Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: Iowa State University
Facility Location: 616 Beach Road, Ames, IA 50011
Air Quality Operating Permit Number: 04-TV-014R4
Expiration Date: 04/02/2030

Permit Renewal Application Deadline: 10/02/2029

EIQ Number: 92-2776, 92-6867
Facility File Number: 85-01-007

Responsible Official
Name: Dr. Sean Reeder
Title: Senior Vice President for Operations and Finance
Mailing Address: 515 Morrill Road, 1350 Beardshear Hall, Ames, IA 50011
Phone #: (515) 294-6218

Permit Contact Person for the Facility (Campus)
Name: Charles Clark
Title: Environmental Engineer II
Mailing Address: 2408 Wanda Daley Dr., Ames, IA 50011
Phone #: (515) 294-5005

Permit Contact Person for the Facility (Power Plant)
Name: Lee Mason
Title: Engineer IV
Mailing Address: 616 Beach Road, Ames, IA 50011
Phone #: (515) 357-9302

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

04/03/2025

Marnie Stein, Supervisor of Air Operating Permits Section — Date

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Abbreviations

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

Pollutants
PM.....particulate matter
PM_{10} .....particulate matter ten microns or less in diameter
SO_2 .....sulfur dioxide
NO_x .....nitrogen oxides
VOC .....volatile organic compound
CO .....carbon monoxide
HAP.....hazardous air pollutant

I. Plant-Wide Conditions

Facility Name: Iowa State University
Permit Number: 04-TV-014R4

Permit conditions are established in accord with 567 Iowa Administrative Code 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 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024 and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix B.

Permit Duration

The term of this permit is: Five (5) years
Commencing on: 04/03/2025
Ending on: 04/02/2025

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 24.110 - 24.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code 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"

Sulfur Dioxide (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

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

amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

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

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

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

Facility Name: Iowa State University
Permit Number: 04-TV-014R4

Facility Description: College, University, Pro School (SIC 8221); and
Electric & Other Services Combined (SIC 4931)

II. Facility Description and Equipment List - Campus

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
Existing Spark Ignition Engines ≥ 400 HP and < 500 HP			
EP-203	EU-203	Agronomy Hall Emergency Generator	04-A-278
EP-206	EU-206	National Laboratory for Agriculture and Environment Emergency Generator	05-A-071-S1
EP-208	EU-208	Sweeney Hall Emergency Generator	04-A-281
Existing Spark Ignition Engines > 500 HP			
EP-204	EU-204	Black Engineering Emergency Generator	04-A-279-S1
EP-205	EU-205	Molecular Biology Emergency Generator	04-A-280
Existing Compression Ignition Engines > 400 HP and < 500 HP			
EP-352	EU-352	LIDIF Emergency Generator	98-A-1086-S1
Existing Compression Ignition Engines > 500 HP			
EP-246	EU-246	ILRIF / Kildee Hall Emergency Generator	98-A-458-S1
EP-337	EU-337	Howe Hall Emergency Generator	99-A-316
EP-338	EU-338	Maple Hall Emergency Generator	99-A-324-S1
New Compression Ignition Engines > 400 HP			
EP-508	EU-508	Vet Med 2 Emergency Generator	07-A-1347-S2
EP-540	EU-540	Vet Med Emergency Generator	11-A-215
EP-625	EU-625	ABE Emergency Generator	13-A-459
EP-800	EU-800	VDL Emergency Generator	21-A-234
Permitted Boilers > 5 MMBtu/hr			
EP-210	EU-210	Wallace-Wilson Halls Boiler #1	04-A-282-S1
	EU-211	Wallace-Wilson Halls Boiler #2	
EP-412	EU-412	Knapp-Storms Boiler #1	05-A-354-S1
EP-413	EU-413	Knapp-Storms Boiler #2	05-A-355-S1
EP-588	EU-588	Vet Med Boiler # 1	11-A-345
EP-589	EU-589	Vet Med Boiler # 2	11-A-346
EP-590	EU-590	Vet Med Boiler # 3	11-A-347
EP-591	EU-591	Vet Med Boiler # 4	11-A-348
Campus Miscellaneous Sources			
EP-200	EU-200	Vet Med Incinerator	75-A-368-S3
EP-220	EU-220	FP&M Paint Spray Booth	04-A-286
EP-235	EU-235	Meats Lab Linear Accelerator	03-A-1061

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP-236	EU-236	Meats Lab Smoke House #1	04-A-289-S1
EP-237	EU-237	Meats Lab Smoke House #2	04-A-290-S1
EP-506	EU-506	Vet Med Cooling Tower	07-A-136
EP-708	EU-708	North Chilled Water Plant Cooling Tower #6	17-A-216
EP-759	EU-759	Central Vacuum System	24-A-019
	EU-761B	Roller Mill	
	EU-764D	Surge 5 Ton Bins #821 & 822	
	EU-764E	Loadout 3 Ton Bins #801 - #812	
EP-760	EU-760	Ingredient Receiving	21-A-112-S1
EP-761	EU-761A	Hammermill	21-A-113-S1
EP-762	EU-762A	Ground Grain 15 Ton Bins #301, 302, 303	21-A-114-S1
	EU-762B	Dual Purpose 30 Ton Bins #304, 305	
EP-763	EU-762B	Dual Purpose 30 Ton Bins #304, 305	21-A-115-S2
	EU-763B	Ingredient 30 Ton Bins #306, 307, & 309	
	EU-763C	Premix Ingredient 7.5 Ton Bin #310	
	EU-763D	Premix Ingredient 15 Ton Bins #313 & 314	
	EU-761C	2,500 Bushel Bins #201 & 202	
EP-764	EU-763C	Premix Ingredient 7.5 Ton Bin #310	21-A-116-S2
	EU-764A	Premix Ingredient 7.5 Ton Bin #311	
	EU-764B	Premix Ingredient 15 Ton Bin #312	
	EU-764C	Mixed Feed 15 Ton Bins #401, 402, 403, & 405	
EP-765	EU-765A	2 Ton Mixer #361	21-A-117-S1
	EU-765B	2 Ton Scale Hopper #320	
EP-766	EU-766	Loadout Scale Hopper 3 Ton #841	21-A-118-S1
EP-767	EU-767	Loadout Scale Hopper 3 Ton #831	21-A-119-S1
EP-768	EU-768	Pellet Cooler	21-A-120-S1
EP-801	EU-801	VDL Incinerator	21-A-235-S1
EP-802	EU-802	VDL Cooling Tower 1	21-A-236-S1
EP-803	EU-803	VDL Cooling Tower 2	21-A-237-S1
Existing Compression Ignition Engines < 400 HP			
EP-259	EU-259	Lied Emergency Generator	Exempt
EP-292	EU-292	Buchanan Hall Emergency Generator	Exempt
EP-366	EU-366	Design College Emergency Generator	Exempt
EP-373	EU-373	Admin. Services Emergency Generator	Exempt
EP-411	EU-411	Eaton Hall Emergency Generator	Exempt
EP-419	EU-419	Carver Co-Lab Emergency Generator	Exempt
EP-465	EU-465	Pearson Emergency Generator	Exempt
EP-473	EU-473	Martin Hall Emergency Generator	Exempt
EP-510	EU-510	UV Emergency Generator	Exempt
EP-524	EU-524	Oak Hall (Formerly Larch) Emergency Generator	Exempt
EP-526	EU-526	ASC I Emergency Generator	Exempt
New Compression Ignition Engines < 400 bhp			
EP-532	EU-532	Hach Hall Emergency Generator	Exempt
EP-533	EU-533	Vet Med Pumphouse Emergency Generator	Exempt

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP-535	EU-535	Music Hall Emergency Generator	Exempt
EP-537	EU-537	Communication Building 2 Emergency Generator	Exempt
EP-539	EU-539	Hilton Coliseum 2 Emergency Generator	Exempt
EP-587	EU-587	Heady Hall Exterior Emergency Generator	Exempt
EP-621	EU-621	VMRI Bldg.35 Emergency Generator	Exempt
EP-622	EU-622	Curtiss Hall Student Services Emergency Generator	Exempt
EP-623	EU-623	Horticulture/Troxel Hall Emergency Generator	Exempt
EP-624	EU-624	Wallace Wilson Fire System Emergency Generator	Exempt
EP-630	EU-630	VMRI BSL3 Bldg 46 Emergency Generator #2	Exempt
EP-631	EU-631	VMRI Freezer Bldg #62 Emergency Generator	Exempt
EP-649	EU-649	EHSSB Emergency Generator	Exempt
EP-657	EU-657	Forker Bldg Emergency Generator	Exempt
EP-689	EU-689	Geoffroy Hall Emergency Generator	Exempt
EP-709	EU-709	Bessey Addition Emergency Generator	Exempt
EP-711	EU-711	ATRB Emergency Generator	Exempt
EP-720	EU-720	Student Innovation Center Emergency Generator	Exempt
EP-722	EU-722	Gerdin Emergency Generator	Exempt
EP-726	EU-726	Vet Med Field Services Emergency Generator	Exempt
EP-728	EU-728	Helser Hall Emergency Generator	Exempt
EP-738	EU-738	Sports Performance Complex Emergency Generator	Exempt
EP-825	EU-825	Therkildsen Hall Emergency Generator	Exempt
Existing 4-Stroke-Rich Burn, Spark Ignition Engines < 400 HP			
EP-270	EU-270	Agronomy Greenhouse Emergency Generator	Exempt
EP-272	EU-272	Food Sciences Emergency Generator	Exempt
EP-273	EU-273	Gilman Hall Emergency Generator	Exempt
EP-277	EU-277	LeBaron Hall Emergency Generator	Exempt
EP-278	EU-278	Meats Lab. # 1 Emergency Generator	Exempt
EP-279	EU-279	Meats Lab. # 2 Emergency Generator	Exempt
EP-282	EU-282	Research Park Emergency Generator	Exempt
EP-284	EU-284	Science 2 Emergency Generator	Exempt
EP-286	EU-286	Town Eng. Emergency Generator	Exempt
EP-287	EU-287	Vet Med Research Institute # 40 Emergency Generator	Exempt
EP-290	EU-290	Barton Hall Emergency Generator	Exempt
EP-291	EU-291	Birch-Welch-Roberts Emergency Generator	Exempt
EP-294	EU-294	Freeman Hall Emergency Generator	Exempt
EP-296	EU-296	Friley Hall South Emergency Generator	Exempt
EP-302	EU-302	Lyon Hall Emergency Generator	Exempt
EP-395	EU-395	Linden Hall Emergency Generator	Exempt
EP-407	EU-407	Gilman Emergency Generator	Exempt
EP-472	EU-472	Reiman Gardens Emergency Generator	Exempt
EP-522	EU-522	Memorial Union Emergency Generator	Exempt
EP-523	EU-523	UDCC Emergency Generator	Exempt
EP-639	EU-639	Knapp Storms Dining Complex Emergency Generator	Exempt

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
New Spark Ignition Engines < 400 HP			
EP-647	EU-647	Ross Hall Emergency Generator	Exempt
EP-729	EU-729	Durham Center Emergency Generator	Exempt
EP-742	EU-742	Jacobson Emergency Generator	Exempt
EP-771	EU-771	Feed Mill Emergency Generator	Exempt
EP-824	EU-824	Friley North Emergency Generator	Exempt
EP-826	EU-826	Town Hall Emergency Generator	Exempt
1.6 MMBtu/hr < Exempt Boilers < 10 MMBtu/hr			
EP-202	EU-202	Livestock Infectious Disease Isolation Facility Boiler #1	Exempt
EP-321	EU-321	Vet Medical Research Institute #1 Boiler	Exempt
EP-420	EU-420	Carver Co-Lab Boiler #1	Exempt
	EU-421	Carver Co-Lab Boiler #2	Exempt
	EU-422	Carver Co-Lab Boiler #3	Exempt
	EU-423	Carver Co-Lab Boiler #4	Exempt
EP-504	EU-504	Carver Co-Lab Boiler #5	Exempt
EP-602	EU-602	VMRI Bldg 40 Boiler # 1	Exempt
EP-603	EU-603	VMRI Bldg 40 Boiler # 2	Exempt
EP-620	EU-620	Schlitter Village Water Heater #2	Exempt
EP-628	EU-628	Applied Science Center I Boiler #1	Exempt
EP-629	EU-629	Applied Science Center I Boiler #2	Exempt
EP-637	EU-637	Bergstrom Boiler #1	Exempt
EP-638	EU-638	Bergstrom Boiler #2	Exempt
EP-691	EU-691	Geoffroy Hall Boiler #1	Exempt
EP-692	EU-692	Geoffroy Hall Boiler #2	Exempt
EP-693	EU-693	Geoffroy Hall Boiler #3	Exempt
EP-694	EU-694	Geoffroy Hall Boiler #4	Exempt
EP-716	EU-716	Lied Rec Center Boiler #1	Exempt
EP-717	EU-717	Lied Rec Center Boiler #2	Exempt
EP-718	EU-718	Lied Rec Center Boiler #3	Exempt
EP-719	EU-719	Lied Rec Center Boiler #4	Exempt
EP-733	EU-733	SPC Boiler #3	Exempt
EP-734	EU-734	SPC Boiler #4	Exempt
EP-739	EU-739	Jacobson Boiler #1	Exempt
EP-740	EU-740	Jacobson Boiler #2	Exempt
EP-775	EU-775	Feed Mill Boiler	Exempt
EP-804	EU-804	Lochinvar Boiler #1	Exempt
EP-805	EU-805	Lochinvar Boiler #2	Exempt
EP-806	EU-806	Lochinvar Boiler #3	Exempt
EP-807	EU-807	CB Boiler #1	Exempt
EP-808	EU-808	CB Boiler #2	Exempt
EP-809	EU-809	CB Boiler #3	Exempt
EP-810	EU-810	CB Boiler #4	Exempt
EP-811	EU-811	VDL Water Heater #1	Exempt
EP-812	EU-812	VDL Water Heater #2	Exempt

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP-820	EU-820	LIDIF Boiler B-1A	Exempt
EP-821	EU-821	LIDIF Boiler B-1B	Exempt
EP-822	EU-822	LIDIF Boiler B-1C	Exempt

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU-221	Hilton Coliseum Paint Booth
EU-238	Transportation Services Underground Storage Diesel Tank (10,000 gallon)
EU-239 [1]	Transportation Services Underground Storage Gas Tank (20,000 gallons) (DNR Construction Permit Number 03-A-1060)
EU-324	VMRI Bldg 29 Boiler (1.01 MMBtu/hr)
EU-327	Extension IT (Haber Road) Boiler (0.25 MMBtu/hr)
EU-328	ASB Boiler #1 (0.75 MMBtu/hr)
EU-329	ASB Boiler #2 (0.75 MMBtu/hr)
EU-331	Ruminant Nutrition Lab Boiler # 1 (0.52 MMBtu/hr)
EU-332	Ruminant Nutrition Lab Boiler # 2 (0.52 MMBtu/hr)
EU-339	Howe Hall Spray Booth
EU-383	Design College Spray Room
EU-384	Design College Glazing Spray Room
EU-403	Armory Spray Room
EU-435	Bergstrom Indoor Training Furnace (0.007 MMBtu/hr)
EU-436	Jack Trice Stadium Above Ground Storage Gas Tank (500 gallons)
EU-437	Jack Trice Stadium Above Ground Storage Diesel Tank (500 gallons)
EU-446	Environmental Health and Safety Services Building (EHSSB) Boiler #1 (1.0 MMBtu/hr)
EU-447	Environmental Health and Safety Services Building (EHSSB) Boiler #2 (1.0 MMBtu/hr)
EU-448	Environmental Health and Safety Services Building (EHSSB) Boiler #3 (1.0 MMBtu/hr)
EU-450	EHSSB Solvent Bulking Room
EU-461	ASB Egen Diesel Tank (500 gallons)
EU-464	Transportation Services Used oil AST (550 gallons)
EU-468	Reiman Gardens Boiler #1 (1.377 MMBtu/hr)
EU-469	Reiman Gardens Boiler #2 (1.377 MMBtu/hr)
EU-470	Reiman Gardens Boiler #3 (1.377 MMBtu/hr)
EU-471	Reiman Gardens Boiler #4 (1.377 MMBtu/hr)
EU-474	Hawthorn Court Market Boiler (1.0 MMBtu/hr)
EU-507	Transportation Services E-85 AST (5,000 gallons)

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

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU-516	Helser Hall Aerosols Spray Booth
EU-518	Wallace Wilson Fuel Oil AST (2,500 gallons)
EU-525	Maple Hall AST Diesel (1,000 gallons)
EU-534	Spray Booth Aerosols College of Design
EU-604	Reiman Gardens Hot Water Heater (0.3 MMBtu/hr, > 120 gallons)
EU-606	Hach Hall E-Gen (EU532) AST Diesel (> 500 Gallons)
EU-607	Howe Hall E-Gen (EU337) AST Diesel (> 500 Gallons)
EU-608	LIDIF Hall E-Gen (EU352) AST Diesel (> 500 gallons)
EU-609	Vet Med 2 E-Gen (EU508) AST Diesel (> 500 gallons)
EU-610	Stephen Auditorium Stage Lift AST Hydraulic
EU-611	Vet Med E-Gen (EU-540) AST Diesel (> 500 gallons)
EU-615	Applied Science Center II Boiler (0.25 MMBtu/hr)
EU-616	Fire Service Training Boiler (0.75 MMBtu/hr)
EU-626	Agriculture & Biosystems Engineering E-Gen (EU625) Diesel Tank (> 500 gallons)
EU-627	Wallace Wilson Fire System E-Gen Tank (EU624) (> 500 gallons)
EU-632	Vet Med Pump House E-Gen (EU533) AST Tank (> 500 gallons)
EU-635	Administrative Services Building Furnace #1 (0.007 MMBtu/hr)
EU-636	Administrative Services Building Furnace #2 (0.007 MMBtu/hr)
EU-651	Jack Trice Stadium South End Zone Boiler #1 (1.403 MMBtu/hr)
EU-652	Jack Trice Stadium South End Zone Boiler #2 (1.403 MMBtu/hr)
EU-656	Food Science & Human Nutrition Building Boiler (0.345 MMBtu/hr)
EU-659	4H Extension Boiler #1 (0.399 MMBtu/hr)
EU-660	4H Extension Boiler #2 (0.399 MMBtu/hr)
EU-661	4H Extension Boiler #3 (0.399 MMBtu/hr)
EU-662	Jack Trice Stadium South End Zone Hot Water Heater #1 (0.399 MMBtu/hr, <120 gallons)
EU-663	Jack Trice Stadium South End Zone Hot Water Heater #2 (0.399 MMBtu/hr, <120 gallons)
EU-664	Knapp Storms Boiler AST fuel Oil (2,500 Gallons)
EU-665	Veenker AST Gasoline (500 gallon)
EU-666	Veenker AST Diesel (500 gallon)
EU-671	Agriculture & Biosystems Engineering (Sukup) Dust Cyclone
EU-690	Geoffroy Hall E-Gen (EU-689) AST Diesel (> 500Gallons)
EU-695	Geoffroy Hall Hot Water Heater #1 (Tankless on demand, 1.35 MMBtu/hr)
EU-696	Geoffroy Hall Hot Water Heater #2 (Tankless on demand, 1.35 MMBtu/hr)
EU-697	Buchanan Hot Water Heater #1 (Tankless on demand, 1.35 MMBtu/hr)
EU-698	Buchanan Hot Water Heater #2 (Tankless on demand, 1.35 MMBtu/hr)
EU-699 (2)	Geoffroy Hall Cooling Tower
EU-700 (2)	Applied Science Center I Cooling Tower #1
EU-701 (2)	Applied Science Center I Cooling Tower #2
EU-703	Library Storage Facility Boiler #1 (0.285 MMBtu/hr)
EU-704	Library Storage Facility Boiler #2 (0.285 MMBtu/hr)
EU-705	Vet Med Diagnostic Modular Addition Furnace (0.15 MMBtu/hr)

[2] Emission units qualify for Small Unit Exemption under 567 IAC 22.1(2)"w". Records shall be kept in accordance with 567 IAC 22.1(2)"w"(3).

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU-706	Vet Med Diagnostic Modular Addition Furnace (0.15 MMBtu/hr)
EU-707	Vet Med Diagnostic Modular Addition Furnace (0.15 MMBtu/hr)
EU-710	Bessey Addition E-Gen (EU-709) AST Diesel (> 500 Gallons)
EU-712	Advanced Teaching & Research Building (ATRB) E-Gen (EU711) AST Diesel (> 500 Gallons)
EU-713	Eaton Hall E-Gen (EU-411) AST Diesel (> 500 Gallons)
EU-714	Martin Hall E-Gen (EU-473) AST Diesel (> 500 Gallons)
EU-715	North Chilled Water Plant Cooling Tower (Grandfathered)
EU-721	Student Innovation Center E-Gen AST
EU-723	Gerdin E-Gen AST
EU-730	West Bergstrom Boiler (0.15 MMBtu/hr)
EU-731	SPC Boiler (1.5 MMBtu/hr)
EU-732	SPC Boiler (1.5 MMBtu/hr)
EU-735	SPC Furnace 1 (0.06 MMBtu/hr)
EU-736	SPC Furnace 2 (0.06 MMBtu/hr)
EU-737	SPC Make-up Air Unit (0.5705 MMBtu/hr)
EU-741	Jacobson Furnace (0.1 MMBtu/hr)
EU-743	SPC E-Gen AST
EU-744	Vet Med Field Svcs Boiler (0.485 MMBtu/hr)
EU-769	Feed Mill Truck Loadout
EU-772	Feed Mill Pilot Plant Handling
EU-773	Feed Mill Pilot Plant Milling
EU-774	Feed Mill Pilot Plant Pellet Cooler
EU-825	Transportation Emergency Generator

III. Emission Point Specific Conditions – Campus

Facility Name: Iowa State University
Permit Number: **04-TV-014R4**

Emission Point ID Number: See Table: Existing Spark Ignition Engines ≥ 400 BHP and < 500 BHP

Associated Equipment

Table: Existing Spark Ignition Engines ≥ 400 BHP and < 500 BHP

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Rated Capacity (bhp)	Raw Material/Fuel	Construction Date
EP-203	EU-203	Agronomy Hall Emergency Generator	469	Natural Gas	01/01/1985
EP-206	EU-206	National Laboratory for Agriculture and Environment Emergency Generator	400	Natural Gas	06/01/1991
EP-208	EU-208	Sweeney Hall Emergency Generator	408	Natural Gas	01/01/1993

Applicable Requirements

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

Table: Existing Spark Ignition Engines ≥ 400 BHP and < 500 BHP -Emission Limits

EP	Opacity 567 IAC 23.3(2)"d"	PM_{10} (lb/hr)	PM (gr/dscf) 567 IAC 23.3(2)"a"	PM (lb/hr)	SO_2 (ppmv) 567 IAC 23.3(3)"e"	NO_x (lb/hr)	Iowa DNR Construction Permit (Authority for Requirement)
EP-203	40% (1)	0.10	0.1	NA	500	10.29	04-A-278
EP-206	40% (2)	0.1	0.1	0.1	500	7.0	05-A-071-S1
EP-208	40% (1)	0.10	0.1	NA	500	7.08	04-A-281

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

(2) An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or

equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. Fuel shall be limited to natural gas only

Authority for Requirement: DNR Construction Permits 04-A-278, 05-A-071-S1, 04-A-281

For EP-203 Only

A. The quantity of natural gas shall not exceed 2.27 million cubic feet per 12-month rolling total.

Authority for Requirement: DNR Construction Permit 04-A-278

For EP-206 Only

A. The quantity of natural gas used shall not exceed 1.5 million cubic feet per 12-month rolling total.
B. This unit shall operate no more than 8 hours per calendar day.

Authority for Requirement: DNR Construction Permit 05-A-071-S1

For EP-208 Only

A. The quantity of natural gas used shall not exceed 1.56 million cubic feet per 12-month rolling total.

Authority for Requirement: DNR Construction Permit 04-A-281

Reporting & Record keeping

A. Record the monthly quantity (in Cubic Feet) of natural gas utilized.
B. Annual fuel usage shall be determined on a 12-month rolling basis, for each month of operation.

Authority for Requirement: DNR Construction Permits 04-A-278, 05-A-071-S1, 04-A-281

For EP-206 Only

A. For each day that this unit operates, record the date and the number of hours the unit operated.

Authority for Requirement: DNR Construction Permit 05-A-071-S1

NSPS and NESHAP Requirements

NESHAP Subpart ZZZZ:

The emergency engines are subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(ii) the spark ignition emergency engines, located at a major source, are existing stationary RICE as they were constructed prior to June 12, 2006.

Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of subpart ZZZZ that are applicable by October 19, 2013.

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or within 1 year + 30 days, whichever comes first. (See 63.6625(j) for the oil analysis option to extend time frame of requirements.)
2. Inspect spark plugs every 1,000 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. 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.

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2c to Subpart ZZZZ

1. An initial notification is not required per 40 CFR 63.6645(a)(5).
2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)

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

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Table:

Existing Spark Ignition Engines ≥ 400 BHP and < 500 BHP Emission Point Characteristics

Emission Point Number	Stack Height (ft, from the ground)	Stack Opening (dia., inches)	Exhaust Flow Rate (scfm)	Exhaust Temp. (°F)	Discharge Style	Authority for Requirement (DNR Construction Permit)
EP-203	43	8	809	1110	Vertically Unobstructed, Hinged Rain Flap	04-A-278
EP-206	65	8	560	927	Vertical Unobstructed	05-A-071-S1
EP-208	50	8	790	1110	Horizontally	04-A-281

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Existing Spark Ignition Engines > 500 HP

Associated Equipment

Table: Existing Spark Ignition Engines > 500 HP

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Rated Capacity (bhp)	Raw Material/ Fuel	Construction Date
EP-204	EU-204	Black Engineering Emergency Generator	703	Natural Gas	01/01/1985
EP-205	EU-205	Molecular Biology Emergency Generator	844	Natural Gas	01/01/1991

Applicable Requirements

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

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

Table: Existing Spark Ignition Engines > 500 HP -Emission Limits

EP	Opacity 567 IAC 23.3(2)"d"	PM_{10} (lb/hr)	PM (gr/dscf) 567 IAC 23.3(2)"a"	SO_2 (ppmv) 567 IAC 23.3(3)"e"	NO_x (lb/hr)	Authority for Requirement (DNR Construction Permit)
EP-204	40% (1)	0.18	0.1	500	13.76	04-A-279-S1
EP-205	40% (1)	0.20	0.1	500	16.75	04-A-280

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

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. The fuel shall be limited to natural gas only.

Authority for Requirement: DNR Construction Permits 04-A-279-S1, 04-A-280

For EP-204 Only

A. The quantity of natural gas used shall not exceed 3.03 million cubic feet per 12-month rolling total.
B. This engine shall operate as an emergency stationary internal combustion engine as defined in §63.6675. There is no time limit on the use of the engine in emergency situations provided that the annual fuel limit established in Condition A above is not exceeded. In accordance with §63.6640(f), the engine is limited to operate a maximum of 100 hours per calendar year for non-emergency situations, such as maintenance checks and readiness testing.

Authority for Requirement: DNR Construction Permit 04-A-279-S1

For EP-205 Only

A. The quantity of natural gas used shall not exceed 3.69 million cubic feet per 12-month rolling total.

Authority for Requirement: DNR Construction Permit 04-A-280

Reporting & Record keeping

A. Record the monthly quantity (in Cubic Feet) of natural gas utilized.
B. Annual fuel usage shall be determined on a 12-month rolling basis, for each month of operation.

Authority for Requirement: DNR Construction Permits 04-A-279-S1, 04-A-280

For EP-204 Only

A. Record the hours the unit operated for non-emergency situations for each month of operation.
B. Record the total amount of hours the unit operated for non-emergency situations each calendar year.

Authority for Requirement: DNR Construction Permit 04-A-279-S1

NSPS and NESHAP Requirements

NESHAP ZZZZ:

The emergency engines are subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(i) the emergency engines, located at a major source, are existing stationary RICE as they were constructed prior to December 19, 2002.

According to 63.6590(b)(3)(iii), an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A, including initial notification requirements.

Authority for Requirement: DNR Construction Permit 04-A-279-S1 (EP-204)
40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Emission Point Characteristics

The emission points shall conform to the specifications listed below.

Table: Existing Spark Ignition Engines > 500 HP -Emission Point Characteristics

Emission Point Number	Stack Height (ft, from the ground)	Stack Opening (dia., inches)	Exhaust Flow Rate (scfm)	Exhaust Temp. (°F)	Discharge Style	Iowa DNR Construction Permit (Authority for Requirement)
EP-204	1 *	6	1152	1110	Vertical Unobstructed	04-A-279-S1
EP-205	66.17	10	1547	1150	Vertical Unobstructed	04-A-280

* Construction permit 04-A-279-S1 states -4.5 ft.

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: (Existing Compression Engine) EP-352

Associated Equipment

Associated Emission Unit ID Numbers: EU-352

Emission Unit vented through this Emission Point: EU-352
Emission Unit Description: Livestock Infectious Disease Isolation Facility (LIDIF) Emergency Generator
Raw Material/Fuel: Diesel
Rated Capacity: 449 bhp

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: DNR Construction Permit 98-A-1086-S1
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.05 lb/hr
Authority for Requirement: DNR Construction Permit 98-A-1086-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.8 lb/MMBtu
Authority for Requirement: DNR Construction Permit 98-A-1086-S1
567 IAC 23.3(2)"b"(1)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 0.93 lb/hr; 2.5 lb/MMBtu
Authority for Requirement: DNR Construction Permit 98-A-1086-S1
567 IAC 23.3(3)"b"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 18 lb/hr
Authority for Requirement: DNR Construction Permit 98-A-1086-S1

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 4.28 lb/hr
Authority for Requirement: DNR Construction Permit 98-A-1086-S1

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

1. This source is limited to using #2 fuel oil, with a sulfur content of no greater than 0.1% (weight basis).
2. This source shall operate no more than 500 hours per 12-month rolling period.

Reporting & Record keeping

1. The sulfur content of the #2 fuel oil, as a weight percentage.
2. The hours of operation each month.
3. During the initial 12 months of operation, cumulative time of use shall be determined at the end of each month.
4. After the initial 12 months of operation, annual time of use shall be determined on a rolling 12 month basis, at the end of each month.

Authority for Requirement: DNR Construction Permit 98-A-1086-S1

NSPS and NESHAP Requirements

NESHAP:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(ii) this compression ignition emergency engine, located at a major source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Compliance Date

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

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or within 1 year + 30 days, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
2. Inspect air cleaner every 1000 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and

operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. 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.

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2c to Subpart ZZZZ

1. An initial notification is not required per 40 CFR 63.6645(a)(5).
2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)

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

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

Stack Height, (ft, from the ground): 36
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (acfm): 2452
Exhaust Temperature (°F): 1002
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 98-A-1086-S1

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Existing Compression Ignition Engines > 500HP

Associated Equipment

Table: Existing Spark Ignition Engines > 500 HP

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Rated Capacity (bhp)	Raw Material/ Fuel	Construction Date
EP-246	EU-246	ILRIF / Kildee Hall Emergency Generator	540	Fuel Oil #1 or #2	06/01/1998
EP-337	EU-337	Howe Hall Emergency Generator	1039	Fuel Oil #2	06/01/1998
EP-338	EU-338	Maple Hall Emergency Generator	804	Fuel Oil #2	02/01/1998

Applicable Requirements

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

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

Table: Existing Spark Ignition Engines > 500HP - Emission Limits

EP	Opacity 567 IAC 23.3(2)"d"	PM_{10} (lb/hr)	PM (gr/dscf) 567 IAC 23.3(2)"a"	PM (lb/MMBtu) 567 IAC 23.3(2)"b"	SO_2	NO_x (lb/hr)	CO (lb/hr)	Iowa DNR Construction Permit (Authority for Requirement)
EP-246	40% (1)	3.29	0.1	NA	2.5 lb/MMBtu(2)	25.0	NA	98-A-458-S1
EP-337	40% (1)	2.0	0.1	0.6	0.71 lb/hr	22.44	6.0	99-A-316
EP-338	40% (1)	0.69	NA	0.6	NA	NA	NA	99-A-324-S1

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

(2) Additional Authority 567 IAC 23.3(3)

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. The use of the generator shall not exceed 500 hours per 12-month rolling total.

Authority for Requirement: DNR Construction Permits 98-A-458-S1, 99-A-316, and 99-A-324-S1

For EP-246 Only

A. The fuel shall be limited to #1 or #2 distillate fuel oil only.
B. The sulfur content of the fuel oil shall not exceed 0.5% by weight.

Authority for Requirement: DNR Construction Permit 98-A-458-S1

For EP-337 and EP-338

A. The fuel source is limited to #2 diesel with a sulfur content not to exceed 0.1% by weight.

Authority for Requirement: DNR Construction Permits 99-A-316, 99-A-324-S1

Reporting & Record keeping

For EP-246

A. Record the type of fuel used and the sulfur content of the fuel.
B. Record the monthly usage of the generator (in hours).
C. Annual generator usage shall be determined on a 12-month rolling basis, for each month of operation.

Authority for Requirement: DNR Construction Permit 98-A-458-S1

For EP-337 and EP-338

A. The type of fuel used.
B. The sulfur content (by weight percent) of the fuel used.
C. The number of hours of operation of the generator per twelve month period rolled monthly.

Authority for Requirement: DNR Construction Permits 99-A-316, 99-A-324-S1

NSPS and NESHAP Requirements

NESHAP ZZZZ:

The emergency engines are subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(i) the emergency engines, located at a major source, are existing stationary RICE as they were constructed prior to December 19, 2002.

According to 63.6590(b)(3)(iii), an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A, including initial notification requirements.

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

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Table: Existing Spark Ignition Engines > 500HP – Emission Point Characteristics

Emission Point Number	Stack Height (ft. from the ground)	Stack Opening (dia., inches)	Exhaust Flow Rate	Exhaust Temp. (°F)	Discharge Style	Iowa DNR Construction Permit (Authority for Requirement)
EP-246	35.5	8	1468 scfm	695	Vertical Obstructed	98-A-458-S1
EP-337	84	12	5414 acfm	1024	Vertical Unobstructed	99-A-316
EP-338	14.1	6	3945 acfm	939	NA	99-A-324-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒
Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒
Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-508

Associated Equipment

Associated Emission Unit ID Numbers: EU-508

Emission Unit vented through this Emission Point: EU-508
Emission Unit Description: Vet Med 2 Emergency Generator
Raw Material/Fuel: Diesel
Rated Capacity: 965 bhp

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: DNR Construction Permit 07-A-1347-S2
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.06 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1347-S2

Pollutant: Particulate Matter-State (PM)
Emission Limit(s): 1.06 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1347-S2

Pollutant: Particulate Matter-Federal (PM)
Emission Limit(s): 0.54 g/KW-hr
Authority for Requirement: DNR Construction Permit 07-A-1347-S2
40 CFR §60.4205(a)
NSPS Subpart IIII

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: DNR Construction Permit 07-A-1347-S2
567 IAC 23.3(3)

Pollutant: Nitrogen Oxide (NO_x)
Emission Limit(s): 23.4 lb/hr; 9.2 g/KW-hr
Authority for Requirement: DNR Construction Permit 07-A-1347-S2
40 CFR §60.4205(a)
NSPS Subpart IIII

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.68 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1347-S2

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 6.46 lb/hr; 11.4 g/KW-hr
Authority for Requirement: DNR Construction Permit 07-A-1347-S2
40 CFR §60.4205(a)
NSPS Subpart IIII

Pollutant: Hydrocarbons (HC)
Emission Limit(s): 1.3 g/KW-hr
Authority for Requirement: DNR Construction Permit 07-A-1347-S2
40 CFR §60.4205(a)
NSPS Subpart IIII

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

Operating Limits

A. The emergency generator shall be fired by diesel fuel only.
B. The sulfur content of any diesel fuel used in the emergency generator shall not exceed 0.05% by weight.
C. The emergency generator shall operate no more than 500 hours per 12-month rolling period.
D. The emergency generator shall operate no more than 100 hours per 12-month rolling period for maintenance checks and readiness testing per 40 CFR§60.4211(e).
E. Per 40 CFR§60.4211, for owners and operators of emergency engines meeting standards under §60.4205, but not §60.4204, any operation other than emergency operation, and maintenance and testing is prohibited.
F. The owner or operator shall meet the fuel requirements specified in 40 CFR§60.4207.
    1. Beginning October 1, 2010, diesel fuel fired in the emergency generator shall be limited to a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume per 40 CFR§80.510(b).
    2. Per 40 CFR§60.4207, owners and operators of pre-2011 model year diesel generators subject to NSPS Subpart IIII may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of 40 CFR§80.510(a) or CFR§80.510(b) beyond the dates required, for the purpose of using up existing fuel inventories.
G. Per 40 CFR§60.4209, the owner or operator shall install a non-resettable hour meter prior to startup of the emergency generator.
H. Per 40 CFR§60.4211, the owner or operator shall purchase an engine certified to the

emission standards in §60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

Reporting & Record keeping

A. Record the sulfur content of any fuel used in the emergency generator in weight percent.
B. Record the number of hours the emergency generator is operated each month and the reason the emergency generator was operated. Calculate and record 12-month rolling totals.
C. The owner or operator shall complete all recordkeeping and monitoring as required by NSPS Subpart IIII.
    1. The owner or operator of the emergency generator shall follow the monitoring requirements of 40 CFR§60.4209.
    2. The owner or operator of the emergency generator shall follow the compliance requirements of 40 CFR§60.4211.
    3. The owner or operator of the emergency generator shall follow the notification, reporting, and recordkeeping requirements of 40 CFR§60.4214(b).

Authority for Requirement: DNR Construction Permit 07-A-1347-S2

NSPS and NESHAP Requirements

NESHAP ZZZZ:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(i) this emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after December 19, 2002.

According to 40 CFR 63.6590(b)(1)(i), a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A except for initial notification requirements of 40 CFR 63.6645(f).

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

NSPS IIII:
This emission unit is subject to the New Source Performance Standards (NSPS) Subpart IIII – Standards of Performance for *Stationary Compression Ignition Internal Combustion Engines* (40 CFR §60.4200 through 40 CFR §60.4219) and to the applicable provisions of NSPS Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) and is also subject to the requirements of 567 IAC 23.1(2)"yyy".

Failure to include any NSPS or NESHAP requirements as a part of this permit does not relieve the permittee from the requirement to comply with all applicable NSPS or NESHAP requirements.
Authority for Requirement: DNR Construction Permit 07-A-1347-S2
40 CFR Part 60 Subpart IIII
567 IAC 23.1(2)"yyy"

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

Stack Height, (ft, from the ground): 17 (1)
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 1933
Exhaust Temperature (°F): 1300
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 07-A-1347-S2
(1) This engine has identical dual stacks.

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-540

Associated Equipment

Associated Emission Unit ID Numbers: EU-540

Emission Unit vented through this Emission Point: EU-540
Emission Unit Description: Vet Med Emergency Generator
Raw Material/Fuel: Diesel
Rated Capacity: 1069 bhp

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permit 11-A-215
567 IAC 23.3(2)"d"

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

Pollutant: Opacity (Acceleration Mode)
Emission Limit(s): 20%
Authority for Requirement: Iowa DNR Construction Permit 11-A-215
40 CFR 60 Subpart IIII
40 CFR §89.113(a)(1)

Pollutant: Opacity (Lugging Mode)
Emission Limit(s): 15%
Authority for Requirement: Iowa DNR Construction Permit 11-A-215
40 CFR 60 Subpart IIII
40 CFR §89.113(a)(2)

Pollutant: Opacity (Peak in Acceleration or Lugging Mode)
Emission Limit(s): 50%
Authority for Requirement: Iowa DNR Construction Permit 11-A-215
40 CFR 60 Subpart IIII
40 CFR §89.113(a)(3)

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.35 lb/hr
Authority for Requirement: DNR Construction Permit 11-A-215

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.20 g/kW-hr
Authority for Requirement: Iowa DNR Construction Permit 11-A-215
567 IAC 23.3(2)"a"
40 CFR 60 Subpart IIII
40 CFR §89.112(a)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)

Pollutant: Nitrogen Oxide (NO_x)
Emission Limit(s): 11.25 lb/hr
Authority for Requirement: DNR Construction Permit 11-A-215

Pollutant: Non-Methane Hydrocarbon (NMHC)+Nitrogen Oxides (NO_x)
Emission Limit(s): 6.4 g/kW-hr
Authority for Requirement: Iowa DNR Construction Permit 11-A-215
567 IAC 23.3(2)"a"
40 CFR 60 Subpart IIII
40 CFR §89.112(a)

Pollutant: Carbone Monoxide (CO)
Emission Limit(s): 3.5 g/kW-hr
Authority for Requirement: Iowa DNR Construction Permit 11-A-215
567 IAC 23.3(2)"a"
40 CFR 60 Subpart IIII
40 CFR §89.112(a)

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

Operating Limits

A. This engine is limited to burning diesel fuel oil only.
B. This engine is limited to operating a maximum of 55 hours in any rolling 12-month period.
C. This engine is limited to operating for emergency situations and required testing and maintenance. In accordance with §60.4211(e), the engine is limited to operating a maximum of 100 hours per year for maintenance checks and readiness testing. This engine is not allowed to operate as a peak shaving unit.
D. In accordance with §60.4207(b), the diesel fuel oil burned in this engine shall meet the following specifications from 40 CFR 80.510(b) for nonroad diesel fuel:
    1. A maximum sulfur content of 15 ppm (0.0015%) by weight; and

2. A minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume.

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

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

Reporting & Record keeping

A. The owner or operator shall maintain the following monthly records:
   1. The total number of hours that the engine operated;
   2. The number of hours that the engine operated for maintenance checks and readiness testing; and
   3. The rolling 12-month total amount of the number of hours that the engine operated.

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

C. The owner or operator of the engine shall comply with the requirements of Operating Limit D listed above by one of the following methods:
   1. Have the fuel supplier certify that the fuel delivered meets the definition of non-road diesel fuel as defined in 40 CFR 80.510(b);
   2. Obtain a fuel analysis from the supplier showing the sulfur content and cetane index or aromatic content of the fuel delivered; or
   3. Perform an analysis of the fuel to determine the sulfur content and cetane index or aromatic content of the fuel received.

Authority for Requirement: DNR Construction Permit 11-A-215

NSPS and NESHAP Requirements

NESHAP ZZZZ:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(i) this emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after December 19, 2002.

According to 40 CFR 63.6590(b)(1)(i), a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A except for initial notification requirements of 40 CFR 63.6645(f).

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

NSPS IIII:
This engine is subject to 40 CFR Part 60 NSPS Subpart IIII – Standards of Performance for *Stationary Compression Ignition Internal Combustion Engines* (IAC 23.1(2)"yyy"). The engine is an emergency stationary internal combustion engine that is not a fire pump engine.

i. In accordance with §60.4211(c), the engine must be certified by its manufacturer to comply with the emissions standards for emergency engines from §60.4205(b) and §60.4202(a)(2).
ii. In accordance with §60.4211(c), the owner or operator must comply with the required NSPS emissions standards by purchasing an engine certified by its manufacturer to meet the applicable emission standards for the same model year and engine power. The engine must be installed and configured to the manufacturer's specifications. Provided these requirements are satisfied, no further demonstration of compliance with the emission standards from §60.4205(b) and §60.4202(a)(2) is required. However, if the engine is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, a compliance demonstration is required in accordance with §60.4211(g).

Authority for Requirement: 40 CFR Part 60 Subpart IIII
567 IAC 23.1(2)"yyy"

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

Stack Height, (ft, from the ground): 32
Stack Opening, (inches, dia.): 10
Exhaust Flow Rate (scfm): 1659
Exhaust Temperature (°F): 1211
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 11-A-215

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-625

Associated Equipment

Associated Emission Unit ID Numbers: EU-625

Emission Unit vented through this Emission Point: EU-625
Emission Unit Description: ABE Emergency Generator
Raw Material/Fuel: Diesel
Rated Capacity: 752 bhp

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permit 13-A-459
567 IAC 23.3(2)"d"

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

Pollutant: Opacity (Acceleration Mode)
Emission Limit(s): 20%
Authority for Requirement: Iowa DNR Construction Permit 13-A-459
40 CFR 60 Subpart IIII
40 CFR §89.113(a)(1)

Pollutant: Opacity (Lugging Mode)
Emission Limit(s): 15%
Authority for Requirement: Iowa DNR Construction Permit 13-A-459
40 CFR 60 Subpart IIII
40 CFR §89.113(a)(2)

Pollutant: Opacity (Peak in Acceleration or Lugging Mode)
Emission Limit(s): 50%
Authority for Requirement: Iowa DNR Construction Permit 13-A-459
40 CFR 60 Subpart IIII
40 CFR §89.113(a)(3)

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.20 g/kW-hr
Authority for Requirement: Iowa DNR Construction Permit 13-A-459
567 IAC 23.3(2)"a"
40 CFR 60 Subpart IIII
40 CFR §89.112(a)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)

Pollutant: Non-Methane Hydrocarbon (NMHC)+Nitrogen Oxides (NO_x)
Emission Limit(s): 6.4 g/kW-hr
Authority for Requirement: Iowa DNR Construction Permit 13-A-459
567 IAC 23.3(2)"a"
40 CFR 60 Subpart IIII
40 CFR §89.112(a)

Pollutant: Carbone Monoxide (CO)
Emission Limit(s): 3.5 g/kW-hr
Authority for Requirement: Iowa DNR Construction Permit 13-A-459
567 IAC 23.3(2)"a"
40 CFR 60 Subpart IIII
40 CFR §89.112(a)

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

Operating Limits

A. This engine is limited to burning diesel fuel oil that meets the requirements of Operating Limit Condition D below.
B. This engine is limited to operating a maximum of 500 hours in any rolling 12-month period.
C. This engine is limited to operate as an emergency stationary internal combustion engine as defined in §60.4219 and in accordance with §60.4211. There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established in Condition B. above is not exceeded. In accordance with §60.4211, the engine is limited to operate a maximum of 100 hours per year for maintenance checks and readiness testing. The engine is also allowed to operate up to 50 hours per year in non-emergency situations, but the 50 hours are counted toward the 100 hours provided for maintenance and testing. The 50 hours per year for non-emergency operation cannot be used to generate income for the facility to supply power to the grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. This engine is not allowed to operate as a peak shaving unit.

D. In accordance with §60.4207(b), the diesel fuel oil burned in this engine shall meet the following specifications from 40 CFR 80.510(b) for nonroad diesel fuel:
    i. a maximum sulfur content of 15 ppm (0.0015%) by weight; and
    ii. a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume.
E. In accordance with §60.4209(a), the engine shall be equipped with a non-resettable hour meter.
F. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in §60.4211(g).
G. In accordance with §60.4211(a), this engine shall be operated and maintained in accordance with the manufacturer's emission-related written instructions. The owner or operator may only change emission-related engine settings that are permitted by the manufacturer.

Reporting & Record keeping

A. The owner or operator shall maintain the following monthly records:
    i. the number of hours that the engine operated for maintenance checks and readiness testing;
    ii. the number of hours that the engine operated for allowed non-emergency operations;
    iii. the total number of hours that the engine operated; and
    iv. the rolling 12-month total amount of the number of hours that the engine operated.
B. The owner or operator shall maintain the following annual records:
    i. the number of hours that the engine operated for maintenance checks and readiness testing; and
    ii. the number of hours that the engine operated for allowed non-emergency operations.
C. The owner or operator of the engine shall comply with the requirements of Operating Limit condition D listed above by one of the following methods:
    i. have the fuel supplier certify that the fuel delivered meets the definition of non-road diesel fuel as defined in 40 CFR 80.510(b);
    ii. obtain a fuel analysis from the supplier showing the sulfur content and cetane index or aromatic content of the fuel delivered; or
    iii. perform an analysis of the fuel to determine the sulfur content and cetane index or aromatic content of the fuel received.

Authority for Requirement: DNR Construction Permit 13-A-459

NSPS and NESHAP Requirements

<u>NESHAP ZZZZ:</u>

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(i) this emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after December 19, 2002.

According to 40 CFR 63.6590(b)(1)(i), a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A except for initial notification requirements of 40 CFR 63.6645(f).

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

NSPS Subpart IIII

This engine is subject to 40 CFR Part 60 NSPS Subpart IIII – Standards of Performance for *Stationary Compression Ignition Internal Combustion Engines* (IAC 23.1(2)"yyy"). The engine is an emergency stationary internal combustion engine that is not a fire pump engine.

i. In accordance with §60.4211(c), the engine must be certified by its manufacturer to comply with the emissions standards for emergency engines from §60.4205(b) and §60.4202(a)(2).

ii. In accordance with §60.4211(c), the owner or operator must comply with the required NSPS emissions standards by purchasing an engine certified by its manufacturer to meet the applicable emission standards for the same model year and engine power. The engine must be installed and configured to the manufacturer's specifications. Provided these requirements are satisfied, no further demonstration of compliance with the emission standards from §60.4205(b) and §60.4202(a)(2) is required. However, if the engine is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, a compliance demonstration is required in accordance with §60.4211(g).

Authority for Requirement: DNR Construction Permit 13-A-459
40 CFR Part 60 Subpart IIII
567 IAC 23.1(2)"yyy"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75
Stack Opening, (inches, dia.): 10
Exhaust Flow Rate (scfm): 1613
Exhaust Temperature (^{o}F): 1300
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 13-A-459

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-800

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): EU 800
Emissions Control Equipment ID Number: N/A
Emissions Control Equipment Description: N/A
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: EU 800
Emission Unit Description: VDL Emergency Generator
Raw Material/Fuel: Diesel
Rated Capacity: 800 KW; 57.3 gal/hr of Diesel Fuel; 1,072 bhp

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 21-A-234

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

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 15.9 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-234

NSPS Emission Limits
Pollutant: Opacity
Emission Limit(s): 20% (acceleration); 15% (lugging); 50% (peak)
Authority for Requirement: DNR Construction Permit 21-A-234
§89.113 (a)(1)

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.20 grams/kW-hr
Authority for Requirement: DNR Construction Permit 21-A-234
§89.112

Pollutant: NMHC + NOx
Emission Limit(s): 6.4 grams/kW-hr
Authority for Requirement: DNR Construction Permit 21-A-234
§89.112

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 3.5 grams/kW-hr
Authority for Requirement: DNR Construction Permit 21-A-234
§89.112

NSPS/NESHAP Applicability

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(i) this emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after December 19, 2002.

According to 40 CFR 63.6590(b)(1)(i), a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A except for initial notification requirements of 40 CFR 63.6645(f).

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII for compression ignition engines. No further requirements apply for this emergency engine under subpart ZZZZ.

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

NSPS Subpart IIII Requirements

For 2007 and later model year emergency (Except FP) CI engines with Disp. < 30 l/cyl constructed after 7/11/2005 and manufactured after 4/1/2006:

Emission Standards (for engines with displacement (L/cyl) < 10):
According to 40 CFR 60.4205(b) and 4202, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

Engine Displacement (l/cyl)	Maximum Engine Power	Model Year(s)	NMHC + NOx	CO	PM	Opacity	Rule Ref
Disp. < 10	560 < kW ≤ 2237 (751 < HP ≤ 3000)	2007+	6.4 (4.8)	3.5 (2.6)	0.20 (0.15)	(1)	~~(2)~~

(1) Exhaust opacity must not exceed: 20 percent during the acceleration mode; 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or lugging modes.
(2) 40 CFR 89.112 and 40 CFR 89.113.

Fuel Requirements (if using diesel):
You must use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 60.4207 and 40 CFR 1090.305.

Compliance Requirements:

1. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
    a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
    b) Changing only those emission-related settings that are permitted by the manufacturer; and
    c) Meeting the requirements of 40 CFR 89, 94 and/or 1068, as they apply to you.
2. You must demonstrate compliance with the applicable emission standards by purchasing an engine certified to the applicable emission standards. The engine must be installed and configured according to the manufacturer's emission-related specifications. 40 CFR 60.4211(c).
3. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct the following performance testing in accordance with 40 CFR 60.4212 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4211(g) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
500 < HP	Within 1 year of engine startup, or non-permitted action [(1)]	Every 8,760 hours or 3 years, whichever comes first

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

Operating and Recordkeeping Requirements

1. If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 60.4209(a)) and, starting with the model years in the following table, you must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 40 CFR 60.4214(b).

Engine power	Starting model year
130 ≤ KW (175 ≤ HP)	2011

2. There is no time limit on the use of the emergency engine in emergency situations. 40 CFR 60.4211(f)(1).
3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year. See 40 CFR 60.4211(f)(2) for more information.
4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used for peak shaving or to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing. See 40 CFR 60.4211(f)(3) for more information.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available 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 engine is limited to operating a maximum of 500 hours in any rolling 12-month period.
B. i. This engine is limited to operate as an emergency stationary internal combustion engine as defined in §60.4219 and in accordance with §60.4211(f). There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established in Condition 5.A. is not exceeded. In accordance with §60.4211(f)(2), the engine is limited to operate a maximum of 100 hours per year for maintenance checks and readiness testing.
   ii. In accordance with §60.4211(f)(3), the engine is also allowed to operate up to 50 hours per year in non-emergency situations, but the 50 hours are counted toward the 100 hours provided for maintenance and testing. The 50 hours per year for non-emergency operation cannot be used for peak shaving or non-emergency demand response or to generate income for the facility to supply power to the electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity.
C. In accordance with §60.4209(a), the engine shall be equipped with a non-resettable hour meter.
D. The owner or operator shall maintain the following monthly records:
   1) the number of hours the engine operated for maintenance checks and readiness testing;
   2) the number of hours the engine operated for allowed non-emergency operations;
   3) the total number of hours the engine operated; and
   4) the rolling 12-month total amount of the number of hours that the engine operated.
E. The owner or operator shall maintain the following annual records:
   1) the number of hours that the engine operated for maintenance checks and readiness testing; and
   2) the number of hours that the engine operated for allowed non-emergency operations.
   3) the total number of hours that the engine operated for maintenance checks, readiness testing, and allowed non-emergency operations.
F. In accordance with §60.4207(b), the diesel fuel oil burned in this engine shall meet the following specifications from 40 CFR 80.510(b) for nonroad diesel fuel:

Parameter	Limit
Sulfur (S) content	15 ppm (0.0015%) by weight
Minimum cetane index **or** Maximum aromatic content	40 35% (by volume)

The owner or operator of the engine shall comply with these requirements listed above by one of the following methods:

i. have the fuel supplier certify that the fuel delivered meets the definition of non-road diesel fuel as defined in 40 CFR 80.510(b);

ii. obtain a fuel analysis from the supplier showing the sulfur content and cetane index or aromatic content of the fuel delivered; or

iii. perform an analysis of the fuel to determine the sulfur content and cetane index or aromatic content of the fuel received.

G. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in §60.4211(g).

H. In accordance with §60.4211(a), this engine shall be operated and maintained in accordance with the manufacturer's emission-related written instructions. The owner or operator may only change emission-related engine settings that are permitted by the manufacturer.

Authority for Requirement: DNR Construction Permit 21-A-234

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 16
Stack Opening, (inches, dia.): 10
Exhaust Flow Rate (scfm): 2,250
Exhaust Temperature (°F): 952
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 21-A-234

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: (Permitted Boilers > 5 MMBtu/hr) EP-210

Associated Equipment

Table: Wallace-Wilson Halls Boiler #1 and #2

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Maximum Rated Capacity	Control Equipment Description and ID
EP-210	EU-210	Wallace-Wilson Halls Boiler #1	10.5 MMBtu/hr Natural Gas; 75 gal/hr fuel oil #1 or #2	Flue Gas Recirculation (CE-210)
	EU-211	Wallace-Wilson Halls Boiler #2	10.5 MMBtu/hr Natural Gas; 75 gal/hr fuel oil #1 or #2	

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permit 04-A-282-S1
567 IAC 23.3(2)"d"

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

Pollutant: PM_{10}
Emission Limit(s): 0.70 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-282-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.6 lb/MMBtu, 0.70 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-282-S1
567 IAC 23.3(2)"b"(2)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 17.04 lb/hr; 38.34 tons/yr; 0.5% by weight S(2); 500 ppmv(3)
Authority for Requirement: DNR Construction Permit 04-A-282-S1
(2)Limit applicable to fuel oil #1 and Fuel oil #2 combusted in Boiler #1 and Boiler #2. Compliance demonstration specified in Operating Limits & Requirements paragraph C.
(3)Limit applicable to natural gas combusted in Boiler #1 and Boiler #2. The facility will demonstrate compliance with this limit by combusting pipeline quality natural gas

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 4.12 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-282-S1

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

A. The owner or operator shall combust only pipeline quality natural gas, fuel oil #1, or fuel oil #2. The owner or operator shall maintain a record of the type of fuel burned in Boiler #1 (EU-210) and Boiler #2 (EU-211).
B. The owner or operator shall not combust more than 1,080,000 gallons of fuel oil #1 and fuel oil #2 in boiler #1 (EU-210) and Boiler #2 (EU-211) in any rolling 12-month period. On a monthly basis, the owner or operator shall:
    a. Record the total amount of fuel oil #1 and Fuel oil #2, in gallons, combusted in Boiler #1 (EU-210) and Boiler #2 (EU-211); and
    b. Calculated and record the rolling 12-month total amount of fuel oil #1 and fuel oil #2, in gallons, combusted in Boiler #1 (EU-210) and Boiler #2 (EU-211).
C. The sulfur content of the fuel oil #1 and fuel oil #2 combusted shall not exceed 0.5% by weight. The owner or operator shall certify the sulfur content of the distillate oil burned in Boiler #1 (EU-210) and Boiler #2 (EU-211). The fuel certification shall include the name of the oil supplier and the sulfur content or the maximum sulfur content of the oil.

Authority for Requirement: DNR Construction Permit 04-A-282-S1

NSPS and NESHAP Requirements

NESHAP DDDDD:
The boilers are subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: *Industrial, Commercial and Institutional Boilers and Process Heaters* [40 CFR Part 63 Subpart DDDDD]

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

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

Stack Height, (ft, from the ground): 45
Stack Opening, (inches, dia.): 29.5
Exhaust Flow Rate (scfm): 4500
Exhaust Temperature (°F): 250
Discharge Style: Vertically Unobstructed
Authority for Requirement: DNR Construction Permit 04-A-282-S1

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: (Permitted Boilers > 5 MMBtu/hr) EP-412

Associated Equipment

Associated Emission Unit ID Numbers: EU-412

Emission Unit vented through this Emission Point: EU-412
Emission Unit Description: Knapp-Storms Boiler #1
Raw Material/Fuel: Natural Gas, Fuel Oil #1 and #2
Rated Capacity: 5.021 MMBtu/hr, 44.8 gallons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permit 05-A-354-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM10)
Emission Limit(s): 0.20 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-354-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.20 lb/hr; 0.6 lb/MMBtu
Authority for Requirement: DNR Construction Permit 05-A-354-S1
567 IAC 23.3(2)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 3.40 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-354-S1

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 1.0 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-354-S1

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. The fuel shall be limited to natural gas, Fuel Oil #1 or Fuel Oil #2.
B. The sulfur content of the fuel oil shall not exceed 0.5% by weight.
C. The boiler, EU-412, shall not exceed 500 hours of operation per 12-month rolling total while using fuel oil #1 or #2.

Reporting & Record keeping

A. Record the type of fuel used and the sulfur content of the fuel.
B. Record the monthly hours of operation while firing fuel oil #1 or #2.
C. Annual usage of fuel oil shall be determined on a 12-month rolling basis, for each month of operation.

Authority for Requirement: DNR Construction Permit 05-A-354-S1

NSPS and NESHAP Requirements

NESHAP DDDDD:
This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: *Industrial, Commercial and Institutional Boilers and Process Heaters* [40 CFR Part 63 Subpart DDDDD]

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 32
Stack Opening, (inches, dia.): 16
Exhaust Flow Rate (scfm): 2,080
Exhaust Temperature (^{o}F): 375
Discharge Style: Vertically Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-354-S1

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: (Permitted Boilers > 5 MMBtu/hr) EP-413

Associated Equipment

Associated Emission Unit ID Numbers: EU-413

Emission Unit vented through this Emission Point: EU-413
Emission Unit Description: Knapp-Storms Boiler #2
Raw Material/Fuel: Natural Gas, Fuel Oil #1 and #2
Rated Capacity: 5.021 MMBtu/hr, 44.8 gallons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permit 05-A-355-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.20 lb/hr; 0.6 lb/MMBtu
Authority for Requirement: DNR Construction Permit 05-A-355-S1
567 IAC 23.3(2)

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.20 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-355-S1

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 3.40 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-355-S1

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 1.00 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-355-S1

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. The fuel shall be limited to natural gas, Fuel Oil #1 or Fuel Oil #2.
B. The sulfur content of the fuel shall not exceed 0.5% by weight.
C. The boiler, EU-413*, shall not exceed 500 hours of operation per 12-month rolling basis, for each month of operation.

Reporting & Record keeping

A. Record the type of fuel used and the sulfur content of the fuel.
B. Record the monthly hours of operation while firing fuel oil #1 or #2.
C. Annual usage of fuel oil shall be determined on a 12-month rolling basis, for each month of operation.

Authority for Requirement: DNR Construction Permit 05-A-355-S1
*Construction Permit 05-A-355-S1 incorrectly lists the boiler as EU-412. The correct identifier is EU-413.

NSPS and NESHAP Requirements

NESHAP DDDDD:
This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: *Industrial, Commercial and Institutional Boilers and Process Heaters* [40 CFR Part 63 Subpart DDDDD]

Authority for Requirement: 40 CFR 63 Subpart DDDDD

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 32
Stack Opening, (inches, dia.): 16
Exhaust Flow Rate (scfm): 2,080
Exhaust Temperature (^{o}F): 375
Discharge Style: Vertically Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-355-S1

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: (Permitted Boilers > 5 MMBtu/hr) See Table: Vet Med Boilers

Associated Equipment

Table: Vet Med Boilers

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (MMBtu/hr)	Iowa DNR Construction Permit (Authority for Requirement)
EP-588	EU-588	Vet Med Boiler # 1	Natural Gas	17.855	11-A-345
EP-589	EU-589	Vet Med Boiler # 2	Natural Gas	17.855	11-A-346
EP-590	EU-590	Vet Med Boiler # 3	Natural Gas	17.855	11-A-347
EP-591	EU-591	Vet Med Boiler # 4	Natural Gas	17.855	11-A-348

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permits in Table: Vet Med Boilers
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.13 lb/hr
Authority for Requirement: DNR Construction Permits in Table: Vet Med Boilers

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.13 lb/hr; 0.6 lb/MMBtu
Authority for Requirement: DNR Construction Permits in Table: Vet Med Boilers
567 IAC 23.3(2)"b"

Pollutant: Nitrogen Oxide (NO_x)
Emission Limit(s): 0.85 lb/hr
Authority for Requirement: DNR Construction Permits in Table: Vet Med Boilers

Pollutant: CO
Emission Limit(s): 1.43 lb/hr
Authority for Requirement: DNR Construction Permits in Table: Vet Med Boilers

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. The fuel shall be limited to natural gas only.

Reporting & Record keeping

A. Maintain a record of the type of fuel used.

Authority for Requirement: DNR Construction Permits in Table: Vet Med Boilers

NSPS and NESHAP Requirements

NSPS Subpart Dc:

These boilers are subject to Standards of Performance for *Small Industrial-Commercial-Institutional Steam Generating Units*. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart Dc & Subpart A, *General Provision*s.

Authority for Requirement: DNR Construction Permits in Table: Vet Med Boilers
40 CFR Part 60 Subpart Dc
567 IAC 23.1(2)"lll"

NESHAP Subpart DDDDD:

These boilers are subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: *Industrial, Commercial, and Institutional Boilers and Process Heaters* [40 CFR Part 63 Subpart DDDDD].

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Emission Point Characteristics
The emission points shall conform to the conditions listed below.

Stack Height, (ft, from the ground): 49
Stack Opening, (inches, dia.): 28
Exhaust Flow Rate (scfm): 4821
Exhaust Temperature (°F): 301
Discharge Style: Vertically, without ran cap or with unobstructing rain cap
Authority for Requirement: DNR Construction Permits in Table: Vet Med Boilers

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: (Campus Miscellaneous Sources) EP-200

Associated Equipment

Associated Emission Unit ID Numbers: EU-200
Emissions Control Equipment ID Number: CE-200
Emissions Control Equipment Description: Afterburner

Emission Unit vented through this Emission Point: EU-200
Emission Unit Description: Vet Med Incinerator
Raw Material/Fuel: Waste and Natural Gas
Rated Capacity: 1080 lbs/hr and 0.0024 MMcf/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% (1)(2)
Authority for Requirement: DNR Construction Permit 75-A-368-S3
567 IAC 23.3(2)"d"
(1) Note that visible air contaminants in excess of 60% opacity may be emitted for a period or period aggregating not more than 3 minutes in any 60-minute period during an operation breakdown or during the cleaning of air pollution control equipment.
(2) An exceedance of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.2 gr/dscf (3)
Authority for Requirement: DNR Construction Permit 75-A-368-S3
567 IAC 23.4(12)"a"
(3) 0.2 grains per standard cubic foot adjusted to 12 percent carbon dioxide

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permit 75-A-368-S3
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. The emission unit's primary and secondary burners shall operate exclusively on natural gas, i.e. no backup fuel source.
B. The afterburner shall operate at all times during any operation of the primary chamber.
C. The incinerator is limited to combusting a fuel feed stream 10 percent or less of the weight of which is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis as defined in 40 CFR 60.51c.

Reporting & Record keeping

A. Record the amount of natural gas used on a rolling 12-month basis.
B. Record the weight of hospital waste and medical/infectious waste combusted by the incinerator as measured on rolling 12-month basis.
C. Record the weight of all other fuels and waste combusted by the incinerator as measured on a rolling 12-month basis.

Authority for Requirement: DNR Construction Permit 75-A-368-S3

NSPS and NESHAP Requirements

NSPS Subpart Ce

This incinerator is subject to New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart Ce, *Emission Guidelines and Compliance Times for Hospital/Medical Infectious Waste Incinerator*. However, the facility does meet an exemption as described in 60.32e(c) to this subpart and is allowed to do reduced requirements within the section.

Authority for Requirement: DNR Construction Permit 75-A-368-S3
40 CFR Part 60, Subpart Ce

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

Stack Height, (ft, from the ground): 70
Stack Opening, (inches, dia.): 31
Exhaust Flow Rate (scfm): 4600
Exhaust Temperature (°F): 1800
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 75-A-368-S3

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

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

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: (Campus Miscellaneous Sources) EP-220

Associated Equipment

Associated Emission Unit ID Numbers: EU-220
Emissions Control Equipment ID Number: CE-220
Emissions Control Equipment Description: Fabric Filters

Emission Unit vented through this Emission Point: EU-220
Emission Unit Description: FP&M Paint Spray Booth
Raw Material/Fuel: Paint
Rated Capacity: 3.75 gallons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permit 04-A-286
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM10)
Emission Limit(s): 1.11 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-286

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.01 gr/dscf
Authority for Requirement: DNR Construction Permit 04-A-286
567 IAC 23.4(13)

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. The spray gun capacity being used may operate at a maximum rate of 3.75 gal/hr.
B. The facility is limited to using no more than 500 gallons of painting and cleaning materials per 12-month rolling period.
C. The facility is limited to using painting and cleaning materials with a maximum Volatile Organic Compounds (VOC) content of 12.0 pounds per gallon.
D. The facility is limited to using painting and cleaning materials with an individual maximum Hazardous Air Pollutant (HAPs) content of 5.0 pound per gallon.

Reporting & Record keeping

A. Record monthly material usage (units of gal/month) of painting and cleaning materials used at the facility.
B. Record VOC and HAPs content in lbs/gal of each material used at the facility.
C. The MSDS of each painting and cleaning material used at the facility shall be kept on-site and available for inspection by the DNR.
D. During the initial 12 months of operation, cumulative plantwide material usage shall be determined for each month of operation.
E. After the initial 12 months of operation, annual plantwide material usage shall be determined on a 12 month rolling basis, for each month of operation.

Authority for Requirement: DNR Construction Permit 04-A-286

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 24
Stack Opening, (inches, dia.): 30
Exhaust Flow Rate (scfm): 13,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertically Unobstructed
Authority for Requirement: DNR Construction Permit 04-A-286

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

Monitoring Requirements

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

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

Paint Booth Agency Operation & Maintenance Plan

Weekly

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

- The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: (Campus Miscellaneous Sources) EP-235

Associated Equipment

Associated Emission Unit ID Numbers: EU-235

Emission Unit vented through this Emission Point: EU-235
Emission Unit Description: Meats Lab Linear Accelerator
Raw Material/Fuel: Electricity
Rated Capacity: 0.40 lbs/hr of ozone production

Applicable Requirements

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

None at this time.

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

None at this time.

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

Stack Height, (ft, from the ground): 48
Stack Opening, (inches, dia.): 36
Exhaust Flow Rate (scfm): 14,600
Exhaust Temperature (°F): Ambient
Discharge Style: Vertically Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-1061

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: (Campus Miscellaneous Sources) EP-236

Associated Equipment

Associated Emission Unit ID Numbers: EU-236

Emission Unit vented through this Emission Point: EU-236
Emission Unit Description: Meats Lab Smoke House #1
Raw Material/Fuel: Wood, Meat
Rated Capacity: 0.42 lb of wood/hr and 1500 lb of meat/day

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permit 04-A-289-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.2 gr/dscf
Authority for Requirement: DNR Construction Permit 04-A-289-S1
567 IAC 23.4(9)

Pollutant: Particulate Matter (PM10)
Emission Limit(s): 1.23 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-289-S1

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. Smokehouse #1 shall be limited to operating no more than 1500 hours per twelve-month rolling period.
B. Smokehouse #1 shall be limited to using no more than 1000 lbs of sawdust per twelve-month rolling period.

Reporting & Record keeping

A. The number of hours operated per twelve-month rolling period.
B. The amount of sawdust used per twelve-month rolling period.

Authority for Requirement: DNR Construction Permit 04-A-289-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 41
Stack Opening, (inches, dia.): 7
Exhaust Flow Rate (scfm): 720
Exhaust Temperature (°F): 129
Discharge Style: Vertical Obstructed
Authority for Requirement: DNR Construction Permit 04-A-289-S1

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: (Campus Miscellaneous Sources) EP-237

Associated Equipment

Associated Emission Unit ID Numbers: EU-237

Emission Unit vented through this Emission Point: EU-237
Emission Unit Description: Meats Lab Smoke House #2
Raw Material/Fuel: wood, meat
Rated Capacity: 0.42 lb of wood/hr and 1500 lb of meat/day

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permit 04-A-290-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM10)
Emission Limit(s): 1.31 lb/hr
Authority for Requirement: DNR Construction Permit 04-A-290-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.2 gr/dscf
Authority for Requirement: DNR Construction Permit 04-A-290-S1
567 IAC 23.4(9)

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. Smokehouse #2 shall be limited to operating no more than 1500 hours per twelve-month rolling period.
B. Smokehouse #2 shall be limited to using no more than 1000 lbs of sawdust per twelve-month rolling period.

Reporting & Record keeping

A. The number of hours operated per twelve-month rolling period.
B. The amount of sawdust used per twelve-month rolling period.

Authority for Requirement: DNR Construction Permit 04-A-290-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 46
Stack Opening, (inches, dia.): 10
Exhaust Flow Rate (scfm): 765
Exhaust Temperature (°F): 129
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 04-A-290-S1

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: (Campus Miscellaneous Sources) EP-506

Associated Equipment

Associated Emission Unit ID Numbers: EU-506

Emission Unit vented through this Emission Point: EU-506
Emission Unit Description: Vet Med Cooling Tower
Raw Material/Fuel: Cooling Water with Dissolved Solids
Rated Capacity: 1,044,000 gallons/hour

Applicable Requirements

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 3.81 tons/yr
Authority for Requirement: DNR Construction Permit 07-A-136

Pollutant: Particulate Matter (PM)
Emission Limit(s): 3.81 tons/yr
Authority for Requirement: DNR Construction Permit 07-A-136

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. The average Total Dissolved Solids (TDS) Concentration in the cooling water shall not exceed 2,000 ppm for any 30-day rolling period.

Reporting & Record keeping

A. The owner or operator shall measure the electrical conductivity of the cooling water to determine the Total Dissolved Solids (TDS) on a continuous basis. The owner or operator is required to take (1) water sample per month over a six month period to determine the relationship between the TDS and electrical conductivity. The determined TDS/conductivity relationship and the measured electrical conductivity value shall be used to determine compliance with allowable TDS concentration. (NOTE: for any malfunctions that may occur to the TDS monitoring system, the owner/operator may take daily grab samples. The TDS monitoring system is required to be operational at least 95% of the time. If the TDS monitoring system experiences downtime for more than 5% of the time a backup TDS monitoring system is required to be installed.)

B. The owner or operator shall operate and maintain the cooling tower per the manufacturer's instructions and specifications.

Authority for Requirement: DNR Construction Permit 07-A-136

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 24.6
Stack Opening, (inches, dia.): 264
Exhaust Flow Rate (acfm): 2,083,420
Exhaust Temperature (°F): 95
Discharge Style: Vertical
Authority for Requirement: DNR Construction Permit 07-A-136

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: (Campus Miscellaneous Sources) EP-708

Associated Equipment

Associated Emission Unit ID Numbers: EU-708
Emissions Control Equipment ID Number: CE-708
Emissions Control Equipment Description: Mist Eliminator (0.0005% Drift Loss)

Emission Unit vented through this Emission Point: EU-708
Emission Unit Description: North Chilled Water Plant Cooling Tower #6
Raw Material/Fuel: Cooling Water with Dissolved Solids
Rated Capacity: 16,000 gallons per minute (total)

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40%[(1)(2)]
Authority for Requirement: DNR Construction Permit 17-A-216
567 IAC 23.3(2)"d"

[(1)]An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
[(2)]The emission limit is based on a six (6) minute average.

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.08 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-216

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.08 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-216

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.08 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 17-A-216
567 IAC 23.3(2)"a"

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

A. The maximum total dissolved solids content of the circulating water shall not exceed a concentration of 2,000 ppmw.
B. Once a month, the owner/operator shall sample and analyze the circulating cooling water to determine the total dissolved solids concentration of the water. These samples shall be taken once each calendar month with at least 15 days between samples.
C. Any water treated chemicals used in this unit shall have a maximum VOC content of no more than 1.0 pounds per gallon.
D. The maximum usage of water treatment chemicals that contain VOC's shall not exceed 15,000 gallons per twelve (12) month period, rolled monthly.

Reporting & Recordkeeping

A. Maintain an SDS or other vendor's documentation showing the VOC content of any water treatment chemicals used in this unit.
B. At the end of each month, record the amount of VOC containing water treatment chemicals used during the last month.
C. At the end of each month, record the amount of VOC containing water treatment chemicals used during the previous twelve (12) months.

Authority for Requirement: DNR Construction Permit 17-A-216

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

Stack Height, (ft, from the ground): 34.6
Stack Opening, (inches, dia.): 264
Exhaust Flow Rate (scfm): 428,000 [2]
Exhaust Temperature (°F): [1]
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 17-A-216

[1] Exhaust temperature of this operation will vary with ambient conditions. Due to heat transfer from the water exhaust temperatures will be approximately 5 degrees warmer than ambient temperature.
[2] Listed air flow represents exhaust from each of the 4 cells of the tower.

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-759

Associated Equipment

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
EU-759	Central Vacuum System	NA	Cyclone (CE-759)
EU-761B	Roller Mill	10 tons/hour	
EU-764D	Surge 5 Ton Bins #821 & 822	75 tons/hour	
EU-764E	Loadout 3 Ton Bins #801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, & 812	75 tons/hour	

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 24-A-019
567 IAC 23.3(2)"d"

[(1)] An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 24-A-019
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available 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 operate and maintain the control equipment (cyclone) according to the manufacturer specifications or written operating and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (1) The date and time any inspection and/or maintenance was performed on the control equipment;
   (2) Any issues identified during the inspection and the date each issue was resolved;
   (3) Any issue identified during the maintenance activities and the date each issue was resolved; and,
   (4) Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 24-A-019

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): Vents inside
Stack Opening, (inches, dia.): Vents inside
Exhaust Flow Rate (scfm): 500
Exhaust Temperature (°F): Vents inside
Discharge Style: Vents inside
Authority for Requirement: DNR Construction Permit 24-A-019

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-760

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): EU-760
Emissions Control Equipment ID Number: CE-760
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: EU-760
Emission Unit Description: Ingredient Receiving
Raw Material/Fuel: Grain
Rated Capacity: 75 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 21-A-112-S1
567 IAC 23.3(2)"d"

[(1)] An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.08 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-112-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.28 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 21-A-112-S1
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available 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 differential pressure drop across the baghouse (CE760) shall be maintained between 0.1 and 8.0 inches of water column (WC).
   (1) The owner or operator shall properly operate and maintain equipment to continuously monitor the differential pressure drop across the baghouses (CE760).
   (2) The monitoring devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
   (3) The owner or operator shall record the pressure drop across the baghouse, at a minimum, of once per calendar week. If the pressure drop across the baghouse falls outside the range specified in Condition 5.A., the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain the following records:
      (a) The date and time of the pressure drop reading.
      (b) The pressured drop reading and if it was within the acceptable range.
      (c) If the pressure drop range is not within the acceptable range (i.e., between 0.1 and 8.0 inches water column), the owner or operator shall record the date and time of the occurrence, corrective actions taken, and the time until the pressured drop parameters are back in the applicable range.
      (d) This requirement shall not apply for those weeks that the emission unit(s) the baghouse (CE760) controls is not in operation.

B. This facility shall not receive more than 20,000 tons of grain per twelve month rolling period.
   (1) The owner or operator shall monthly record the following:
      (a) the amount of grain received each month (in tons); and,
      (b) the rolling twelve month total amount of grain received.

C. The owner or operator shall operate and maintain the control equipment (baghouse) according to the manufacturer specifications or written operating and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (1) The date and time any inspection and/or maintenance was performed on the control equipment;
   (2) Any issues identified during the inspection and the date each issue was resolved;
   (3) Any issue identified during the maintenance activities and the date each issue was resolved; and,
   (4) Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 21-A-112-S1

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

Stack Height, (ft, from the ground): 12
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 5,865
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 21-A-112-S1

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

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-761

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): EU-761A
Emissions Control Equipment ID Number: CE-761
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: EU-761A
Emission Unit Description: Hammermill
Raw Material/Fuel: Feed Grain
Rated Capacity: 10 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 21-A-113-S1
567 IAC 23.3(2)"d"

[(1)] An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.12 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-113-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.16 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 21-A-113-S1
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available 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 differential pressure drop across the baghouse (CE761) shall be maintained between 0.1 and 8.0 inches of water column (WC).
   (1) The owner or operator shall properly operate and maintain equipment to continuously monitor the differential pressure drop across the baghouses (CE761).
   (2) The monitoring devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
   (3) The owner or operator shall record the pressure drop across the baghouse, at a minimum, of once per calendar month. If the pressure drop across the baghouse falls outside the range specified in Condition 5.A., the owner or operator shall investigate the baghouse and make the necessary corrections. The owner or operator shall maintain the following records:
      (a) The date and time of the pressure drop reading.
      (b) The pressured drop reading and if it was within the acceptable range.
      (c) If the pressure drop range is not within the acceptable range (i.e., between 0.1 and 8.0 inches water column), the owner or operator shall record the date and time of the occurrence, corrective actions taken, and the time until the pressured drop parameters are back in the applicable range.
      (d) This requirement shall not apply for those calendar months that the emission unit the baghouse (CE761) controls is not in operation.

B. The owner or operator shall operate and maintain the control equipment (baghouse) according to the manufacturer specifications or written operating and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (1) The date and time any inspection and/or maintenance was performed on the control equipment;
   (2) Any issues identified during the inspection and the date each issue was resolved;
   (3) Any issue identified during the maintenance activities and the date each issue was resolved; and,
   (4) Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 21-A-113-S1

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

Stack Height, (ft, from the ground): 12
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 1,900
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 21-A-113-S1

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

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-762, EP-763, and EP-764

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): EU-762A and EU-762B
Emissions Control Equipment ID Number: CE-762, CE-763, and CE-764
Emissions Control Equipment Description: Sock Filters
Continuous Emissions Monitors ID Numbers: N/A

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	CE ID	Control Equipment	Raw Material	Rated Capacity
EP-762	EU-762A	Ground Grain 15 Ton Bins #301, 302, 303	CE-762	Sock Filters	Feed Grain	20 ton/hr
EP-762 / EP-763	EU-762B	Dual Purpose 30 Ton Bin #304, 305	CE-762 / CE-763	Sock Filters	Feed Grain	20 ton/hr
EP-763	EU-763B	Ingredient 30 Ton Bin #306, 307, 308, 309	CE-763	Sock Filters	Feed Grain	75 ton/hr
EP-763	EU-763D	Premix Ingredient 15 Ton Bin #313, 314	CE-763	Sock Filters	Feed Grain	75 ton/hr
EP-763	EU-761C	2500 Bushel Bin #201, 202	CE-763	Sock Filters	Feed Grain	70 ton/hr
EP-763 / EP-764	EU-763C	Premix Ingredient 7.5 Ton Bin #310	CE-763 / CE-764	Sock Filters	Feed Grain	75 ton/hr
EP-764	EU-764A	Premix Ingredient 15 Ton Bin #311	CE-764	Sock Filters	Feed Grain	75 ton/hr
EP-764	EU-764B	Premix Ingredient 15 Ton Bin #312	CE-764	Sock Filters	Feed Grain	75 ton/hr
EP-764	EU-764C	Mixed Feed 15 Ton Bin #401, 402, 403, 404	CE-764	Sock Filters	Feed Grain	75 ton/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permits 21-A-114-S1, 21-A-115-S2, 21-A-116-S2
567 IAC 23.3(2)"d"

(1) An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.01 lb/hr
Authority for Requirement: DNR Construction Permits 21-A-114-S1, 21-A-115-S2, 21-A-116-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf, 0.09 lb/hr
Authority for Requirement: DNR Construction Permits 21-A-114-S1, 21-A-115-S2, 21-A-116-S2
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available 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 operate and maintain the control equipment (sock filters) according the manufacturer's specifications or written operating and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (2) The date and time any inspection and/or maintenance was performed on the control equipment;
   (3) Any issues identified during the inspection and the date each issue was resolved;
   (4) Any issues identified during the maintenance activities and the date each issue was resolve; and
   (5) Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permits 21-A-114-S1, 21-A-115-S2, 21-A-116-S2

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

Stack Height, (ft, from the ground): Inside vent
Stack Opening, (inches, dia.): Inside vent
Exhaust Flow Rate (scfm): 500
Exhaust Temperature (°F): Inside vent
Discharge Style: Inside vent

Authority for Requirement: DNR Construction Permits 21-A-114-S1, 21-A-115-S2, 21-A-116-S2

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

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-765

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): EU-765A and EU-765B
Emissions Control Equipment ID Number: CE-765
Emissions Control Equipment Description: Bag Filter
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: EU-765A and EU-765B
Emission Unit Description: 2 Ton Mixer #361 (765A) and 2 Ton Scale Hopper #320 (765B)
Raw Material/Fuel: Feed Grain
Rated Capacity: 75 tons/hr (each)

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 21-A-117-S1
567 IAC 23.3(2)"d"

[(1)] An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.04 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-117-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.21 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 21-A-117-S1
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-117-S1

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available 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 operate and maintain the control equipment (bag filters) according to the manufacturer specifications or written operating and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (1) The date and time any inspection and/or maintenance was performed on the control equipment;
   (2) Any issues identified during the inspection and the date each issue was resolved;
   (3) Any issue identified during the maintenance activities and the date each issue was resolved; and,
   (4) Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 21-A-117-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 42
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 500
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 21-A-117-S1

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-766 and EP-767

Associated Equipment

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
EU-766	Loadout Scale Hopper 3 Ton #841	75 tons/hour	Sock Filter (CE-766)
EU-767	Loadout Scale Hopper 3 Ton #831	75 tons/hour	Sock Filter (CE-767)

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permits 21-A-118-S1 & 21-A-119-S1
567 IAC 23.3(2)"d"

[(1)] An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.02 lb/hr
Authority for Requirement: DNR Construction Permits 21-A-118-S1 & 21-A-119-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.09 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permits 21-A-118-S1 & 21-A-119-S1
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available 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 operate and maintain the control equipment (sock filters) according to the manufacturer specifications or written operating and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (1) The date and time any inspection and/or maintenance was performed on the control equipment;
   (2) Any issues identified during the inspection and the date each issue was resolved;
   (3) Any issue identified during the maintenance activities and the date each issue was resolved; and,
   (4) Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permits 21-A-118-S1 & 21-A-119-S1

Emission Point Characteristics

The emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): Internally vented
Stack Opening, (inches, dia.): Internally vented
Exhaust Flow Rate (scfm): 500
Exhaust Temperature (°F): Internally vented
Discharge Style: Internally vented
Authority for Requirement: DNR Construction Permits 21-A-118-S1 & 21-A-119-S1

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-768

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): EU-768
Emissions Control Equipment ID Number: CE-768
Emissions Control Equipment Description: Cyclone
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: EU-768
Emission Unit Description: Pellet Cooler
Raw Material/Fuel: Feed Grain
Rated Capacity: 5 ton/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 21-A-120-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.15 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-120-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.26 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 21-A-120-S1
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available 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 operate and maintain the equipment covered under this permit, which includes the control equipment (CE768), according to the manufacturer's instructions and/or in accordance with the facility's maintenance plan.
   (1) The owner or operator shall keep a log of all maintenance and inspection activities performed on the equipment in order to demonstrate that it was maintained in accordance with the manufacturer's instructions or in accordance with the facility's maintenance plan.
   (2) At a minimum, this log shall include:
      (a) The date that any inspection and/or maintenance was performed on the control devices;
      (b) Any issues identified during the inspection;
      (c) Any issues addressed during the maintenance activities and the date each issue was resolved; and
      (d) Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 21-A-120-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 68.8
Stack Opening, (inches, dia.): 6 x 23
Exhaust Flow Rate (scfm): 3,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 21-A-120-S1

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-801

Associated Equipment

Associated Emission Unit ID Numbers (if multiple units vent thru this EP): EU-801
Emissions Control Equipment ID Number: CE-801
Emissions Control Equipment Description: Secondary Chamber rated at 3 MMBTU/hr
Continuous Emissions Monitors ID Numbers: N/A

Emission Unit vented through this Emission Point: EU-801
Emission Unit Description: VDL Incinerator
Raw Material/Fuel: Waste
Rated Capacity: 1200 lb/hr Waste Charge Rate, 2500 lb/batch of Waste, (Six burners in lower chamber rated at 9 MMBTU/hr total)

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 21-A-235-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 1.9 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-235-S1

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.9 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-235-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 2.8 lb/hr; 0.2 gr/dscf
Authority for Requirement: DNR Construction Permit 21-A-235-S1
567 IAC 23.4(12)"a-b"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppm_v
Authority for Requirement: DNR Construction Permit 21-A-235-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 5.0 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-235-S1

Pollutant: Carbon Dioxide (CO)
Emission Limit(s): 4.1 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-235-S1

Operating Requirements with Associated Monitoring and Recordkeeping
All records as required by this permit shall be available 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. VDL Incinerator (EU-801) shall be fired by natural gas only.
B. The amount of waste charged into VDL Incinerator (EU-801) shall not exceed the rated capacity (lbs/batch) in batch incinerating mode. Batch incinerating mode is allowed to be used to incinerate a single whole animal one at a time, and only type 4 pathological waste is allowed in the incinerator.
    (1) The owner or operator shall maintain records on the amount of waste charged into the VDL Incinerator (EU-801) in batch mode. The records shall be on a pounds per charge basis.
    (2) The type of waste shall be documented for each batch.
C. The amount of waste charged into VDL Incinerator (EU-801) shall not exceed the rated capacity (lbs/hr) in continuous incinerator mode.
    (1) The owner or operator shall maintain records on the amount of waste charged into the VDL Incinerator (EU-801) in continuous incinerator mode. The records shall be on a pounds per hour basis.
D. The waste burned in the VDL Incinerator (EU-801) shall be limited to pathological waste, low-level radioactive waste, chemotherapeutic waste, and hospital and medical/infectious waste. Pathological waste is waste material consisting of only human or animal remain, anatomical parts, and/or tissue, and the bags/containers used to collect and transport the waste material and animal bedding. Low-level radioactive waste and chemotherapeutic waste are defined in §60.3078. Hospital waste and medical/infectious waste (HMIW) are defined in §60.51c. Because the rated capacity of VDL Incinerator (EU-801) is based on burning pathological waste, whenever HMIW is incinerated in the unit, it shall be incinerated at the same time that pathological waste is being incinerated. Prior to burning other types of waste in VDL Incinerator (EU-801), the owner or operator shall notify the Iowa DNR - Air Quality Bureau.
    (1) The owner or operator shall maintain records on the identification of the types of waste charged into the VDL Incinerator (EU-801) when in continuous incinerator

mode.

E. VDL Incinerator (EU-801) shall be operated only by personnel who have been properly trained.

F. VDL Incinerator (EU-801) is a co-fired combustor as defined in §60.51c, and, accordingly, the VDL Incinerator (EU-801) is restricted to burning a maximum of 10% hospital waste and medical/infectious waste by weight of all waste combusted on a calendar quarter basis. By definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are not considered hospital waste or medical/infectious waste.
    (1) The owner or operator shall maintain the following records on a calendar quarterly basis for VDL Incinerator (EU-801):
        a. The amount of hospital waste and medical/infectious waste burned (pounds);
        b. The total amount of waste burned (pounds); and
        c. The percentage of hospital waste and medical/infectious waste burned.

G. VDL Incinerator (EU-801) shall be equipped with an interlock system to prevent charging waste material until the secondary combustion chamber temperature has reached a minimum temperature of 1600°F and the primary combustion chamber has reached a minimum temperature of 1200°F.
    (1) The owner or operator shall have equipment that monitors and records the temperature in the primary combustion chamber for each incinerator.
    (2) The owner or operator shall have equipment that monitors and records the temperature in the secondary combustion chamber continuously for each incinerator.

H. The secondary chamber (CE-801) for the VDL Incinerator (EU-801) shall remain on and maintain a minimum temperature of 1550°F until the waste material has burned down completely.

I. The owner or operator shall follow its written standard operating procedures for the VDL Incinerator (EU-801).

J. The owner or operator shall maintain the records required by its standard operating procedures for the VDL Incinerator (EU-801).

Authority for Requirement: DNR Construction Permit 21-A-235-S1

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

Stack Height, (ft, from the ground): 51
Stack Opening, (inches, dia.): 30
Exhaust Flow Rate (scfm): 2,210
Exhaust Temperature (°F): 1,500
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 21-A-235-S1

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

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

Stack Testing:

Pollutant – Opacity
Stack Test to be Completed by (date) - (1)
Test Method - 40 CFR 60, Appendix A, Method 9
Authority for Requirement: DNR Construction Permit 21-A-235-S1

Pollutant – Particulate Matter (PM)
Stack Test to be Completed by (date) - (1)
Test Method - 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
Authority for Requirement: DNR Construction Permit 21-A-235-S1

Pollutant – Particulate Matter (PM_{10})
Stack Test to be Completed by (date) - (1)
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement: DNR Construction Permit 21-A-235-S1

Pollutant – Particulate Matter ($PM_{2.5}$)
Stack Test to be Completed by (date) - (1)
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement: DNR Construction Permit 21-A-235-S1

Pollutant – Nitrogen Oxides (NO_x)
Stack Test to be Completed by (date) - [1]
Test Method - 40 CFR 60, Appendix A, Method 7E
Authority for Requirement: DNR Construction Permit 21-A-235-S1

Pollutant – Carbon Monoxide (CO)
Stack Test to be Completed by (date) - [1]
Test Method - 40 CFR 60, Appendix A, Method 10
Authority for Requirement: DNR Construction Permit 21-A-235-S1

[1] Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-802 and EP-803

Associated Equipment

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Maximum Design Capacity	CE ID	Control Equipment Description	Permit #
EP-802	EU-802	VDL Cooling Tower 1 (1 Cell)	36,000 Gallons/hr	CE-802	Mist Eliminator (0.001%)	21-A-236-S1
EP-803	EU-803	VDL Cooling Tower 2 (1 Cell)	36,000 Gallons/hr	CE-803	Mist Eliminator (0.001%)	21-A-237-S1

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: DNR Construction Permits 21-A-236-S1 & 21-A-237-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.01 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permits 21-A-236-S1 & 21-A-237-S1
567 IAC 23.3(2)"a"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available 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 total dissolved solids (TDS) of the water used shall not exceed 2,000 parts per million (ppm) by weight for each VDL cooling tower (EU-802 and EU-803).
    1) Record the analysis of the TDS of the water used for each quarter in each VDL cooling tower (EU-802 and EU-803) when each one is in use.

B. The combined total of both VDL cooling towers (EU-802 and EU-803) usage of VOC containing cooling tower chemical additives shall not exceed 1,200 gallons per 12- month rolling period with a VOC containing cooling module chemical additive with a VOC content exceeding 0.03 pounds per gallon:
    1) Record the combined total of both VDL cooling towers amount of VOC containing cooling tower chemical additive used each month, in gallons. Purchase records may be used to record usage if it is assumed that a full delivery is used within the month it is received.
    2) Calculate and record the 12-month rolling combined total of VOC containing cooling tower chemical additive used by both VDL cooling towers (EU-802 and EU-803) each month, in gallons.

C. The combined total of both VDL cooling towers (EU-802 and EU-803) usage of VOC containing cooling tower chemical additives shall not exceed 400 gallons per 12- month rolling period with a VOC containing cooling module chemical additive with a VOC content exceeding 7.6 pounds per gallon:
    1) Record the combined total of both VDL cooling towers amount of VOC containing cooling tower chemical additive used each month, in gallons. Purchase records may be used to record usage if it is assumed that a full delivery is used within the month it is received.
    2) Calculate and record the 12-month rolling combined total of VOC containing cooling tower chemical additive used by both VDL cooling towers (EU-802 and EU-803) each month, in gallons.

D. The combined total of both VDL cooling towers (EU-802 and EU-803) usage of HAP containing cooling tower chemical additives shall not exceed 400 gallons per 12- month rolling period with a HAP containing cooling module chemical additive with a HAP content exceeding 0.2 pounds per gallon:
    1) Record the combined total of both VDL cooling towers (EU-802 and EU-803) amount of HAP containing cooling tower chemical additive used each month, in gallons. Purchase records may be used to record usage if it is assumed that a full delivery is used within the month it is received.
    2) Calculate and record the 12-month rolling combined total of HAP containing cooling tower chemical additive used by both VDL cooling towers (EU-802 and EU-803) each month, in gallons.

E. The owner or operator shall maintain a Safety Data Sheet (SDS) for cooling tower chemical additives used in each VDL cooling tower (EU-802 and EU-803).

F. The owner or operator shall operate, inspect and maintain all the equipment associated

with the process and the Mist Eliminators (CE-802 and CE-803) in accordance with manufacturer's specifications and maintenance schedule.

1) The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from the inspection or maintenance of the Mist Eliminators (CE-802 and CE-803).

Authority for Requirement: DNR Construction Permits 21-A-236-S1 & 21-A-237-S1

Emission Point Characteristics

The emission points shall conform to the specifications listed below.

EP ID	Stack Height, Feet	Discharge Style	Stack Opening, inches	Stack Temperature, °F	Exhaust Flowrate, SCFM
EP-802	10	Vertical, Unobstructed	100	100	18,857
EP-803	10	Vertical, Unobstructed	100	100	18,857

Authority for Requirement: DNR Construction Permits 21-A-236-S1 & 21-A-237-S1

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Existing Compression Ignition Engines < 400 BHP

Associated Equipment

Table: Existing Compression Ignition Engines [(1)]

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Rated Capacity (bhp)	Construction Date
EP-259	EU-259	Lied Emergency Generator	40	05/11/1990
EP-292	EU-292	Buchanan Hall Emergency Generator	10	08/01/2003
EP-366	EU-366	Design College Emergency Generator	241	01/01/1974
EP-373	EU-373	Admin. Services Emergency Generator	322	01/01/1997
EP-411	EU-411	Eaton Hall Emergency Generator	168	07/01/2002
EP-419	EU-419	Carver Co-Lab Emergency Generator	161	01/01/2003
EP-465	EU-465	Pearson Emergency Generator	207	06/01/2003
EP-473	EU-473	Martin Hall Emergency Generator	168	07/01/2004
EP-510	EU-510	UV Emergency Generator	51	01/01/2006
EP-524	EU-524	Oak Hall (Formerly Larch) Emergency Generator	241	07/01/1999
EP-526	EU-526	ASC I Emergency Generator	241	11/10/1987

[(1)] All engines listed are diesel-fueled emergency generators, less than 400 bhp and exempt from construction permitting

Applicable Requirements

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

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

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

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

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

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

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

Reporting & Record keeping

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

Authority for Requirement: 567 IAC 22.108(3)

NSPS and NESHAP Requirements

NESHAP:

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

Compliance Date

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

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or within 1 year + 30 days, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
2. Inspect air cleaner every 1000 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.

6. 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.

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2c to Subpart ZZZZ

1. An initial notification is not required per 40 CFR 63.6645(a)(5).
2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: New Compression Ignition Engines < 400 BHP

Associated Equipment

Table: New Compression Ignition Engines < 400 BHP (1)

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Rated Capacity (bhp)	Displacement (L/cyl)	Construction Date
EP-532	EU-532	Hach Hall Emergency Generator	373	1.48	10/21/2008
EP-533	EU-533	Vet Med Pumphouse Emergency Generator	398	1.47	7/14/2009
EP-535	EU-535	Music Hall Emergency Generator	80	0.60	3/2/2010
EP-537	EU-537	Communication Building 2 Emergency Generator	315	1.13	9/10/2010
EP-539	EU-539	Hilton Coliseum 2 Emergency Generator	274	1.10	10/04/2010
EP-587	EU-587	Heady Hall Exterior Emergency Generator	49	0.61	9/10/2010
EP-621	EU-621	VMRI Bldg.35 Emergency Generator	49	0.60	03/01/2011
EP-622	EU-622	Curtiss Hall Student Services Emergency Generator	279	1.12	07/28/2011
EP-623	EU-623	Horticulture/Troxel Hall Emergency Generator	98	1.10	03/19/2012
EP-624	EU-624	Wallace Wilson Fire System Emergency Generator	389	1.45	04/11/2012
EP-630	EU-630	VMRI BSL3 Bldg 46 Emergency Generator #2	237	1.13	12/28/2012
EP-631	EU-631	VMRI Freezer Bldg #62 Emergency Generator	315	1.13	07/16/2013
EP-649	EU-649	EHSSB Emergency Generator	198	1.12	08/01/2015
EP-657	EU-657	Forker Bldg Emergency Generator	131	1.13	05/28/2015
EP-689	EU-689	Geoffroy Hall Emergency Generator	398	1.47	12/07/2015
EP-709	EU-709	Bessey Addition Emergency Generator	398	1.45	09/09/2016
EP-711	EU-711	ATRB Emergency Generator	331	1.2	06/01/2016
EP-720	EU-720	Student Innovation Center Emergency Generator	279	1.12	01/06/2018
EP-722	EU-722	Gerdin Emergency Generator	132	1.1	06/11/2019

EP-726	EU-726	Vet Med Field Services Emergency Generator	94	0.85	11/06/2019
EP-728	EU-728	Helser Hall Emergency Generator	24.3	0.55	01/06/2020
EP-738	EU-738	Sports Performance Complex Emergency Generator	284	1.13	12/23/2019
EP-825	EU-825	Therkildsen Hall Emergency Generator	247	1.2	2/16/2025

(1) All engines listed are diesel-fueled emergency generators with a rated capacity of less than 400 bhp, and exempt from construction permitting

Applicable Requirements

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

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

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

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limits

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

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

Reporting & Record keeping

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

Authority for Requirement: 567 IAC 22.108(3)

NSPS and NESHAP Requirements

NESHAP Subpart ZZZZ:
These emergency engines are subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(ii) these compression ignition emergency engines, located at a major source, are new stationary RICE as they were constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), these emergency engines must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII for compression ignition engines. No further requirements apply for these emergency engines under subpart ZZZZ.

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

NSPS Subpart IIII:

Emission Standards (for engines with displacement (L/cyl) < 10):
According to 40 CFR 60.4205(b) and 4202, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

EP	Max. Engine Power (bhp)	Model Year	NMHC + NOx	CO	PM	Opacity	Rule Ref
EP-532	373	2008	4.0 (3.0)	3.5 (2.6)	0.20 (0.15)	(1)	(2)
EP-533	398	2009					
EP-535	80	2009	4.7 (3.5)	5.0 (3.7)	0.40 (0.30)		
EP-537	315	2010	4.0 (3.0)	3.5 (2.6)	0.20 (0.15)		
EP-539	274	2010					
EP-587	49	2010	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)		(3)
EP-621	49	2010					
EP-622	279	2010	4.0 (3.0)	3.5 (2.6)	0.20 (0.15)		(2)
EP-623	98	2012	4.7 (3.5)	5.0 (3.7)	0.40 (0.30)		
EP-624	389	2012	4.0 (3.0)	3.5 (2.6)	0.20 (0.15)		
EP-630	237	2012					
EP-631	315	2013					
EP-649	198	2015					
EP-657	131	2015	4.0 (3.0)	5.0 (3.7)	0.30 (0.22)		
EP-689	398	2016	4.0 (3.0)	3.5 (2.6)	0.20 (0.15)		
EP-709	398	2017					
EP-711	331	2016					

(1) Exhaust opacity must not exceed: 20 percent during the acceleration mode; 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or lugging modes.
(2) 40 CFR 89.112 and 40 CFR 89.113.
(3) Table 2 to Subpart IIII and 40 CFR 1039.105.

Fuel Requirements (if using diesel):
You must use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 60.4207 and 40 CFR 80.510(b).

Compliance Requirements:

4. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
    a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
    b) Changing only those emission-related settings that are permitted by the manufacturer; and
    c) Meeting the requirements of 40 CFR 89, 94 and/or 1068, as they apply to you.
5. You must demonstrate compliance with the applicable emission standards by purchasing an engine certified to the applicable emission standards. The engine must be installed and configured according to the manufacturer's emission-related specifications. 40 CFR 60.4211(c).
6. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct the following performance testing in accordance with 40 CFR 60.4212 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4211(g) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
HP < 100	Within 1 year of non-permitted action [(1)]	Not required
100 ≤ HP ≤ 500	Within 1 year of engine startup, or non-permitted action [(1)]	Not required

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

Operating and Recordkeeping Requirements

5. If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 60.4209(a)) and, starting with the model years in the following table, you must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 40 CFR 60.4214(b).

Engine power	Starting model year
19 ≤ KW < 56 (25 ≤ HP < 75)	2013
56 ≤ KW < 130 (75 ≤ HP < 175)	2012
130 ≤ KW (175 ≤ HP)	2011

6. There is no time limit on use for emergency situations. 40 CFR 60.4211(f)(1).
7. The engine may be operated for the purpose of maintenance checks and readiness testing, emergency demand response, and deviation of voltage or frequency for a maximum of 100 hours/year. See 40 CFR 60.4211(f)(2) for more information.
8. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used for peak shaving or non-emergency demand response or to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing. See 40 CFR 60.4211(f)(3) for more information.

Authority for Requirement: 40 CFR Part 60, Subpart IIII
567 IAC 23.1(2)"yyy"

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Existing 4-Stroke Rich Burn Spark Ignition < 400 BHP

Associated Equipment

Table: Existing 4-Stroke Rich Burn Spark Ignition < 400 BHP [(1)]

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Rated Capacity (bhp)	Construction Date
EP-270	EU-270	Agronomy Greenhouse Emergency Generator	60	01/01/1985
EP-272	EU-272	Food Sciences Emergency Generator	52	01/01/1991
EP-273	EU-273	Gilman Hall Emergency Generator	40	01/01/1991
EP-277	EU-277	LeBaron Hall Emergency Generator	201	01/01/1992
EP-278	EU-278	Meats Lab. # 1 Emergency Generator	40	01/01/1992
EP-279	EU-279	Meats Lab. # 2 Emergency Generator	40	01/01/1992
EP-282	EU-282	Research Park Emergency Generator	47	01/01/1995
EP-284	EU-284	Science 2 Emergency Generator	13	01/01/1972
EP-286	EU-286	Town Eng. Emergency Generator	17	01/01/1970
EP-287	EU-287	Vet Med Research Institute # 40 Emergency Generator	114	01/01/1989
EP-290	EU-290	Barton Hall Emergency Generator	5	08/01/1981
EP-291	EU-291	Birch-Welch-Roberts Emergency Generator	14	08/01/1981
EP-294	EU-294	Freeman Hall Emergency Generator	5	12/01/1981
EP-296	EU-296	Friley Hall South Emergency Generator	13	06/01/1983
EP-302	EU-302	Lyon Hall Emergency Generator	5	12/01/1981
EP-395	EU-395	Linden Hall Emergency Generator	132	03/15/2000
EP-407	EU-407	Gilman Emergency Generator	40	01/01/2001
EP-472	EU-472	Reiman Gardens Emergency Generator	46	01/01/2002
EP-522	EU-522	Memorial Union Emergency Generator	11	07/01/2008
EP-523	EU-523	UDCC Emergency Generator	65	06/01/2003
EP-639	EU-639	Knapp Storms Dining Complex Emergency Generator	10	01/01/1970

[(1)] All engines listed are natural gas-fueled emergency generators, less than 400 bhp, and exempt from construction permitting.

Applicable Requirements

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

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

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

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

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

NSPS and NESHAP Requirements
NESHAP Subpart ZZZZ:
The emergency engines are subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(ii) these spark ignition emergency engine, located at a major source, are existing stationary RICE as they were constructed prior to June 12, 2006.

Compliance Date
Per 63.6595(a)(1) you must comply with the provisions of subpart ZZZZ that are applicable by October 19, 2013.

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or within 1 year + 30 days, whichever comes first. (See 63.6625(j) for the oil analysis option to extend time frame of requirements.)
2. Inspect spark plugs every 1,000 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. 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.

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing, emergency demand response and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing, emergency demand response and periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing and emergency demand response. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2c to Subpart ZZZZ

1. An initial notification is not required per 40 CFR 63.6645(a)(5).
2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: New Spark Ignition Emergency Engines < 400 BHP

Associated Equipment

Table: New Spark Ignition Emergency Engines [(1)]

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Rated Capacity (bhp)	Construction Date
EP-647	EU-647	Ross Hall Emergency Generator	22.5	06/02/2015
EP-729	EU-729	Durham Center Emergency Generator	302	02/26/2020
EP-742	EU-742	Jacobson Emergency Generator	40	03/16/2004
EP-771	EU-771	Feed Mill Emergency Generator	242	01/13/2022
EP-824	EU-824	Friley North Emergency Generator	40	02/15/2023
EP-826	EU-826	Town Hall Emergency Generator	40	05/01/2025

[(1)] These engines are natural gas-fired emergency generators, less than 400 bhp and exempt from construction permitting.

Applicable Requirements

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

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

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

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

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

NSPS and NESHAP Requirements

NESHAP Subpart ZZZZ:

The emergency engines are 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)(2)(ii) these spark ignition emergency engine, located at a major source, are new stationary RICE as they were constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), these emergency engines must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ for spark ignition engines. No further requirements apply for this engine under subpart ZZZZ.

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

NSPS Subpart JJJJ:

Emission Standards (40 CFR 60.4233(d) and Table 1 to Subpart JJJJ):

Emission Standards (g/HP-hr) [1]	
HC + NOx	CO
10	387

[1] Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

Compliance Demonstrations:

1. You must demonstrate compliance with the emission standards according to one of following methods (40 CFR 60.4243(b)):
    a) Purchasing a certified engine that complies with the emission standards, or
    b) Purchasing a non-certified engine and demonstrating compliance with the emission standards. You must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct performance tests to demonstrate compliance in accordance with 40 CFR 60.4244. Owners and operators are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 4243(b) for additional information.

Initial Test	Subsequent Test
Required	Not required

2. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer's written instructions must keep records of required maintenance. 40 CFR 60.4243(b)(1), 4243(a) and 4245(a)(2).

3. Owners and operators of natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, a performance test must be conducted to demonstrate compliance with the emission standards. 40 CFR 60.4243(e).
4. If you are an owner or operator of engine ≤ 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing, but you are not required to conduct subsequent performance testing unless the engine is rebuilt or undergoes major repair or maintenance. 40 CFR 60.4243(f).
5. Owners and operators of certified engines must keep a record from the manufacturer that the engines are certified to meet applicable emission standards. 40 CFR 60.4245(a)(3).
6. Owners and operators of non-certified engines or certified engines operating in a non-certified manner must keep documentation that these engines meet the applicable emission standards. 40 CFR 60.4245(a)(4).

Operating and Recordkeeping Requirements (40 CFR 4243(d))

1. Owners and operators of the following emergency SI engines that do not meet the applicable standards for non-emergency engines must install a non-resettable hour meter. 40 CFR 60.4237.

Maximum Engine Power	Engine Was Built On Or After
HP < 130	7/1/2008

2. 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.
3. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing.
4. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the date and time of operation of the engine and the reason the engine was in operation.
5. Owners and operators of the following emergency SI that does not meet the applicable standards for a non-emergency engine must keep the following records. 40 CFR 60.4245(b).

Maximum Engine Power	Manufactured On Or After	Recordkeeping Requirement
25 < HP < 130	7/1/2008	Hours of operation recorded through a non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

Authority for Requirement: 40 CFR Part 60, Subpart JJJJ
567 IAC 23.1(2)"zzz"

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Exempt Boilers

Associated Equipment

Table: Exempt Boilers [(1)]

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Rated Capacity (MMBtu)
EP-202	EU-202	Livestock Infectious Disease Isolation Facility Boiler #1	4.00
EP-321	EU-321	Vet Medical Research Institute #1 Boiler	2.45
EP-420	EU-420	Carver Co-Lab Boiler #1	2.04
	EU-421	Carver Co-Lab Boiler #2	2.04
	EU-422	Carver Co-Lab Boiler #3	2.04
	EU-423	Carver Co-Lab Boiler #4	2.04
EP-504	EU-504	Carver Co-Lab Boiler #5	2.04
EP-602	EU-602	VMRI Bldg 40 Boiler # 1	2.093
EP-603	EU-603	VMRI Bldg 40 Boiler # 2	2.093
EP-620	EU-620	Natural Gas Boiler	0.7
EP-628	EU-628	Applied Science Center I Boiler #1	5.025
EP-629	EU-629	Applied Science Center I Boiler #2	5.025
EP-637	EU-637	Bergstrom Boiler #1	2.00
EP-638	EU-638	Bergstrom Boiler #2	2.00
EP-691	EU-691	Geoffroy Hall Boiler #1	3.00
EP-692	EU-692	Geoffroy Hall Boiler #2	3.00
EP-693	EU-693	Geoffroy Hall Boiler #3	3.00
EP-694	EU-694	Geoffroy Hall Boiler #4	3.00
EP-716	EU-716	Lied Rec Center Boiler #1	3.00
EP-717	EU-717	Lied Rec Center Boiler #2	3.00
EP-718	EU-718	Lied Rec Center Boiler #3	3.00
EP-719	EU-719	Lied Rec Center Boiler #4	3.00
EP-733	EU-733	SPC Boiler #3	3.00
EP-734	EU-734	SPC Boiler #4	3.00
EP-739	EU-739	Jacobson Boiler #1	2.50
EP-740	EU-740	Jacobson Boiler #2	2.50
EP-775	EU-775	Feed Mill Boiler	4.20
EP-804	EU-804	Lochinvar Boiler #1	2.50
EP-805	EU-805	Lochinvar Boiler #2	2.50

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Rated Capacity (MMBtu)
EP-806	EU-806	Lochinvar Boiler #3	2.50
EP-807	EU-807	CB Boiler #1	2.008
EP-808	EU-808	CB Boiler #2	2.008
EP-809	EU-809	CB Boiler #3	2.008
EP-810	EU-810	CB Boiler #4	2.008
EP-811	EU-811	VDL Water Heater #1	0.499
EP-812	EU-812	VDL Water Heater #2	0.499
EP-820	EU-820	LIDIF Boiler B-1A	3.00
EP-821	EU-821	LIDIF Boiler B-1B	3.00
EP-822	EU-822	LIDIF Boiler B-1C	3.00

(1) All boilers are natural gas-fired, existing boilers, with maximum capacities between 1.6 and 10 MMBtu/hr, and exempt from construction permitting.

Applicable Requirements

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

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

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.6 lbs/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppm
Authority for Requirement: 567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

NSPS and NESHAP Requirements

NESHAP Subpart DDDDD:

These boilers are subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD]

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

IV. Facility Description and Equipment List- Power Plant

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP-80	EU-80	Vacuum System	99-A-853
EP-100	EU-100	Electric Power Generation	99-A-732
EP-102	EU-102	Equipment Losses (Five S and C Vista Switches)	13-A-309-P
EP-S	EU-B1	Circulating Fluidizer Bed Boiler #1	07-A-923-P6
	EU-B2	Circulating Fluidizer Bed Boiler #2	
EP-B8	EU-B8	Boiler 8 Stack	13-A-302-P
EP-B9	EU-B9	Boiler 9 Stack	13-A-303-P
EP-B10	EU-B10	Boiler 10 Stack	13-A-304-P
EP-T1	EU-T1	Fuel Oil Tank Vent 1	13-A-306
EP-T2	EU-T2	Fuel Oil Tank Vent 2	13-A-307

Insignificant Activities Equipment List – Power Plant

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU-70	Cooling Tower
EU-71	Solvent Parts Washer
EU-75	Maintenance Welding

V. Emission Point Specific Conditions - Power Plant

Emission Point ID Number: EP-80

Associated Equipment

Associated Emission Unit ID Numbers: EU-80
Emissions Control Equipment ID Number: CE-80A and CE-80B
Emissions Control Equipment Description: Cyclone and Fabric Filter

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Emission Unit vented through this Emission Point: EU-80
Emission Unit Description: Central Vacuum System
Raw Material/Fuel: Coal
Rated Capacity: 350 scfm

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: DNR Construction Permit 99-A-853
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr./dscf
Authority for Requirement: DNR Construction Permit 99-A-853
567 IAC 23.3(2)"a"(1)

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limit

A. Maintain Primary CE-80A (High Efficiency Cyclone) and Secondary Separator CE-80B (Fabric Filter) according to manufacturer specifications and maintenance schedule.

Reporting and Recordkeeping

A. Record on a monthly basis all maintenance (if any) of Primary CE-80A and Secondary CE-80B.

Authority for Requirement: DNR Construction Permit 99-A-853

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 6.5
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 350
Exhaust Temperature (^{o}F): Ambient (70)
Discharge Style: Downward
Authority for Requirement: DNR Construction Permit 99-A-853

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-100

Associated Equipment

Associated Emission Unit ID Numbers: EU-100

Emission Unit vented through this Emission Point: EU-100
Emission Unit Description: Electrical Power Generation (Portable Generator)
Raw Material/Fuel: Diesel
Rated Capacity: 535 bhp

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: Iowa DNR Construction Permit 99-A-732
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.6 lb/MMBtu
Authority for Requirement: Iowa DNR Construction Permit 99-A-732
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Pollutant: Nitrogen Dioxide (NO_x)
Emission Limit(s): 39.4 tons/yr
Authority for Requirement: Iowa DNR Construction Permit 99-A-732

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limit

A. The diesel generator shall use #1 or #2 diesel fuel only.
B. The diesel generator shall be limited to 125,000 gallons of fuel per twelve month period rolled monthly.
C. The diesel fuel shall have a sulfur content not to exceed 0.5% by weight

Recordkeeping

A. Records shall indicate the following:
    1. The type of diesel used.
    2. The quantity of diesel used per twelve month period rolled monthly
    3. The sulfur content of the diesel fuel.

Authority for Requirement: Iowa DNR Construction Permit 99-A-732

NSPS and NESHAP Requirements

NESHAP Subpart ZZZZ:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(i) this emergency engine, located at a major source, is an existing stationary RICE as it was constructed prior to December 19, 2002.

According to 63.6590(b)(3)(iii), an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A, including initial notification requirements.

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

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

Stack Height, (ft, from the ground): 11
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 2103
Exhaust Temperature (°F): 903
Authority for Requirement: DNR Construction Permit 99-A-732

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-102

Associated Equipment

Associated Emission Unit ID Numbers: EU-102

Emission Unit vented through this Emission Point: EU-102
Emission Unit Description: Equipment Losses (Five S and C Vista Switches)
Raw Material/Fuel: Sulfur hexafluoride
Rated Capacity: Two 15kV and Three 5kV

Applicable Requirements

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

This emission point has no emission limits at this time.

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limit

A. Operate and maintain these units to minimize emissions of SF_6.
B. Develop and implement a written leak detection and repair (LDAR) program for switches containing SF_6.

Recordkeeping

A. Maintain a record of any SF6 replenished in these units.
B. Record the results of the LDAR program.

Authority for Requirement: Iowa DNR Construction Permit 13-A-309-P

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-S

Associated Equipment

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID	CEMS ID
EU-B1	CFB Boiler #1 (Natural gas)	249 MMBtu/hr	Low NOx Burner (CE-LNB1)	ME-N1a
EU-B2	CFB Boiler #2 (Natural gas)	249 MMBtu/hr	Low NOx Burner (CE-LNB2)	ME-N2a

Applicable Requirements

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

The emissions from each emission unit shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: Iowa DNR Construction Permit 07-A-923-P6

[(1)]An exceedance of the indicator opacity of No Visible Emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 1.25 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 07-A-923-P6

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.25 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 07-A-923-P6

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.25 lb/hr; 0.034 lb/MMBtu
Authority for Requirement: Iowa DNR Construction Permit 07-A-923-P6

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 0.15 lb/hr; 1.42 lb/MMBtu; 500 ppm_v
Authority for Requirement: Iowa DNR Construction Permit 07-A-923-P6

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 24.90 lb/hr; 0.2 lb/MMBtu
Authority for Requirement: Iowa DNR Construction Permit 07-A-923-P6

Pollutant: Carbon Monoxides (CO)
Emission Limit(s): 18.43 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 07-A-923-P6

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 70 tons/yr
Authority for Requirement: Iowa DNR Construction Permit 07-A-923-P6

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

A. This emission unit shall burn natural gas only as the fuel.
    1) The owner or operator shall maintain records of the type of fuel used in the unit.
B. The control equipment shall be maintained per manufacturer's recommendations.
    1) The owner or operator shall maintain records of maintenance performed on the control equipment.
C. The owner or operator shall maintain a record of the date that the equipment specified in Table 1, Condition 5 of the Construction Permit have permanently ceased operation and have been decommissioned.

NEW SOURCE PERFORMANCE STANDARDS REQUIREMENTS
D. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subpart Db [§60.40b - §60.49b], including those not specifically mentioned in this permit.
    1) The owner or operator shall maintain records of the following information for each steam generating unit operating day. This information shall be submitted in a report, as required in 40 CFR §60.49b(i).
        a) Calendar date;
        b) The average hourly NO_x emission (as NO_2) rates measured;
        c) The 30-day average NO_x emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
        d) Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emission standard in §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
        e) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
        f) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
        g) Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted;
        h) Identification of the times when the pollutant concentration exceeds full span of

the CEMS;

i) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and,
j) Results of daily CEMS drift tests and quarterly accuracy assessments as required in 40 CFR Appendix F, Procedure 1.

Authority for Requirement: Iowa DNR Construction Permit 07-A-923-P6

NSPS and NESHAP Applicability:

NSPS Subpart A and Db:
Boiler 1 and Boiler 2 are subject the New Source Performance Standard (NSPS) for Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60 Subpart Db; 567 IAC 23.1(2)"ccc") and the General Provisions of the NSPS (40 CFR 60 Subpart A; 567 IAC 23.1(2)).
Authority for Requirement: Iowa DNR Construction Permit 07-A-923-P6
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db

NESHAP Subpart A and DDDDD:
Boiler 1 and Boiler 2 are of the source category affected by the following federal regulations: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63 Subpart DDDDD) and the General Provisions of the NESHAP (40 CFR 63 Subpart A).
Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

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

Stack Height, (ft, from the ground): 230
Stack Opening, (inches, dia.): 144
Exhaust Flow Rate (scfm): 94,400
Exhaust Temperature (^{o}F): 325
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 07-A-923-P6

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.

Continuous Emissions Monitoring:

Pollutant – Nitrogen Oxides (NO_x)
Monitoring Equipment Number: ME-N1a and ME-N2a
Operational Specifications – 40 CFR Part 60
Date of System Calibration and Quality Assurance – 11/29/2022 and 11/30/2023
Ongoing System Calibration/Quality Assurance – 40 CFR Part 60
Reporting & Record keeping – 40 CFR Part 60
Authority for Requirement – DNR Construction Permit 07-A-923-P6

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)

A. The owner or operator shall comply with the applicable monitoring requirements in 40 CFR Part 60, Subpart Db [§60.40b - §60.49b], including those not specifically mentioned in this permit.
   1) The owner or operator shall continuously monitor emissions of nitrogen oxides (NO_x) discharged to the atmosphere through EP-S. Therefore, in accordance with 40 CFR §60.48b(b)(1), the owner or operator shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring NO_x concentrations from EP-S.
   2) The 1-hour average NOx emission rates measured by the NOx CEMS required by 40 CFR §60.48b(b) and §60.13(h) shall be expressed in lb/MMBtu heat input and shall be used to calculate the average emission rates under 40 CFR §60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR §60.13(h)(2).
   3) The CEMS required by this permit to monitor NO_x emissions discharged to the atmosphere through EP-S shall be operated and the data recorded during all periods of operation including periods of startup, shutdown, malfunction, or emergency conditions, except for CEMS breakdowns, repairs calibration checks, and zero and span adjustments.
B. The owner or operator shall follow the procedures in 40 CFR §60.13 for installation, evaluation, and operation of the CEMS.
C. The CEMS required by this permit to monitor NO_x emissions discharged to the atmosphere through EP-S shall be designed to meet the requirements in 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2) – *Specifications and Test Procedures for SO2 and NOx Continuous Emission Monitoring Systems in Stationary Sources* and Performance Specification 6 (PS6) – *Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources*.

D. The CEMS required by this permit shall comply with the applicable requirements in Appendix F to 40 CFR Part 60 – Quality Assurance Procedures, including, but not limited to the following requirements:

1) The owner or operator shall develop and implement a quality control (QC) program. As a minimum, each QC program shall include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:
   a) Calibration of the CEMS;
   b) Calibration drift determination and adjustment of the CEMS;
   c) Preventive maintenance of the CEMS (including spare parts inventory);
   d) Data recording, calculations, and reporting;
   e) Accuracy audit procedures including sampling and analysis methods; and
   f) Program of corrective action for malfunctioning CEMS.
2) Whenever excessive inaccuracies occur for two consecutive quarters, the owner or operator shall revise the current written procedures or shall modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.
3) The owner or operator shall keep on-site a copy of these written procedures and shall make them available for inspection by the Department.
4) The owner or operator shall conduct a Relative Accuracy Test Audit (RATA) at least once every four calendar quarters and shall submit RATA reports to the Department as indicated in the construction permit (see Permit Condition 12 – *Notification, Reporting, and Recordkeeping*).

Authority for Requirement: DNR Construction Permit 07-A-923-P6

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-B8, EP-B9, and EP-B10

Associated Equipment (See table below)

EP	EU	EU Description	Emission Control Equipment Description and ID	Continuous Emissions Monitors ID Numbers	Raw Material / Fuel	Rated Capacity (MMBtu/hr)
EP-B8	EU-B8	Boiler #8	Low NO_x Burner (CE-B8)	N8, C8	Fuel Oil Natural Gas	213.6
EP-B9	EU-B9	Boiler #9	Low NO_x Burner (CE-B9)	N9, C9		213.6
EP-B10	EU-B10	Boiler #10	Low NO_x Burner (CE-B10)	N10, C10		213.6

Applicable Requirements

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

Emission Limits when Combusting Fuel Oil:

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 6.4 lb/hr
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 6.4 lb/hr
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

Pollutant: Particulate Matter (PM)
Emission Limit(s): 6.4 lb/hr
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 27.1 lb/hr
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

Pollutant: Carbon Monoxide (CO)
BACT Emission Limit(s): 0.04 lb/MMBtu[(1)]
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P
[(1)]Standard is expressed as the average of three (3) runs

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Emission Limits when Combusting Natural Gas:

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 2.14 lb/hr
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 2.14 lb/hr
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

Pollutant: Particulate Matter (PM)
Emission Limit(s): 2.14 lb/hr
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 7.7 lb/hr
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

Pollutant: Carbon Monoxide (CO)
BACT Emission Limit(s): 0.075 lb/MMbtu[(2)]
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P
[(2)]Standard is a 30-day rolling average

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P
567 IAC 23.3(3)"e"

Additional Emission Limits:

Pollutant: Opacity
Emission Limit(s): 40%[(3)]
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P
567 IAC 23.3(2)"d"
[(3)]An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make correction to operators or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.2 lb/MMBtu
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P
567 IAC 23.3(2)"b"(3)

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 0.2 lb/MMBtu[(4)]
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P
567 IAC 23.1(2)"ccc"
NSPS Subpart Db
[(4)]Per 40 CFR §60.44b(h) and 40 CFR §60.44(i), the limit is a 30-day rolling average that includes periods of startup, shutdown, and malfunction.

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 16.0 lb/hr
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

Pollutant: Greenhouse Gas ($CO2_e$)
BACT Emission Limit(s): 113,552 ton/yr[(5)]
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P
[(5)]Standard is a 12-month rolling total

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limit

A. These emission units shall combust only natural gas or fuel oil #2.
B. The number of hours each unit may be fired on fuel oil shall not exceed 200 hours per 12-month rolling period.
C. The sulfur content of any fuel oil used in the units shall not exceed 0.0015 percent by weight.

Recordkeeping Requirement

A. Per 40 CFR §60.49b(d)(1), the owner or operator shall record and maintain records of the amount of each fuel combusted during each operating day.
B. Record the number of hours each unit is fired on fuel oil. Calculate and record monthly and 12-month rolling totals.
C. Maintain records to demonstrate the sulfur content of any fuel oil used in each unit, in weight percent.
D. Calculate the $CO2_e$ emissions using unit specific emission factors for CO_2, N_2O and methane from the most recent stack tests. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

NSPS and NESHAP Applicability:

NSPS Subpart Db:
Boilers #8, #9 and #10 are subject the New Source Performance Standard (NSPS) for Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60 Subpart Db; 567 IAC 23.1(2)"ccc") and the General Provisions of the NSPS (40 CFR 60 Subpart A; 567 IAC 23.1(2)).
Authority for Requirement: 40 CFR 60 Subpart Db

NESHAP Subpart DDDDD:
Boilers #8, #9 and #10 are subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63 Subpart DDDDD) and the General Provisions of the NESHAP (40 CFR 63 Subpart A).
Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

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

Stack Height, (ft, from the ground): 93
Stack Opening, (inches, dia.): 54
Exhaust Flow Rate (scfm): 40,702
Exhaust Temperature (°F): 304
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

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.

Continuous Emissions Monitoring:

Pollutant – Nitrogen Oxides (NO_x)
Monitoring Equipment Number: ME-N8, ME-N9 and ME-N10
Operational Specifications – 40 CFR Part 60
Date of System Calibration and Quality Assurance – 4/28/2016 (N8), 4/27/2016 (N9), 4/26/2016 (N10)
Ongoing System Calibration/Quality Assurance – 40 CFR Part 60
Reporting & Record keeping – 40 CFR Part 60
Authority for Requirement – DNR Construction Permits 13-A-302-P, 13-A-303-P, and 13-A-304-P

Pollutant – Carbon Monoxide (CO)
Monitoring Equipment Number: ME-C8, ME-C9 and ME-C10
Operational Specifications – 40 CFR Part 60
Date of System Calibration and Quality Assurance – 4/28/2016 (C8), 4/27/2016 (C9), 4/26/2016 (C10)
Ongoing System Calibration/Quality Assurance – 40 CFR Part 60
Reporting & Record keeping – 40 CFR Part 60
Authority for Requirement – DNR Construction Permits 13-A-302-P, 13-A-303-P, and 13-A-304-P

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)

The owner or operator shall demonstrate compliance with the nitrogen oxide NSPS emission limits through the use of a continuous emission monitoring system (CEMS). The owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring nitrogen oxides emissions discharged from the emission point to the atmosphere. The CEM shall be installed, evaluated, operated and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

The 1-hour average NO_X emission rates measured by the NO_X CEM required by 40 CFR 60.48b(b) and required under 40 CFR 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emissions rates under 40 CFR 60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2).

Per 40 CFR 60.49b(f), when NO_X emissions are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, 40 CFR Part 60 Appendix A Method 7, 40 CFR Part 60 Appendix A Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

The owner or operator shall demonstrate compliance with the carbon monoxide BACT emission limits through the use of a continuous emission monitoring system (CEMS). The owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring carbon monoxide emissions discharged from the emission point to the atmosphere. The CEM shall be installed, evaluated, operated and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 (PS4). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

In accordance with 40 CFR Part 60 Subpart Db, the owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring either the oxygen content or the carbon dioxide content of the flue gas discharged from the emission point to the atmosphere.

All continuous monitoring systems (CMS) required by this permit shall be operated and data recorded during all periods of operation of the Boiler except for CMS breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments

If requested by the Department, the owner/operator shall coordinate the quarterly cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.

The procedures under 40 CFR §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

Authority for Requirement: DNR Construction Permits 13-A-302-P, 13-A-303-P, & 13-A-304-P

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EP-T1 and EP-T2

Associated Equipment

Associated Emission Unit ID Numbers: EU-T1 and EU-T2

Emission Units vented through these Emission Points: EU-T1 and EU-T2
Emission Unit Description: Fuel Oil Tank Vent 1 and Fuel Oil Tank Vent 2
Raw Material/Fuel: Fuel Oil #1 or #2
Rated Capacity: 175,000 gallons each

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: Iowa DNR Construction Permits 13-A-306 and 13-A-307
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permits 13-A-306 and 13-A-307
567 IAC 23.3(2)"a"

Operating Requirements with Associated Monitoring and Recordkeeping
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Operating Limit
A. These Tanks (EU-T1 and EU-T2) shall be used to store fuel oil #1 or fuel oil #2 only.
Authority for Requirement: DNR Construction Permits 13-A-306 and 13-A-307

Recordkeeping Requirement
A. The facility shall keep records of material stored in these tanks (EU-T1 and EU-T2).
Authority for Requirement: 567 IAC 22.108(3)

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

Stack Height, (ft, from the ground): 36
Stack Opening, (inches, dia.): NA
Exhaust Flow Rate (scfm): Breathing Losses
Exhaust Temperature (°F): NA
Discharge Style: NA
Authority for Requirement: DNR Construction Permits 13-A-306 and 13-A-307

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

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). 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 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix B.

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—24.104(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. 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 the appropriate DNR Field office. *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 the appropriate DNR Field office. *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"*

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"*

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)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
    a. The date, place and time of sampling or measurements
    b. The date the analyses were performed.
    c. The company or entity that performed the analyses.
    d. The analytical techniques or methods used.
    e. The results of such analyses; and
    f. The operating conditions as existing at the time of sampling or measurement.
    g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance

records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

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

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

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

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

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 21.10(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 21.10(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 21.7(1)-567 IAC 21.7(4)*

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)*

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
vii. 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 24.110(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 - 24.113(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.

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.
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)*

G20. Asbestos

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

G21. Open Burning

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

G22. Acid Rain (Title IV) Emissions Allowances

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

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*

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*

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 22.3(3)"c"*

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

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department’s request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks (42 days) of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing,

continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

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

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 343-6589

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.
567 IAC 21.10(7)"a", 567 IAC 21.10(9)

G31. Prevention of Air Pollution Emergency Episodes

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

G32. Contacts List

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

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

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

Chief, Air Quality Bureau
Iowa Department of Natural Resources
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 313-8325

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

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

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

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

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

Field Office 5
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 725-0268

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

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

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

VII. Appendix A: Link to Standards

A. 40 CFR Part 60 Subpart A – General Provisions
https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.a

B. 40 CFR Part 60 Subpart Ce – Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators
https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.c_0e

C. CFR Part 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.d_0b

D. 40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial Steam Generating Units
https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.d_0c

E. 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.iiii

F. 40 CFR Part 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.jjjj

G. 40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE NESHAP)
https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.63.zzzz

H. 40 CFR Part 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.63.ddddd

VII. Appendix B: Executive Order 10 (EO10) Rules Crosswalk

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
20	**20 (Reserved)**	Scope of Title - Definitions	N/A	**Definitions moved** to Ch. 21, 22 and 23. **Rescinded** Ch. 20. (Reserved)
21	**21**	Compliance	Compliance, Excess Emissions, and Measurement of Emissions	**Kept and combined** with rules from Chapters 24, 25, 26, and 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). **Moved operating permit rules** to Chapter 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. **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. **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. **Rescinded** Ch. 26. (Reserved)
27	**27**	Local Program Acceptance	Local Program Acceptance	**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	Fee	**Kept**
31	**31**	Nonattainment Areas	Nonattainment New Source Review	**Kept**
32	**N/A**	AFO Field Study	N/A	**Rescinded** 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**	Emissions Trading-CAIR-CAMR	N/A	**Rescinded** Ch. 34. (Reserved)
35	**N/A**	Grant Assistance Programs	N/A	**Rescinded** Ch. 35. (Reserved)

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
20	**20 (Reserved)**	**Scope of Title - Definitions**	**N/A**	**Definitions moved** 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	
21	**21**	**Compliance**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Kept and combined** 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
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
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
22	**22**	**Controlling Pollution-Permits**	**Controlling Air Pollution - Construction Permitting**	**Kept construction permit rules and combined** 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	
22.6	22.6	Nonattainment area designations	Reserved	

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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
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**	**Operating Permits**	**Moved operating permit rules** 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
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
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

22.129	24.129	Information requirements for acid rain permit applications	Information requirements for acid rain permit applications	Moved from Ch. 22, no changes to rule text

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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
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
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
22.300	24.300	Operating permit by rule for small sources	Operating permit by rule for small sources	Moved from Ch. 22, no changes to rule text

23	23	Emission Standards	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

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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
25	**(New) 21**	**Emissions Measurement**	**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
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
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 26Table 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
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
27.4	27.4	Administrative organization	Administrative organization	Kept, some language updated
27.5	27.5	Program activities	Program activities	Kept, some language updated
28	**22**	**NAAQS**	**N/A**	**Moved rules and combined** with Ch. 22. **Rescinded** Ch. 28. (Reserved)
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	**Moved from Ch. 28**, minor language updated **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)
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated

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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

31	**31**	**Nonattainment Areas**	**Nonattainment New Source Review**	**Kept**
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

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
32.5	N/A	Iowa Air Sampling Manual	N/A	Rescinded, reserved, and language removed

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

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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
34.201	N/A	CAIR NOx annual trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
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	CAIR NOx allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.207	N/A	CAIR NOx allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
34.208	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language 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
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	N/A	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	CAIR NOx ozone season opt-in units - rescinded	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 emissions trading and other requirements for the Clean Air Mercury Rule (CAMR) - rescinded	N/A	Rescinded, reserved, and language removed
34.301	N/A	Mercury (Hg) budget trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.302	N/A	Hg designated representative for Hg budget sources - rescinded	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
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

34.306	N/A	Hg allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed

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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

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
35.6	N/A	Project selection	N/A	Rescinded, reserved, and language removed
35.7	N/A	Funding sources	N/A	Rescinded, reserved, and language removed
35.8	N/A	Type of financial assistance	N/A	Rescinded, reserved, and language removed
35.9	N/A	Term of loans	N/A	Rescinded, reserved, and language 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
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
35.16	N/A	Financial assistance denial	N/A	Rescinded, reserved, and language removed