

**Iowa Department of Natural Resources
Title V Operating Permit**

Name of Permitted Facility: Iowa Army Ammunition Plant
Facility Location: 17571 State Highway 79
Middletown, Iowa 52638

Air Quality Operating Permit Number: 04-TV-019R1-M001

Expiration Date: January 10, 2017

Permit Renewal Application Deadline: July 10, 2016

EIQ Number: 92-3457

Facility File Number: 29-01-004

Responsible Official

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Lieutenant Colonel, U.S. Army Commanding

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

For the Director of the Department of Natural Resources

Lori Hanson, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE	control equipment
CEM.....	continuous emission monitor
°F	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP	emission point
EU	emission unit
g/kW-hr	gram per kilowatt hour
gr./dscf	grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NMHC.....	Non-Methane Hydrocarbons
NSR.....	New Source Review
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
NMHC.....	non-methane hydrocarbons

I. Facility Description and Equipment List

Facility Name: Iowa Army Ammunition Plant

Permit Number: 04-TV-019R1-M001

Facility Description: National Defense (SIC 9711)

* The double border around certain equipment in each of these lists indicates that the enclosed equipment is grouped in a table in the Emission Point Specific Conditions section of this permit.

Equipment List

A. Line 1 – Adhesive Application and Cleaning Processes

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
1-10-32	1-10-32	Adhesive Spray Booth	12-A-132
1-13-5	1-13-3	Cleaning Process	96-A-823
1-13-13	1-13-13	Cleaning Process	96-A-825
1-18-6	1-18-3	Adhesive Application (3 Stations)	96-A-826
1-18-7	1-18-4	Adhesive Application	96-A-827
1-13-18	1-13-18 1-13-19	Cleaning Station	08-A-331
1-61-3	1-61-1	Adhesive/Cleaning Operations	03-A-346-S1
1-61-23	1-61-21	Varnish Applications (2 Stations)	10-A-402-S1
	1-61-23	Propellant Weigh and Load (2 Stations)	
	1-61-24	Adhesive Application	
	1-61-25	Oven	
	1-61-26	Ink Jet Process (2 Stations)	
	1-61-27	Sealant Station (Hand Applied)	
1-77-4	1-77-2 1-77-3 1-77-4	Adhesive Application and Oven	85-A-115-S1
1-85-2-10	1-85-2-10	Varnish Applications (6 Stations)	10-A-403-S2
	1-85-2-11	Ink Jet Process (7 Stations)	
	1-85-2-12	Adhesive Applications (4 Stations)	
	1-85-2-13	Propellant Weigh and Load (7 Stations)	

Line 1 – Surface Coating Processes

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
1-61-7	1-61-18	Surface Coating Operations	05-A-501
1-18-10	1-18-9	Surface Coating Operations	94-A-172
1-18-11	1-18-11	Touch up Paint Booth	04-A-275

Line 1 – Explosives Processing

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
1-01-1	1-01-1	Ribbon Blender	89-A-022
1-01-5	1-01-5	Double Cone Blender	88-A-126
1-01-6	1-01-6	Dust Removal System	88-A-128
1-01-7	1-01-7	Hammermill	88-A-129
1-10-31	1-10-31	Explosive Dumping	12-A-131
1-12-20	1-12-20	Pressing Operation	11-A-359
1-12-24	1-12-24 1-12-25	Explosives Screening	11-A-358
1-13-15	1-13-15	Propellant Handling & Loading (4 stations)	01-A-951-S4
1-13-22	1-13-22 1-13-23	Propellant Weighing (4 stations) Two (2) Laser Jet Markers	10-A-031-S3
1-01-3	1-01-3	Explosive Processing High Shear Mixer	88-A-127
1-18-13	1-18-13	Propellant Loader	01-A-1128
1-65-5-1	1-65-5-1	Powder Blender	03-A-505
1-65-5-2	1-65-5-2	Propellant Screening	03-A-506
1-99-1	1-99-1	Vacuum House	Grandfathered
1-99-4	1-99-4	Vacuum House	Grandfathered

Line 1 – Combustion Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
1-62-2-5	1-62-2-9 1-62-2-10	Keystone Boiler with Flue Gas Recirculation (Natural Gas or Fuel Oil)	04-A-311-S4
1-62-9	1-62-9	Emergency Generator (550 bhp)	10-A-197
1-211-1	1-211-1	Diesel Generator	97-A-524
1-211-4	1-211-4	Yard L Generator (315 kW)	Grandfathered

Line 2 – Adhesive Application and Cleaning Processes

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
Vents internally	2-04-25	Adhesive station	04-A-855
2-04-25	2-04-25	Adhesive oven	04-A-856
2-04-36	2-04-1	Oven/Cleaning Station	04-A-525
	2-04-2		
2-12-2	2-12-2	Rework Bay and Cleaning Operations	01-A1253
2-13-8	2-13-8	Clean and Prime Warheads	03-A-562
	2-13-9	Clean and Prime Warheads	

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
2-13-9	2-13-10	Clean and Prime Sabots	03-A-563
	2-13-11	Clean and Prime Sabots	
2-13-10	2-13-14	Clean and Prime Operations	03-A-564
	2-13-15	Clean and Prime Operations	
2-13-11	2-13-38	Adhesive Application	96-A-829

Line 2 – Surface Coating Processes

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
2-05-2-1	2-05-2-4	Surface Coating Operations	80-A-030
2-10-17	2-10-1	Surface Coating Operations	90-A-141
2-10-23	2-10-13	Surface Coating Operations	84-A-080
2-10-24	2-10-14	Surface Coating Operations	84-A-081
2-12-10	2-12-9	Surface Coating Operations	84-A-085
2-12-11	2-12-10	Surface Coating Operations	84-A-084
2-04-21	2-04-4	Base Coat Paint Booth	88-A-028-S2
2-04-22	2-04-5	Top Coat Paint Booth	88-A-027-S2
2-10-31	2-10-31	Stencil Mat Machine	03-A-290
2-10-32			03-A-291
2-10-33			03-A-292
2-10-34			03-A-293
2-10-35			03-A-294-S1

Line 2 – Explosives Processing

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
2-01-6	2-01-6	Adhesive Application	01-A-1136-S1
2-05-2-17	2-05-2-17	Propellant Loading	91-A-249-S2
2-10-26	2-10-26	Xomat Model B X-ray Film Processor	02-A-117
2-10-27	2-10-27	Propellant Loading System	01-A-636
2-10-28	2-10-28	Propellant Weighing and Handling Tables(5)	01-A-674-S1
2-10-29	2-10-29	Propellant Weighing and Handling Tables (2)	01-A-675
2-10-30	2-10-30	Propellant Weighing and Handling Station	01-A-676-S2
2-12-4	2-12-4	Shell Loading System	03-A-571-S1
2-13-1	2-13-2	PCA System (5 stations)	01-A-1130
2-13-2	2-13-6	Bay D PCA Station (2 Weigh Tables)	01-A-672
2-13-3	2-13-7	Portable Weigh Table	01-A-673
2-13-17	2-13-17	Propellant Screening and Weigh	02-A-119
2-13-18	2-13-18 2-13-19 2-13-20	Demil Process	11-A-056
2-99-1	2-99-1	Vacuum House	Grandfathered

Line 3 – Adhesive Application and Cleaning Processes

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
3-04-8	3-04-2	Adhesive Application	96-A-831

Line 3 – Surface Coating Processes

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
3-10-2	3-10-2	Surface Coating Operations	87-A-071-S2
3-10-9	3-10-9	Surface Coating Operations	83-A-134-S1
3-12-6	3-12-6	Paint Booth	12-A-001

Line 3 – Explosives Processing

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
3-05-2-1	3-05-2-1	West Kettle Hopper	Grandfathered
3-05-2-2	3-05-2-2	West Melt Kettle	
3-05-2-3	3-05-2-3	Center Melt Kettle	
3-05-2-4	3-05-2-4	Center Kettle Hopper	
3-05-2-5	3-05-2-5	East Kettle Hopper	
3-05-2-6	3-05-2-6	East Melt Kettle	
3-05-2-7	3-05-2-7	West Grid Hopper	
3-05-2-8	3-05-2-8	West Grid Melt	
3-05-2-9	3-05-2-9	Center Grid Melt	
3-05-2-10	3-05-2-10	Center Grid Hopper	
3-05-2-11	3-05-2-11	East Grid Hopper	
3-05-2-12	3-05-2-12	East Grid Melt	
3-05-2-18	3-05-2-18	West Probe Machine-Bay C	
3-05-2-19	3-05-2-19	East Probe Machine-Bay C	
3-05-2-23	3-05-2-23	West Bay G Pour Machine-Vent A	
3-05-1-26	3-05-1-26	Add/Pour Station (melt kettle)	01-A-1255
3-05-1-27	3-05-1-27	Melt kettle/Add Pour	02-A-120
3-05-1-29	3-05-1-29	Explosive Processing	01-A-1257
3-05-1-1	3-05-1-1	Two TNT Sweatout Tanks	79-A-199-S4
3-05-1-5	3-05-1-5	Wash down Facility	79-A-200-S3
3-05-1-16	3-05-1-16	Probe Machine	01-A-500
3-05-1-32	3-05-1-32	Screening table	01-A-1256
3-05-2-13	3-05-2-13 3-05-2-14	Explosive Loading Operation	09-A-680-S1
3-10-10	3-10-10	X-ray Film Processing	05-A-132
3-16-1	3-16-1	High Shear Mixer	06-A-456-S1

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
3-50-12	3-50-12	TNT Screening	93-A-375-S1
3-50-13	3-50-13	Explosive Screening Process	06-A-843-S1
3-99-3	3-99-3	Vacuum House	Grandfathered
3-99-4	3-99-4	Vacuum House	Grandfathered

Line 3A – Adhesive Application and Cleaning Processes

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
3A-05-2-4	3A-05-2-4	Wash Down Operation	96-A-1276
3A-12-4	3A-12-4	Cleaning Station	06-A-845
3A-12-7	3A-12-7	Cleaning Station	06-A-846

Line 3A – Surface Coating Processes

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
3A-12-5	3A-12-5	Spray Paint Booth	03-A-543
3A-12-6	3A-12-6	Surface Coating Operations	90-A-231-S4

Line 3A – Explosives Processing

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
3A-05-1-9	3A-05-1-4 to 3A-05-1-11 and 3A-05-1-15	Sump Out Explosive Material (8 sumps) and funnel washer	95-A-186-S6
3A-05-1-12	3A-05-1-12	(2) TNT Screening Table	86-A-083-S3
3A-05-1-13	3A-05-1-13	North TNT Grid Melt	01-A-1086-S2
3A-05-1-15	3A-05-1-3	North TNT Weigh Feeder and Melt Kettles	88-A-007-S4
3A-05-1-17	3A-05-1-17	South TNT Grid Melt	01-A-476-S3
3A-05-1-19	3A-05-1-19	South TNT Weigh Feeder and Melt Kettles	01-A-1087-S2
3A-05-1-20	3A-05-1-20	Explosive Pouring Operation	02-A-012-S2
3A-05-1-21	3A-05-1-21	Cooling Ovens (36) & Probe machines (2)	02-A-122-S2
3A-05-1-22	3A-05-1-22	Funnel Washing Machine	06-A-844-S2
3A-50-1-1	3A-50-1-1	Loading Hopper	01-A-185
3A-50-1-2	3A-50-1-2	Portable Hopper	01-A-186
3A-50-1-3	3A-50-1-3	Screening Table	01-A-187
3A-99-8	3A-99-8	Vacuum House	01-A-1080
3A-100-1	3A-100-1	X-ray film processing	02-A-121

Line 3A – Combustion Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
3A-05-1E-5	3A-05-1E-1	Diesel Generator	00-A-207

Line 4B

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
4B-22-5	4B-22-5	Inspection Table	00-A-244
4B-22-6	4B-22-6	Humidification Cabinet	00-A-605-S1
4B-22-10	4B-22-2	Estane Application	97-A-529
4B-22-12	4B-22-4	Adhesive Application & Paint	96-A-835-S1
4B-22-13	4B-22-13	Adhesive Application & Cleaning Process	96-A-818-S1
4B-99-1	4B-99-1	Vacuum House	01-A-1081

General Line – Surface Coating

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
300-148-1	300-148-1	Maintenance Paint Booth	03-A-674

General Line – Combustion Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
100-101-5	100-101-5	Emergency Generator (Administration Dept.) (1000 kW)	10-A-476-S2
100-211-1	100-211-1	Emergency Generator (In Bldg. 1-211) (25 kW)	96-A-518-S1
200-211-2	200-211-2	Emergency Generator (80 kW)	96-A-520-S3
200-101-2-1	200-101-2-1	Fire/Security/Safety Bldg. Emergency Generator	N/A ⁽¹⁾
500-164-2-1	500-164-2-1	Administrative Lift Station Generator	N/A
500-214-2-1	500-214-2-1	Gate 3 Emergency Generator	N/A
500-215-1	500-215-1	Emergency Generator (30 kW)	96-A-519
300-148-20	300-148-20	Emergency Generator (Mechanical Dept.) (500 kW)	10-A-407
500-139-5	500-139-5	Internal Combustion Engine	96-A-521-S2
30-144-1	30-144-1	Steam Boiler (0.14 MMBtu/hr)	Grandfathered
30-144-3	30-144-3	Steam Boiler (6.21 MMBtu/hr)	96-A-881
30-144-4	30-144-4	F Yard Burnham Diesel Boiler (150 bhp)	Small unit exemption
500-139-1	500-139-1	Spreader Stoker	81-A-150-S3
	500-139-2	Spreader Stoker	
500-139-4	500-139-4	Internal Combustion Engine (1000 kW)	95-A-521-S1
500-139-6	500-139-6	Emergency Generator	07-A-1083

⁽¹⁾ Emission Unit qualifies 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).

General Line - Miscellaneous

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
500-162-1	500-162-1	Waste Treatment Pit (Water)	Not applicable

General Line – Fugitive Dust Source

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
500-137-2-1	500-137-2-1	Inert Solid Waste Landfill (Fugitive)	Not applicable
IAAAP-2	IAAAP-3	Coal Pile (Fugitive)	
IAAAP-3	IAAAP-4	Unpaved Road (Fugitive)	
IAAAP-6	IAAAP-8	Fly ash (Fugitive)	
IAAAP-7	IAAAP-9	Unstable Propellants/Explosives	

Insignificant Activities Equipment List

EJD = Exemption Justification Document has been prepared to use the small unit exemption

Insignificant Emission Unit Number	Insignificant Emission Unit Description
1-01-4	Mixing Kettle (EJD)
1-05-2-29	Cleaning Operations
1-13-8	Drying Oven (electric)
1-18-2	Propellant Weighing Station
1-18-12	Drying Oven (electric)
1-62-11	Air Exchange Unit (3 MMBtu/hr)
1-152-9-1	Storage Tank (600 gallons, fuel oil)
2-04-1	Adhesive Application
2-10-6	Adhesive Application
2-12-14	Propellant Dumping (EJD)
2-13-22	Laquer/Primer Application (EJD)
3-05-1-30	Drying Oven
3-05-1-31	Drying Oven
3-05-2-30	Cooling Bath (EJD)
3-05-2-31	Cooling Bath # 2 (EJD)
3-08-1	Aluminum Screening Operations (indoor source)
200-152-2	Storage Tank (600 gallons)
200-131-3	Emergency Vehicle Vent
300-148-5	Welding Operations
300-148-6	Welding Operations
3A-152-3	Tank (fuel oil) 300 gallons
3A-05-2-6	Stenciling Operation
4A-03-4	Acid Dispensing Station (EJD)
4A-07-1	Cleaning Station (EJD)
4A-22-2	Cleaning Station (EJD)
4A-22-3	Batching Station (EJD)
4A-22-5	Paint Drying Conveyor (steam)(EJD)
4A-22-6	Touch-up Painting/Cleaning Station (EJD)
4A-22-7	Painting Operations (EJD)
4A-58-8	RDX Breakdown Station (EJD)
4B-22-18	Adhesive Application (EJD)
400-152-3	10,000 Gallon Diesel Fuel Tank
500-152-18	300 Gallons Diesel Fuel Tank
500-152-19	300 Gallon Diesel Fuel Tank
500-152-20	300 Gallon Diesel Fuel Tank
BG-152-4	275 Gallon Diesel Fuel Tank
BG-152-8	600 Gallon Diesel Fuel Tank
FS-1	Fire Testing (fugitive)
40MM-TS	40 mm Fire Testing
IAAAP 11	40 mm Unstable Propellants/Explosives Area
F-152-3	F Yard 20,000 gal diesel tank (EJD)
E-4055	Diesel Fuel Tank (625 gallons)

Insignificant Emission Unit Number	Insignificant Emission Unit Description
HH-1	Colonel's Heat (Natural gas boiler 0.14 MMBtu/hr)
BG-2	BG-2 Propane Heater (0.4 MMBtu/hr)
BG-13	BG-13 Propane Heater (0.17 MMBtu/hr)

II. Plant-Wide Conditions

Facility Name: Iowa Army Ammunition Plant
Permit Number: 04-TV-019R1-M001

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

Permit Duration

The term of this permit is: Five (5) years
Commencing on: January 11, 2012
Ending on: January 10, 2017

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

Emission Limits

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

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

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

Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed 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 - No person shall allow, cause or permit 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 public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. 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 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 limited to, the following procedures.

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

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

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, the Iowa Army Ammunition Plant is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, the Iowa Army Ammunition Plant shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

III. Emission Point-Specific Conditions

Facility Name: Iowa Army Ammunition Plant
Permit Number: 04-TV-019R1-M001

Emission Point ID Number: 1-10-32

Associated Equipment

Associated Emission Unit ID Number: 1-10-32
Emissions Control Equipment ID Number: CE 1-10-32
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 1-10-32
Emission Unit Description: Adhesive Spray Booth
Raw Material/Fuel: Liquid Adhesives
Rated Capacity: 5.73 gal/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 12-A-132

⁽¹⁾An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/scf

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

Iowa DNR Construction Permit 12-A-132

Pollutant: Particulate Matter

Emission Limits: 0.18 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 12-A-132

Pollutant: PM-10

Emission Limit: 0.18 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 12-A-132

Operational Limits & Requirements

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

Process throughput:

1. The amount of coating material and organic solvent used in the spray booth shall not exceed 850 gallons in any rolling 12-month period.
2. The VOC content of any coating material or organic solvent used in the spray booth shall not exceed 8.0 pounds per gallon.

Control Equipment Parameters:

1. The permittee shall maintain the dry filters in accordance with the manufacturer's specifications and maintenance schedule.

Reporting & Record keeping:

All records listed below 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.

1. The permittee shall maintain records on the identification, the VOC content, the single HAP content, and the total HAP content of each coating and organic solvent used in the spray booth.
2. The permittee shall maintain the following monthly records:
 - a. The amount of coatings and organic solvent used in the spray booth, in gallons: and
 - b. The rolling 12-month total of the amount of coatings and organic solvent used in the spray booth, in gallons.
3. The permittee shall maintain records on any maintenance done on the dry filters.

Authority for Requirement: Iowa DNR Construction Permit 12-A-132

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 21

Stack Diameter (inches): 18

Stack Exhaust Flow Rate (scfm): 2,100

Stack Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 12-A-132

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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 Numbers: See Table VOC I

Table VOC I

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (gal/yr)
1-13-5	1-13-3	Cleaning Process	Isopropyl Alcohol & Adhesive	333.3
1-13-13	1-13-13	Cleaning Process	Methyl Ethyl Ketone & Adhesive	333.3
1-18-6	1-18-3	Adhesive Application (3 Stations)	Adhesive	4,333
1-18-7	1-18-4	Adhesive Application	Solvent/Adhesive	4,333

Applicable Requirements

(The following requirements apply to the equipment described in Table VOC I)

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

The emissions from the emission points described in Table VOC I shall not exceed the following specified levels.

Pollutant: VOC

Emission Limit: See Table VOC II

Authority for Requirement: Iowa DNR Construction Permits Specified in Table VOC II

Table VOC II

Emission Point Number	Emission Unit Number	Construction Permit #	VOC Emission Limit (TPY)	Material Usage Limit (gal/rolling 12-month)
1-13-5	1-13-3	96-A-823	1.4	333.3
1-13-13	1-13-13	96-A-825	1.5	333.3
1-18-6	1-18-3	96-A-826	19.5	4,333
1-18-7	1-18-4	96-A-827	19.5	4,333

Operational Limits & Requirements

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

Process throughput:

1. The material usage limit specified in Table VOC II is the maximum amount of material that is permitted to be used at each application station, per 12 months (rolled monthly).
2. The maximum VOC content of any material used must be 9 lbs of VOC per gallon of material.

Reporting & Record keeping:

All records listed below 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.

1. Monthly records must be kept which show the maximum VOC content and the quantity of each material used at each application station.
2. If the quantity of material used exceeds the rolling 12-month material usage limit specified in Table VOC II, then the permittee must demonstrate that they are in compliance with the VOC emission rate. This must be done by calculating the VOC emission rate using the following, for each material:
 - a. quantity used
 - b. VOC content
 - c. MSDS sheets or the equivalent
3. The arithmetic and methodology used in calculating the emission rate must be shown.
4. All records must be satisfactory for demonstrating compliance with the VOC emission limit and material usage limit specified in Table VOC II for each application station.

Authority for Requirement: Iowa DNR Construction Permits specified in Table VOC II

Emission Point Characteristics

The emission points shall conform to the conditions listed in Table VOC III.

Table VOC III

Emission Point Number	Emission Unit Number	Construction Permit #	Emission Point Characteristics				
			Height (feet)	Diameter (inches)	Exhaust Flowrate	Exhaust Flowrate Units	Exhaust Temp. (F)
1-13-5	1-13-3	96-A-823	30	14	1,200	acfm	70
1-13-13	1-13-13	96-A-825	25	9	600	scfm	70
1-18-6	1-18-3	96-A-826	16	20	2,300	acfm	70
1-18-7	1-18-4	96-A-827	20	8	3,200	acfm	70

Authority for Requirement: Iowa DNR Construction Permits specified in Table VOC III

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Emission Point Location: Table VOC IV lists the approximate location of each emission point.

Table VOC IV

Emission Point Number	Emission Unit Number	Construction Permit #	Emission Point Location
1-13-5	1-13-3	96-A-823	Slightly east of center, along the northern wall of building 1-13, Bay A
1-13-13	1-13-13	96-A-825	Near the northeast corner of Bay G, building 1-13
1-18-6	1-18-3	96-A-826	Near the center of Bay D, building 1-18
1-18-7	1-18-4	96-A-827	Near the northeast corner of Bay E, building 1-13

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: 1-13-18

Associated Equipment

Associated Emission Unit ID Number: 1-13-18 and 1-13-19

Emission Unit vented through this Emission Point: 1-13-18 and 1-13-19

Emission Unit Description: Cleaning Station

Raw Material/Fuel: Methyl Ethyl Ketone (MEK)

Rated Capacity: 1500 gal/yr

Applicable Requirements

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

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

No limits at this time.

Operational Limits & Requirements

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

Process throughput:

1. The facility is limited to using MEK at the cleaning station for 1-13 EU 18 and 1-13 EU 19.
2. The facility shall not exceed using greater than 1,500 gallons of MEK per rolling 12-month period.

Reporting & Record keeping:

All records listed below 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.

The permittee shall maintain the following monthly records:

1. The facility shall maintain on site the MSDS for MEK.
2. The facility shall record on a monthly basis the amount of MEK used in the cleaning station for 1-13 EU 18 and 1-13 EU 19.
3. The facility shall after 12 months of operation begin a rolling 12-month total to verify 1-13 EU 18 and 1-13 EU 19 does not exceed the 12 month rolling total.

Authority for Requirement: Iowa DNR Construction Permit 08-A-331

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 18.5

Stack Diameter (inches): 18

Stack Exhaust Flow Rate (scfm): 2000

Stack Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 08-A-331

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 1-61-3

Associated Equipment

Associated Emission Unit ID Number: 1-61-1

Emission Unit vented through this Emission Point: 1-61-1

Emission Unit Description: Adhesive/Cleaning Operations (16 units)

Raw Material/Fuel: Adhesives, cleaning solvent

Rated Capacity: 0.8 gal/hr used from all 16 emission units

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: VOCs

Emission Limit: 21.9 tpy ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 03-A-346-S1

⁽¹⁾ Standard is a 12-month rolling total, based on material usage limits.

Pollutant: Total HAPs

Emission Limit: 3.6 tpy ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 03-A-346-S1

⁽¹⁾ Standard is a 12-month rolling total, based on material usage limits.

Operational Limits & Requirements

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

Process throughput:

1. The total amount of adhesive employed shall not exceed 21,024 gallons per any rolling 12-month period.
2. The VOC content of the adhesive employed shall not exceed 0.34 pound per gallon. The VOC content limit applies to mixed adhesives and not to individual parts.
3. The total volatile HAP content of the adhesive employed shall not exceed 0.34 pound per gallon.
4. The total amount of any cleaning solvent employed shall not exceed 5256 gallons per any rolling 12-month period.
5. The VOC content of any cleaning solvent employed shall not exceed 7.0 pounds per gallon.
6. The cleaning solvent shall not contain any HAPs.

7. The maximum amount of adhesive and solvent used per hour shall not exceed 0.8 gallons.

Reporting & Record keeping:

All records listed below 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.

The permittee shall maintain the following monthly records:

1. The identification, the VOC content, and the total volatile HAP content of the adhesive and cleaning solvent used in this emissions unit.
2. The total amount of adhesive used (gallons).
3. The rolling, 12-month total of the amount of adhesive used (gallons).
4. The amount of cleaning solvent used (gallons).
5. The rolling 12-month total of the amount of cleaning solvent used (gallons).

The permittee shall record on an hourly basis:

1. The amount of adhesive and solvent used from the 16 emission units.

Authority for Requirement: Iowa DNR Construction Permit 03-A-346-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 31

Stack Diameter (inches): 9

Stack Exhaust Flow Rate (scfm): 1400

Stack Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 03-A-346-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 1-61-23

Associated Equipment

Associated Emission Unit ID Number: See Table 40 MM Low Velocity

Table 40 MM Low Velocity

Emission Unit Identification	Emission Unit	Raw Material	Rated Capacity
EU 1-61-21	Varnish Applications (2 Stations)	Varnish	500 gal/yr
EU 1-61-23	Propellant Weigh and Load (2 Stations)	Explosives	15 lb/day
EU 1-61-24	Adhesive Application	Adhesive	450 gal/yr
EU 1-61-25	Oven	Steam	NA
EU 1-61-26	Ink Jet Process (2 Stations)	Ink	500 gal/yr
EU 1-61-27	Sealant Station (hand applied)	Sealant	200 gal/yr

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: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 10-A-402-S1

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit: 0.20 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 10-A-402-S1

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 10-A-402-S1

Pollutant: Particulate Matter

Emission Limit: 0.59 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 10-A-402-S1

Operational Limits & Requirements

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

Process throughput:

1. Emission Unit 1-61-21 shall be limited to utilizing no more than 500 gallons of varnish per rolling twelve (12) month period.
2. The varnish used shall have a maximum VOC content of 5.7 pounds per gallon.
3. The varnish used shall have a maximum individual HAP content of 4.0 pounds per gallon.
4. The varnish used shall have a maximum total HAP content of 5.7 pounds per gallon.
5. Emission Unit 1-61-23 shall be limited to a total propellant loading limit of 15 pound per day.
6. Emission Unit 1-61-24 shall be limited to no more than 450 gallons of adhesive per rolling twelve (12) month period.
7. The adhesive used shall have a maximum VOC content of 8.5 pounds per gallon.
8. The adhesive used shall not contain any HAPs.
9. Emission Unit 1-61-26 shall be limited to 500 gallons of ink per rolling twelve (12) month period.
10. The ink used shall have a maximum VOC content of 7.0 pounds per gallon.
11. The ink used shall not contain any HAPS.
12. Emission Unit 1-61-27 shall be limited to utilizing 200 gallons of polysulfide curative per rolling twelve (12) month period.
13. The curative used shall have a maximum VOC content 7.0 pounds per gallon.
14. The curative used shall have a maximum individual HAP content of 10.0 pounds per gallon.
15. The curative used shall have a maximum total HAP content of 16.0 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

1. A log of all varnishes, adhesives, and inks used and their respective VOC, individual HAP, and total HAP contents.
2. The owner or operator shall record the monthly usage of varnish.
3. The owner or operator shall calculate the 12-month rolling total for use of varnish.
4. The owner or operator shall record the daily (24 hour) usage of propellant.
5. The owner or operator shall calculate the 24-hour rolling total for the use of propellant.
6. The owner or operator shall record the monthly usage of adhesive.
7. The owner or operator shall calculate the 12-month rolling total for use of adhesive.
8. The owner or operator shall record the monthly usage of ink.
9. The owner or operator shall calculate the 12-month rolling total for use of ink.
10. The owner or operator shall record the monthly use of polysulfide curative.
11. The owner or operator shall calculate the 12-month rolling total for use of polysulfide curative.
12. Retain Material Safety Data Sheets (MSDS) or other documentation specifying the VOC content of all VOC containing materials used at the facility (Plant Number 29-01-004).
13. Retain Material Safety Data Sheets (MSDS) or other documentation specifying the total HAP content of all HAP containing materials used at the facility (Plant Number 29-01-004).

Authority for Requirement: Iowa DNR Construction Permit 10-A-402-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 34

Stack Diameter (inches): 13

Stack Exhaust Flow Rate (scfm): 2300

Stack Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-402-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Stack Testing:

Pollutant – PM-10

1st Stack Test to be Completed - Within 60 days after achieving maximum production rate and no later than 180 days after the initial start up.

Test Method – 40 CFR 51, Appendix M, 201A with 202

Authority for Requirement – Iowa DNR Construction Permit 10-A-402-S1

Stack Testing:

Pollutant – Opacity

1st Stack Test to be Completed - Within 60 days after achieving maximum production rate and no later than 180 days after the initial start up.

Test Method – 40 CFR 60, Appendix A, Method 9

Authority for Requirement – Iowa DNR Construction Permit 10-A-402-S1

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

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

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: 1-77-4

Associated Equipment

Associated Emission Unit ID Number: 1-77-2, 1-77-3 and 1-77-4

Emissions Control Equipment ID Number: 1-77/CE 4

Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 1-77-2, 1-77-3 and 1-77-4

Emission Unit Description: Adhesive Application & Oven

Raw Material/Fuel: Adhesive and solvents

Rated Capacity: 1500 gal/year (adhesive) and 400 gal/year (solvents)

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: 40%

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

Iowa DNR Construction Permit 85-A-115-S1

(1) An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 85-A-115-S1

Pollutant: VOC

Emission Limit: 6.25 tpy

Authority for Requirement: Iowa DNR Construction Permit 85-A-115-S1

Pollutant: Total HAP

Emission Limit: 2.87 tpy

Authority for Requirement: Iowa DNR Construction Permit 85-A-115-S1

Operational Limits & Requirements

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

Process throughput:

1. This emission unit shall be limited to 1500 gallons of adhesive per rolling 12-month period. In addition, the adhesive used shall have a maximum VOC content of 5.5 lb/gal and a total HAP content of 1.0 lb/gal.
2. This emission unit shall be limited to 400 gallons of solvent per rolling 12-month period. In addition the solvent shall have a maximum VOC and total HAP content of 10.6 lb/gal.

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall record the monthly usage of adhesive in this emission unit.
2. The owner or operator shall calculate the 12-month rolling total for use of Adhesive in this emission unit.
3. The owner or operator shall record the monthly usage of solvent in this emission unit.
4. The owner or operator shall calculate the 12-month rolling total for the use of solvent in this emission unit.

Authority for Requirement: Iowa DNR Construction Permit 85-A-115-S1

1. Retain Material Safety and Data Sheets (MSDS) showing VOC and HAP content of adhesive and solvent.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 18

Stack Diameter (inches): 33

Stack Exhaust Flow Rate (scfm): 3500

Stack Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 85-A-115-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and Maintenance Plan**Weekly**

- Inspect the spray 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: 1-85-2-10

Associated Equipment

Associated Emission Unit ID Number: See Table 40 MM High Velocity

Table 40 MM High Velocity

Emission Unit Identification	Emission Unit	Raw Material	Rated Capacity
EU 1-85-2-10	Varnish Applications (6 Stations)	Varnish	4000 gal/yr
EU 1-85-2-11	Ink Jet Process (7 Stations)	Ink, cleaners	500 gal/yr
EU 1-85-2-12	Adhesive Application (4 Stations)	Adhesive	1000 gal/yr
EU 1-85-2-13	Propellant Weigh and Load (7 Stations)	Explosives	1200 lb/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: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 10-A-403-S1

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit: 0.69 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 10-A-403-S2

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 10-A-403-S2

Pollutant: Particulate Matter

Emission Limit: 2.06 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 10-A-403-S2

Operational Limits & Requirements

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

Process throughput:

1. The Varnish Applications (EU 1-85-2-10) shall be limited to utilizing a total of no more than 4,000 gallons of varnish per rolling twelve (12) month period.
2. The varnish used shall have a maximum VOC content of 5.7 pounds per gallon
3. The varnish used shall have a maximum individual HAP content of 4.0 pound per gallon
4. The varnish used shall have a maximum total HAP content of 5.7 pound per gallon.
5. The Ink Jet Process (EU 1-85-2-11) shall be limited to a total of 500 gallons of ink, ink additives, and ink solvents per rolling twelve (12) month period.
6. The inks, ink additives, and ink solvents used shall have a maximum VOC content of 7.0 pounds per gallon.
7. The inks, ink additives, and ink solvents used shall not contain any HAPS.
8. The Adhesive Application (EU 1-85-2-12) shall be limited to a total of no more than 1,000 gallons of adhesive and primer per rolling twelve (12) month period.
9. The adhesive and primer used shall have a maximum VOC content of 8.5 pounds per gallon.
10. The adhesive and primer used shall not contain any HAPS.
11. The Propellant Weigh and Load Stations (EU 1-85-2-13) shall be limited to 36,500 pounds of propellant loading per day.

Authority for Requirement: Iowa DNR Construction Permit 10-A-403-S2

Reporting & Record keeping:

All records listed below 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.

1. A log of all varnishes, adhesives, and inks used and their respective VOC, individual HAP, and total HAP contents.
2. The owner or operator shall record the monthly usage of varnish.
3. The owner or operator shall calculate the 12-month rolling total for use of varnish.
4. The owner or operator shall record the monthly usage of ink, ink additives, and ink solvents.
5. The owner or operator shall calculate the 12-month rolling total for the use of ink, ink additives, and ink solvents.
6. The owner or operator shall record the monthly usage of adhesive and primer.
7. The owner or operator shall calculate the 12-month rolling total for use of adhesive and primer.
8. The owner or operator shall record the monthly usage of propellant.
9. Retain Material Safety Data Sheets (MSDS) or other documentation specifying the VOC content of all VOC containing materials used at the facility (Plant Number 29-01-004).
10. Retain Material Safety Data Sheets (MSDS) or other documentation specifying the total HAP content of all HAP containing materials used at the facility (Plant Number 29-01-004).

Authority for Requirement: Iowa DNR Construction Permit 10-A-403-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 27.8

Stack Diameter (inches): 26

Stack Exhaust Flow Rate (scfm): 8,000

Stack Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-403-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Stack Testing:

Pollutant – PM-10

1st Stack Test to be Completed - Within 60 days after achieving maximum production rate and no later than 180 days after the initial start up.

Test Method – 40 CFR 51, Appendix M, 201A with 202

Authority for Requirement – Iowa DNR Construction Permit 10-A-403-S2

Stack Testing:

Pollutant – Opacity

1st Stack Test to be Completed - Within 60 days after achieving maximum production rate and no later than 180 days after the initial start up.

Test Method – 40 CFR 60, Appendix A, Method 9

Authority for Requirement – Iowa DNR Construction Permit 10-A-403-S2

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

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

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: 1-61-7

Associated Equipment

Associated Emission Unit ID Number: 1-61-18
Emissions Control Equipment ID Number: 1-61/CE 18
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 1-61-18
Emission Unit Description: Surface Coating Operations
Raw Material/Fuel: Paint
Rated Capacity: 11.25 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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 05-A-501

⁽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⁽²⁾

Emission Limit: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 05-A-501

⁽²⁾ PM and PM-10 are assumed to be equivalent

Pollutant: VOC

Emission Limit: 4.9 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 05-A-501

Operational Limits & Requirements

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

Process throughput:

1. The paint booth is limited to a usage of 1,500 gallons of VOC/HAP containing material (Paint, Solvent, etc.) per rolling 12-month period.

2. The maximum VOC content of VOC containing material (Paint, Solvent, etc.) used in the paint booth shall not exceed 6.5 pounds per gallon.
3. The maximum HAP content of HAP containing material (Paint, Solvent, etc.) used in the paint booth shall not exceed 6.5 pounds per gallon.
4. Maintain dry filters according to manufacturers specifications and maintenance schedule.

Reporting & Record keeping:

All records listed below 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.

1. Record on a monthly basis the amount of VOC / HAP containing material (Paint, Solvent, etc.) used in the paint booth in gallons. Calculate and record rolling 12-month totals.
2. Record the VOC content of VOC containing material (Paint, Solvent, etc.) used in the paint booth in pounds per gallon.
3. Record the HAP content of HAP containing material (Paint, Solvent, etc.) used in the paint booth in pounds per gallon.
4. Retain Material Safety Data Sheets (MSDS) of all materials used in the paint booth.
5. Maintain a record of all inspections / maintenance and any action resulting from the inspection / maintenance of dry filters.

Authority for Requirement: Iowa DNR Construction Permit 05-A-501

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 37

Stack Diameter (inches): 24

Stack Exhaust Flow Rate (scfm): 5350

Stack Temperature (°F): 70

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 05-A-501

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and Maintenance Plan**Weekly**

- Inspect the spray 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: 1-18-10

Associated Equipment

Associated Emission Unit ID Number: 1-18-9
Emissions Control Equipment ID Number: 1-18/CE1
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 1-18-9
Emission Unit Description: Surface Coating Operations
Raw Material/Fuel: Paint
Rated Capacity: 10-fl oz/min

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: 0%
Authority for Requirement: Iowa DNR Construction Permit 94-A-172

Pollutant: Particulate Matter
Emission Limits: 0.01 gr/scf , 0.171 lb/hr, 0.75 TPY
Authority for Requirement: 567 IAC 23.4(13)
Iowa DNR Construction Permit 94-A-172

Pollutant: VOC
Emission Limit: 39.4 TPY
Authority for Requirement: Iowa DNR Construction Permit 94-A-172

Operational Limits & Requirements

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

Process throughput:

1. The density of the following paint components cannot exceed the following:
Solids: 4.28 lbs/ gallon of paint
VOC: 8.14 lbs/ gallon of paint
2. No more than 9,679 gallons of paint may be used per 12 months (rolling total).
3. Only one spray gun is permitted in this booth.
4. The opacity from this stack must be zero percent at all times.

Reporting & Record keeping:

All records listed below 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.

The permittee shall maintain the following monthly records:

1. The identification, the solid and VOC content for every paint used in this booth.
2. The total amount of paint used (gallons).

Authority for Requirement: Iowa DNR Construction Permit 94-A-172

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 27

Stack Diameter (inches): 18

Stack Exhaust Flow Rate (acfm): 2,000

Stack Temperature (°F): Ambient

Discharge Style: Vertical, obstructed

Stack Location: Stack is located at production line 1, bay A, building 1-18. Stack is located on the northeast side of the building

Authority for Requirement: Iowa DNR Construction Permit 94-A-172

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Visible Emissions Monitoring:

The facility shall check the visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(3)

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

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

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

Dry Filter Agency Operation and 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: 1-18-11

Associated Equipment

Associated Emission Unit ID Number: 1-18-11
Emissions Control Equipment ID Number: 1-18-11
Emissions Control Equipment Description: Dry Filters

Emission Unit vented through this Emission Point: 1-18-11
Emission Unit Description: Touch-up Paint Booth
Raw Material/Fuel: Paint & Solvent
Rated Capacity: 10-fl oz/min per gun (one spray gun at this source)

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: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 04-A-275

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 04-A-275

Pollutant: VOC

Emission Limit: 5.25 TPY⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-275

⁽²⁾ The VOC limit is 5.25 tons per any rolling 12-month period.

Operational Limits & Requirements

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

Process throughput:

1. The Touch-Up Paint Booth, 1-18-11, is limited to a maximum of 1500 gallons of VOC/HAP containing material (i.e., paint, solvent, thinner, etc) per rolling 12-month period.
2. The maximum VOC/HAP content of the VOC/HAP containing material used in this emission unit, 1-18-11, shall not exceed 7.0 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

1. Record on a monthly basis, the amount of VOC/HAP containing material (i.e., paint, solvent, thinner, etc.) used in the Touch-Up Paint Booth, 1-18-11, in gallons. Calculate and record 12-month rolling totals for material usage.
2. Record the VOC/HAP content of the VOC/HAP containing material used in this emission unit, 1-18-11, in pounds per gallon.
3. Retain Material Safety and Data Sheets (MSDS) of all materials used in the Touch-Up Paint Booth, 1-18-11.

Authority for Requirement: Iowa DNR Construction Permit 04-A-275

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 31

Stack Diameter (inches): 25

Stack Exhaust Flow Rate (scfm): 5500

Stack Temperature (°F): Ambient

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 04-A-275

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and 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 Numbers: See Table EXPL I

Table EXPL I

Emission Point Number	Emission Unit Number	Emission Unit Description	Control Equipment No. & Description	Raw Material	Rated Capacity	Construction Permit #
1-01-1	1-01-1	Ribbon Blender	1-01/CE1 Dry Filter	Inert Powder	800 lb/hr	89-A-022
1-01-5	1-01-5	Double Cone Blender	1-01/CE3 Dry Filter	Inert Powder	800 lb/hr	88-A-126
1-01-6	1-01-6	Dust Removal System	1-01/CE4 Dry Filter	Inert Powder	510 lb/hr	88-A-128
1-01-7	1-01-7	Hammermill	1-01/CE5 Dry Filter	Inert Powder	300 lb/hr	88-A-129

Applicable Requirements

(The following requirements apply to the emissions equipment described in Table EXPL I)

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

The emissions from the emission points described in Table EXPL I shall not exceed the following specified levels.

Pollutant: Opacity

Emission Limit: 40%

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

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permits as specified in Table EXPL I

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 ☒

The following requirements apply to each piece of equipment that is indicated in Table EXPL I as having a dry filter or scrubber for control equipment.

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: 1-10-31

Associated Equipment

Associated Emission Unit ID Number: 1-10-31

Emissions Control Equipment ID Number: CE 1-10-31

Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 1-10-31

Emission Unit Description: Explosive Dumping

Raw Material/Fuel: Explosive or Inert Material

Rated Capacity: 3,500 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 12-A-131

⁽¹⁾An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/scf

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

Iowa DNR Construction Permit 12-A-131

Pollutant: Particulate Matter

Emission Limits: 0.33 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 12-A-131

Pollutant: PM-10

Emission Limit: 0.33 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 12-A-131

Operational Limits & Requirements

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

Control Equipment Parameters:

1. The wet scrubber shall be operated and maintained in accordance with the manufacturer's instructions.

Reporting & Record keeping:

All records listed below 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.

1. The permittee shall maintain records on all maintenance performed on the wet scrubber.

Authority for Requirement: Iowa DNR Construction Permit 12-A-131

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 28.5

Stack Diameter (inches): 9

Stack Exhaust Flow Rate (scfm): 1,300

Stack Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 12-A-131

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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: 1-12-20

Associated Equipment

Associated Emission Unit ID Number: 1-12-20
Emissions Control Equipment ID Number: 1-12 CE 20
Emissions Control Equipment Description: Scrubber

Emission Unit vented through this Emission Point: 1-12-20
Emission Unit Description: Pressing Operation (2 Pressing Stations)
Raw Material/Fuel: Explosives
Rated Capacity: 100 lb/hr per press for a total of 200 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 11-A-359

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant:	Emission Limit:	Reference
Particulate Matter	0.90 lb/hr	Requested by Facility
	0.03 gr/scf	Requested by Facility
	0.1 gr/dscf	567 IAC 23.3(2)"a"
PM-10	0.30 lb/hr	Requested by Facility
	0.01 gr/scf	Requested by Facility
PM-2.5	0.30 lb/hr	Requested by Facility
	0.01 gr/scf	Requested by Facility

Authority for Requirement: Iowa DNR Construction Permit 11-A-359

Operational Limits & Requirements

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

Control Equipment Parameters:

1. The owner or operator shall maintain the control equipment according to manufacturer's specifications and maintenance schedule or per written facility specific operation and maintenance plan.

Authority for Requirement: Iowa DNR Construction Permit 11-A-359

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 43

Stack Diameter (inches): 14

Stack Exhaust Flow Rate (scfm): 3,500

Stack Temperature (°F): Ambient

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 11-A-359

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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: 1-12-24

Associated Equipment

Associated Emission Unit ID Number: 1-12-24 & 1-12-25

Emissions Control Equipment ID Number: 1-12 CE 24

Emissions Control Equipment Description: Scrubber

Emission Unit vented through this Emission Point: 1-12-24 & 1-12-25

Emission Unit Description: Explosives Screening (2 Screening Stations, 1 Dumping Station)

Raw Material/Fuel: Explosives

Rated Capacity: 100 lb/screening unit for a total of 200 lb.

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: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 11-A-358

- ⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant:	Emission Limit:	Reference
Particulate Matter	0.72 lb/hr	Requested by Facility
	0.03 gr/scf	Requested by Facility
	0.1 gr/dscf	567 IAC 23.3(2)"a"
PM-10	0.24 lb/hr	Requested by Facility
	0.01 gr/scf	Requested by Facility
PM-2.5	0.24 lb/hr	Requested by Facility
	0.01 gr/scf	Requested by Facility

Authority for Requirement: Iowa DNR Construction Permit 11-A-358

Operational Limits & Requirements

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

Control Equipment Parameters:

1. The owner or operator shall maintain the control equipment according to manufacturer's specifications and maintenance schedule or per written facility specific operation and maintenance plan.

Authority for Requirement: Iowa DNR Construction Permit 11-A-358

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 45

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 2800

Stack Temperature (°F): Ambient

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 11-A-358

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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: 1-13-15

Associated Equipment

Associated Emission Unit ID Number: 1-13-15

Emissions Control Equipment ID Number: 1-13-15

Emissions Control Equipment Description: Vacuum System with Filter

Emission Unit vented through this Emission Point: 1-13-15

Emission Unit Description: Propellant Handling & Loading

Raw Material/Fuel: Explosive/Inert Material

Rated Capacity: 4 stations at 1400 lb/hr each

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40 %⁽¹⁾

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

Iowa DNR Construction Permit 01-A-951-S4

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-951-S4

Operational Limits & Requirements

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

Process throughput:

1. Only two (2) of the four (4) stations shall operate simultaneously

Authority for Requirement: Iowa DNR Construction Permit 01-A-951-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 4

Stack Diameter (inches): 4

Stack Exhaust Flow Rate (scfm): 150

Stack Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 01-A-951-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 1-13-22

Associated Equipment

Associated Emission Unit ID Number: 1-13-22 and 1-13-23

Emission Unit vented through this Emission Point: 1-13-22 and 1-13-23

Emission Unit Description: Propellant Weighing and Laser Jet Markers

Raw Material/Fuel: Explosive/Inert Material and Ink

Rated Capacity: 4 Propellant Weighing stations combined rating of 225 lb/hr
2 Laser Jet Markers limited to 1,025 gal/year

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40 %⁽¹⁾

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

Iowa DNR Construction Permit 10-A-031-S3

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 10-A-031-S3

Pollutant: Particulate Matter

Emission Limit: 0.11 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 10-A-031-S3

Pollutant: PM-10

Emission Limit: 0.11 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 10-A-031-S

Operational Limits & Requirements

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

Process throughput:

1. No more than 1,025 gallons of ink, ink additive, ink cleaner and MEK shall be used in these emission units.
2. The maximum VOC content of ink, ink additive, ink cleaner and MEK used in these emission units shall not exceed 7.8 lb/gal.
3. The materials utilized in this emission unit shall not contain HAPs.

Reporting & Record keeping:

All records listed below 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.

1. The permittee shall maintain records on the identification, the VOC content, and the HAP content of each ink, ink additive, ink cleaner and solvent used in these emission units.
2. The permittee shall record the monthly usage of ink, ink additive, ink cleaner, and MEK in these emission units.
3. The permittee shall calculate the combined 12-month rolling total of ink, ink additive, ink cleaner, and MEK in these emission units.

Authority for Requirement: Iowa DNR Construction Permit 10-A-031-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 18.5

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 1200

Stack Temperature (°F): 70

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-031-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 1-01-3

Associated Equipment

Associated Emission Unit ID Number: 1-01-3

Emissions Control Equipment ID Number: 1-01/CE2

Emissions Control Equipment Description: Vapor Recovery

Emission Unit vented through this Emission Point: 1-01-3

Emission Unit Description: Explosive Processing High Shear Mixer

Raw Material/Fuel: Methyl Ethyl Ketone, inert powder

Rated Capacity: 5.35 lbs/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: 40%

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

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 88-A-127

Pollutant: Methyl Ethyl Ketone

Emission Limit: 5.35 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 88-A-127

Operational Limits & Requirements

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

Operating Limits:

1. The amount of methyl ethyl ketone (MEK) used in the high shear mixer shall not exceed 16,000 pounds per rolling 12-month year.

Authority for Requirement: 567 IAC 22.108(14)

Reporting & Record keeping:

All records listed below 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.

1. The rolling 12-month total of methyl ethyl ketone (MEK) used in the high shear mixer (pounds).

Authority for Requirement: 567 IAC 22.108(14)

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: 1-18-13

Associated Equipment

Associated Emission Unit ID Numbers: 1-18-13

Emission Unit vented through this Emission Point: 1-18-13

Emission Unit Description: Propellant Loader

Raw Material/Fuel: Explosive materials

Rated Capacity: 3000 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-1128

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-1128

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 13

Stack Diameter (inches): 15

Exhaust Flow Rate (scfm): 1,013

Exhaust Temperature (°F): 70

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-1128

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 1-65-5-1 & 1-65-5-2

Table Explosive Processing I

Emission Point Number	Emission Unit Number	Emission Unit Description	Control Equipment Number	Control Equipment Description	Raw Material	Rated Capacity (ton/hr)
1-65-5-1	1-65-5-1	Explosive Processing/Powder Blender	1-65-5/CE-1	Fabric Filter	Explosive Material	0.5
1-65-5-2	1-65-5-2	Explosive Processing/Screener	1-65-5/CE-2	Fabric Filter	Explosive Material	0.5

Applicable Requirements

(The following requirements apply to the emissions equipment described in Table Explosive Processing I)

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

The emissions from each emission point identified in Table Explosive Processing II shall not exceed the following specified levels.

Table Explosive Processing II

Emission Point Number	Emission Unit Number	Opacity Limit ⁽¹⁾	PM Limit PM-10 Limit (lb/hr)	Additional PM Limits (gr/dscf)	Authority for Requirement Construction Permit #
1-65-5-1	1-65-5-1	40 %	1.23 1.23	0.04	03-A-505
1-65-5-2	1-65-5-2	40 %	1.23 1.23	0.04	03-A-506

- ⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Table Explosive Processing III

Emission Point Number	Emission Unit Number	Construction Permit #	Emission Point Characteristics				
			Height (feet)	Diameter (inches)	Exhaust Flowrate (scfm)	Exhaust Temp. (°F)	Discharge Style
1-65-5-1	1-65-5-1	03-A-505	31	18	3600	70	Vertical unobstructed
1-65-5-2	1-65-5-2	03-A-506	31	18	3600	70	Vertical unobstructed

Authority for Requirement: Iowa DNR Construction Permits specified in Table Explosive Processing III

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 1-99-1

Associated Equipment

Associated Emission Unit ID Numbers: 1-99-1
Emissions Control Equipment ID Number: CE 1-99-1
Emissions Control Equipment Description: Bag Filter

Emission Unit vented through this Emission Point: 1-99-1
Emission Unit Description: Vacuum House
Raw Material/Fuel: Explosive/Inert Powder
Rated Capacity: 25 lb/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: 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

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

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: 1-99-4

Associated Equipment

Associated Emission Unit ID Numbers: 1-99-4
Emissions Control Equipment ID Number: CE 1-99-4
Emissions Control Equipment Description: Bag Filter

Emission Unit vented through this Emission Point: 1-99-4
Emission Unit Description: Vacuum House
Raw Material/Fuel: Explosive/Inert Powder
Rated Capacity: 25 lb/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: 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

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

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: 1-62-2-5**Associated Equipment**

Associated Emission Unit ID Number: 1-62-2-9 (natural gas)

1-62-2-10 (fuel oil)

Emissions Control Equipment ID Number: 1-62-2-9

Emissions Control Equipment: Flue gas recirculation

Emission Unit vented through this Emission Point: 1-62-2-9 and 1-62-2-10

Emission Unit Description: Keystone Boiler with Flue Gas Recirculation

Raw Material/Fuel: Natural Gas or Fuel Oil

Rated Capacity: 126.7 MMBtu/hr natural gas or 116.48 MMBtu/hr fuel oil

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	Emission Limit	Authority for Requirement
Opacity	40% ⁽¹⁾ Natural gas combustion	Iowa DNR Construction Permit 04-A-311-S4 567 IAC 23.3(2)"d"
	20% ⁽²⁾ Fuel oil combustion	Iowa DNR Construction Permit 04-A-311-S4 40 CFR Part 60, Subpart Db 567 IAC 23.1(2)"ccc"
Footnotes	⁽¹⁾ An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g. stack testing).	
	⁽²⁾ Opacity shall not exceed 20% (6-minute average), except for one (1) 6-minute period per hour of not more than 27% opacity. See 40 CFR 60.43b(f).	

Pollutant: PM-10

Emission Limit: 0.05 lb/MMBtu, 13.87 tpy

Authority for Requirement: Iowa DNR Construction Permit 04-A-311-S4

Pollutant: Particulate Matter

Emission Limit: 0.05 lb/MMBtu, 13.87 tpy

Authority for Requirement: Iowa DNR Construction Permit 04-A-311-S4

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 0.06 lb/MMBtu

Authority for Requirement: Iowa DNR Construction Permit 04-A-311-S4

Pollutant: Nitrogen Oxides

Emission Limit: 0.10 lb/MMBtu, 27.7 tpy

Authority for Requirement: Iowa DNR Construction Permit 04-A-311-S4

Operational Limits & Requirements

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

Process throughput:

1. The boiler (EP 1-62-2-5) shall be limited to firing natural gas or distillate oil only. Prior to firing any other fuels in the boiler, the permittee shall obtain a modified construction permit.
2. The sulfur content of the fuel oil shall not exceed 0.05% by weight.
3. The total heat input for the boiler shall not exceed 554,858 MMBTU per any rolling 12-month period. The annual capacity factor of the boiler is limited to 50% by this operating limit.

Authority for Requirement: Iowa DNR Construction Permit 04-A-311-S4

Reporting & Record keeping:

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

- A. The owner or operator shall record and maintain records of the amounts of each fuel combusted during each day. (§60.49b(d))
- B. The owner or operator shall maintain the following monthly records:
 - i. The amount of natural gas (cubic feet) and distillate fuel oil (gallons) burned in the boiler;
 - ii. The heat input to the boiler from burning natural gas and distillate fuel oil. This shall be determined by adding the heat input from burning natural gas to the heat input from burning distillate fuel oil. The units shall be in million BTUs. To determine the heat input from burning natural gas, the amount of gas burned (scf) shall be multiplied by the heat content of natural gas (1020 BTU/scf) and then divided by one million. To determine the heat input from burning distillate fuel oil, the amount of oil burned (gallons) shall be multiplied 140,000 BTU/gallon and then divided by one million.
 - iii. The rolling 12-month total of the heat input to the boiler in million BTUs.
- C. The owner or operator shall maintain records of opacity observations made. (§60.49b(f))
- D. The owner or operator shall maintain the following records each day that the boiler operates:
 - i. The calendar date;

- ii. The average hourly NOx emission rates, expressed as NO₂, in lbs /MMBTU heat input;
 - iii. The 30-day average NOx emission rate (lbs/MMBTU heat input) calculated at the end of each day based on the emission rates from the preceding 30 days that the boiler operated;
 - iv. Identification of any day when the calculated 30-day average NOx emission rates are in excess of the NOx emission standard of 0.10 lb/MMBTU with the reasons for such excess emissions as well as a description of corrective actions taken;
 - v. Identification of any day for which the NOx data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
 - vi. Identification of the times when NOx emissions data have been excluded from the calculation of average emission rates and the reasons for excluding data;
 - vii. Identification of the “F” factor used for calculations, methods of determination, and type of fuel combusted;
 - viii. Identification of the times when the pollutant concentration exceeded the full span of the CEMS;
 - ix. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
 - x. Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of Part 60. (§60.49b(g))
- E. The owner or operator shall submit excess emission reports for exceedances of the opacity standard that occurred during any calendar quarter. Excess emissions are defined as all 6-minute periods during which the average opacity exceeded the opacity limit of 20%. These reports shall be submitted no later than 30 days from the end of calendar quarter. (§60.49b(h)(1) and (3))
- F. The owner or operator shall submit excess emission reports for exceedances of the NOx standard that occurred during any calendar quarter. Excess emissions are defined as any calculated 30-day rolling average where the NOx emission rate exceeded the limit of 0.10 lb/MMBTU heat input. The reports shall be submitted no later than 30 days from the end of the calendar quarter. (§60.49b(h)(2) and (4))
- G. The owner or operator shall submit reports containing the information recorded under item (D) above. These reports shall cover each calendar quarter. The reports shall be submitted no later than 30 days from the end of the reporting period. (§60.49b(i))

- H. The owner or operator shall obtain and maintain fuel receipts from the fuel supplier that certify that the distillate fuel oil burned in the boiler meets the definition of distillate oil as defined in (§60.41b) and that the oil meets the sulfur content limit required by this permit. The distillate oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted certifying that only oil meeting the sulfur content limit and/or pipeline quality natural gas was combusted during the reporting period. The reporting period is each calendar quarter. The reports shall be submitted no later than 30 days from the end of the reporting period. (§60.49b(r))

NSPS/NESHAP:

NSPS:

This emission unit is subject to Subparts A (General Provisions, 40 CFR Part 60.1 – 40 CFR Part 60.19) and Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units 40 CFR Part 60.40b – 40 CFR Part 60.49b) of the New Source Performance Standards (NSPS).

Authority for Requirement: Iowa DNR Construction Permit 04-A-311-S4

NESHAP:

This equipment is of the source category affected by the following federal regulation: 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 (feet): 50

Stack Diameter (inches): 36

Stack Exhaust Flow Rate (scfm): 23,530

Stack Temperature (°F): 350

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 04-A-311-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Stack Testing:

Pollutant – PM (state)

Test to be Completed within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.⁽¹⁾

Test Method – Iowa Compliance Sampling Manual Method 5

Authority for Requirement – Iowa DNR Construction Permit 04-A-311-S4

⁽¹⁾ Test to be completed while burning fuel oil.

Pollutant – Opacity

Test to be Completed within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.⁽¹⁾

Test Method – 40 CFR 60, Appendix A, Method 9

Authority for Requirement – Iowa DNR Construction Permit 04-A-311-S4

⁽¹⁾ Test to be completed while burning fuel oil.

Continuous Emissions Monitoring:

Compliance and Performance Test Methods and Procedures for nitrogen oxides

To determine compliance with the emission limits for NO_x required under §60.44b, the owner or operator shall conduct an initial performance test using the continuous system for monitoring NO_x under §60.48b. For the initial compliance test, NO_x emissions from the boiler are to be monitored for 30 successive operating days and the 30-day average emission rate is used to determine compliance with the NO_x emission standards. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period. (§60.46b(e)(1))

If requested after the initial performance test, the permittee shall determine compliance with the NO_x standard through the use of a 30-day performance test. During periods when performance tests are not requested, NO_x emissions data collected by the CEM are used to calculate a 30-day rolling average emission rate and used to prepare excess emission reports, but will not be used to determine compliance with the NO_x emission standards. A new 30-day rolling average emission rate is calculated each day the boiler operates as the average of all of the hourly NO_x emission data for the preceding 30 days of operation. (§60.46b(e)(4)).

The following continuous emission monitoring requirements apply to this emission point and its associated emission unit(s) and control equipment.

- A. The owner or operator shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring NO_x and O₂ (or CO₂) emissions discharged to the atmosphere and shall record the output of the system.
 - i. The CEMS required shall be operated and data recorded during all periods of operation of the

boiler except for CEMS breakdown and repairs. Data is recorded during calibration checks, and zero and span adjustments.

- ii. The 1-hour average NO_x emission rates measured by the CEMS shall be expressed in lb/MMBTU heat input and shall be used to calculate the average NO_x emission rate. The 1-hour averages shall be calculated under the data points required under §60.13(h)(2).
- iii. The procedures under §60.13 shall be followed for installation, evaluation and operation of the CEMS.
 - a. The NO_x span value shall be 500 ppm.
 - b. The CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 2 and 3 of 40 CFR Part 60, Appendix B.
 - c. Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of 40 CFR Part 60, Appendix F.
- iv. When NO_x emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 or Method 7A of appendix A of part 60 or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each day that the boiler operates and for at least 22 days out of 30 successive days that the boiler operates. (§60.48b(b) – (f)).

Authority for Requirement – Iowa DNR Construction Permit 04-A-311-S4

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

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

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: 1-62-9

Associated Equipment

Associated Emission Unit ID Number: 1-62-9

Emission Unit vented through this Emission Point: 1-62-9

Emission Unit Description: Emergency Generator

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 550 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: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 10-A-197

⁽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

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 10-A-197

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

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

Process throughput:

1. The maximum number of hours of operation of this unit shall not exceed 500 hours per twelve (12) month period, rolled monthly.
2. This unit shall have a non-resettable hour meter installed as required by 40 CFR §60.4209(a).
3. The fuel used in this unit shall meet the requirements of 40 CFR §60.4207

Reporting & Record keeping:

All records listed below 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.

1. The owner/operator of this unit shall keep a record of each time the engine is used and the reason for the use as required by 40 CFR §60.4214(b).
2. The owner/operator shall record the number of hours this unit operates for each use of the unit.
3. At the end of each month, calculate and record the number of hours that this unit operated over the previous month.
4. At the end of each month, calculate and record the number of hours this unit operated over the previous twelve (12) months.
5. Documentation from the fuel supplier that the fuel received during each shipment meets the required specifications of 40 CFR §60.4207.

Authority for Requirement: Iowa DNR Construction Permit 10-A-197

NESHAP/NSPS

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63, Subpart ZZZZ]

Authority for Requirement: 40 CFR Part 63, Subpart ZZZZ

NSPS:

This emission unit is regulated by the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR, Part 60, Subpart IIII. This source meets the definition of an emergency engine that is not a fire pump with a displacement of less than 10 liters/cylinder. This engine is model year 2007 or later. Therefore, this source must comply with the emission standards in 60.4202(a)(2) and all other applicable requirements of Subpart IIII.

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 (feet): 13.5

Stack Diameter (inches): 8.0

Stack Exhaust Flow Rate (scfm): 1,150

Stack Temperature (°F): 963

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 10-A-197

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 1-211-1

Associated Equipment

Associated Emission Unit ID Number: 1-211-1

Emission Unit vented through this Emission Point: 1-211-1

Emission Unit Description: Diesel Generator

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 470 hp

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: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 97-A-524

⁽¹⁾ If visible emissions are observed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 97-A-524

Pollutant: PM-10

Emission Limit: 1.2 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 97-A-524

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Pollutant: Sulfur Dioxide

Emission Limit: 0.6 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 97-A-524

Operational Limits & Requirements

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

Process throughput:

1. The operation of the generator administered under DNR permit 97-A-524 shall not exceed 1,000 hours per rolling twelve-month period.
2. The sulfur content of diesel fuel used in the generator administered under DNR permit 97-A-524 shall not exceed 0.05 weight percent.

Reporting & Record keeping:

All records listed below 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.

1. The permit holder shall maintain records on the premises to show the twelve-month rolling total hours of operation of the generator administered under DNR permit 97-A-524.
2. The permit holder shall maintain records on the premises to show the supplier certification of the sulfur content of diesel fuel used in the generator administered under DNR permit 97-A-524.

Authority for Requirement: Iowa DNR Construction Permit 97-A-524

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 9.5

Stack Diameter (inches): 8.04

Stack Exhaust Flow Rate (acfm): 18,117

Stack Temperature (°F): 998

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 97-A-524

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 1-211-4

Associated Equipment

Associated Emission Unit ID Number: 1-211-4

Emission Unit vented through this Emission Point: 1-211-4

Emission Unit Description: Yard L Generator (315 kW)

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 25.0 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: 40 %

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

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

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

Process throughput:

1. The sulfur content of the diesel fuel combusted in this emission unit shall not exceed 0.5 percent by weight.

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

Reporting & Record keeping:

All records listed below 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.

1. The permit holder shall maintain records to show the supplier certification of the sulfur content of the diesel fuel used.

Authority for Requirement: 567 IAC 22.108(3)

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

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: Vents Internally

Associated Equipment

Associated Emission Unit ID Number: 2-04-25

Emission Unit vented through this Emission Point: 2-04-25

Emission Unit Description: Adhesive station

Raw Material/Fuel: Adhesive

Rated Capacity: 0.09 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: VOC

Emission Limit: 3.55 tpy

Authority for Requirement: Iowa DNR Construction Permit 04-A-855

Operational Limits & Requirements

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

Process throughput:

1. The adhesive station is limited to a maximum of 788 gallons of adhesive material per rolling 12-month period.
2. The maximum VOC content of the adhesive used in this emission unit shall not exceed 9.0 pounds of VOC per gallon.

Authority for Requirement: Iowa DNR Construction Permit 04-A-855

Reporting & Record keeping:

All records listed below 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.

2. Record on a month basis, the amount of adhesive material used in the affected emission unit, in gallons. Calculate and record 12-month rolling totals for material usage.
3. Record the VOC content of the adhesive material used in the affected emission unit, in pounds per gallon.
4. Retain Material Safety and Data Sheets (MSDS) of all materials used in the adhesive station.

Authority for Requirement: Iowa DNR Construction Permit 04-A-855

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: 2-04-25

Associated Equipment

Associated Emission Unit ID Number: 2-04-25

Emission Unit vented through this Emission Point: 2-04-25

Emission Unit Description: Adhesive oven (steam)

Raw Material/Fuel: VOC emissions

Rated Capacity: See EU 2-04-25 Adhesive Station

Applicable Requirements

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

The emissions from this emission point have been accounted for in the material usage restriction for the adhesive station.

Pollutant: VOC

Emission Limit: NA – Emissions have been accounted for in the material usage restriction for the adhesive station.

Authority for Requirement: Iowa DNR Construction Permit 04-A-856

Operational Limits & Requirements

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

Operating limits are not required at this time.

Reporting & Record keeping:

Record keeping is not required at this time.

Authority for Requirement: Iowa DNR Construction Permit 04-A-856

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 24

Stack Diameter (inches): 8

Stack Exhaust Flow Rate (scfm): 500

Stack Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 04-A-856

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-04-36

Associated Equipment

Associated Emission Unit ID Number: 2-04-1 & 2-04-2

Emission Units vented through this Emission Point: 2-04-1 & 2-04-2
Emission Unit Description: Oven (steam heated)/Cleaning Station
Raw Material/Fuel: Cleaning solvent
Rated Capacity: 0.09 gal/hr

Applicable Requirements

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

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

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

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

Pollutant: VOC
Emission Limit: The VOC emissions emitted from the ovens due to painting operations are accounted for in the corresponding paint booths (EP 2-04-21 & EP 2-04-22). The calculated VOC emissions due to the cleaning station are 2.56 tpy, based on operating limits.
Authority for Requirement: Iowa DNR Construction Permit 04-A-525

Operational Limits & Requirements

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

Process throughput:

1. The facility shall not use more than 788 gallons of VOC-containing cleaning materials in the cleaning station associated with this permit per twelve-month rolling period.
2. The maximum VOC content of any material used in the cleaning station associated with this permit shall be 6.5 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

The facility shall maintain the following records:

1. The facility shall record monthly material usage (units of gal/month) of all VOC-containing materials used in the cleaning station associated with this permit. During the initial 12 months of operation, cumulative material usage shall be determined for each month of operation. After the initial 12 months of operation, annual material usage shall be determined on a 12 month rolling basis, for each month of operation.
2. The facility shall record the VOC content of all VOC-containing material used in the cleaning station associated with this permit.
3. The MSDS of all materials used in the emission units associated with this permit shall be kept on-site and available for inspection by the DNR.

Authority for Requirement: Iowa DNR Construction Permit 04-A-525

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 26

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 5000

Stack Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 04-A-525

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-12-2

Associated Equipment

Associated Emission Unit ID Number: 2-12-2

Emission Unit vented through this Emission Point: 2-12-2

Emission Unit Description: Rework Bay/Cleaning Ops

Raw Material/Fuel: Paint or solvent

Rated Capacity: 100 gal/yr

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: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 01-A-1253

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-1253

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 31

Stack Diameter (inches): 11

Stack Exhaust Flow Rate (scfm): 1500

Stack Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-1253

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-13-8 & 2-13-9

Table Clean & Prime I

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (gal/yr)
2-13-8	2-13-8 2-13-9	Clean & Prime Warheads (Wipe & Brush Application)	Primer, Solvent, Clear coat	1095
2-13-9	2-13-10 2-13-11	Clean & Prime Sabots	Primer, Solvent, Clear coat	1095

Applicable Requirements

(The following requirements apply to the emissions equipment described in Table Clean & Prime I

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

The emissions from each emission point identified in Table Clean & Prime II shall not exceed the following specified levels.

Table Clean & Prime II

Emission Point Number	Associated Emission Unit Number	VOC's typ ⁽¹⁾	Single HAP typ ⁽¹⁾	Authority for Requirement Construction Permit #
2-13-8	2-13-8 2-13-9	3.76	2.29	03-A-562
2-13-9	2-13-10 2-13-11	3.76	2.29	03-A-563

⁽¹⁾ Standard is a 12-month rolling total, based on material usage limits listed below.

Operational Limits & Requirements

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

Process throughput:

1. Total material usage (e.g. coatings and solvent) shall not exceed 1095 gallons⁽¹⁾ in any rolling 12-month period.
2. The maximum VOC content of any material used shall not exceed 6.88 pounds per gallon, as applied.
3. The maximum individual HAP content of any material used shall not exceed 4.2 lbs per gallon.

Reporting & Record keeping:

All records listed below 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.

The permittee shall maintain the following monthly records:

1. The identification, the VOC content and the HAP content of any material applied.
2. The total amount of material used (gallons).
3. The rolling 12-month total of the amount of material used (gallons).

Authority for Requirement: Iowa DNR Construction Permits specified in Table Clean and Prime II

⁽¹⁾ 1095 gallons is per each point referenced in Table: Clean and Prime III

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Table Clean and Prime III

Emission Point Number	Emission Unit Number	Construction Permit #	Emission Point Characteristics				
			Height (feet)	Diameter (inches)	Exhaust Flowrate (scfm)	Exhaust Temp. (°F)	Discharge Style
2-13-8	2-13-8 2-13-9	03-A-562	15	26	1000	70	Vertical unobstructed
2-13-9	2-13-10 2-13-11	03-A-563	23.5	8	5600	70	Vertical unobstructed

Authority for Requirement: Iowa DNR Construction Permits specified in Table Clean and Prime III

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-13-10

Associated Equipment

Associated Emission Unit ID Number: 2-13-14 & 2-13-15

Emission Unit vented through this Emission Point: 2-13-14 & 2-13-15

Emission Unit Description: Clean & Prime Operations

Raw Material/Fuel: Primer, solvent and clear coat

Rated Capacity: 1095 gal/yr

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: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 03-A-564

⁽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

Emission Limit: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 03-A-564

Pollutant: VOC

Emission Limit: 3.76 TPY⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 03-A-564

Pollutant: Single HAP

Emission Limit: 2.29 TPY⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 03-A-564

⁽¹⁾ Standard is a 12-month rolling total, based on material usage limits listed below.

Operational Limits & Requirements

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

Process throughput:

1. Total material usage (e.g. coatings and solvent) shall not exceed 1095 gallons in any rolling 12-month period.
2. The amount of material applied by spraying (e.g. aerosol) shall not exceed 100 gallons in any 12-month period.
3. The maximum VOC content of any material used shall not exceed 6.88 pounds per gallon, as applied.
4. The maximum individual HAP content of any material used shall not exceed 4.2 lbs per gallon.

Reporting & Record keeping:

All records listed below 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.

The permittee shall maintain the following monthly records:

1. The identification, the VOC content and the HAP content of any material applied.
2. The total amount of material used (gallons). The permittee shall keep a separate monthly record of the amount of coatings applied by spraying.
3. The rolling 12-month total of the amount of material used (gallons). The permittee shall keep a separate record of the rolling 12-month total of the amount of coatings applied by spraying.

Authority for Requirement: Iowa DNR Construction Permit 03-A-564

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 20

Stack Diameter (inches): 15

Exhaust Flow Rate (scfm): 1,200

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 03-A-564

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-13-11

Associated Equipment

Associated Emission Unit ID Number: 2-13-38

Emission Unit vented through this Emission Point: 2-13-38

Emission Unit Description: Adhesive Application

Raw Material/Fuel: Isopropyl Alcohol & Adhesive

Rated Capacity: 4,333 gal/yr

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: VOC

Emission Limit: 19.5 TPY

Authority for Requirement: Iowa DNR Construction Permit 96-A-829

Operational Limits & Requirements

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

Process throughput:

1. A maximum of 4,333 gallons of material is permitted to be used at this application station, per 12 months (rolled monthly).
2. The maximum VOC content of any material used must be 9 lbs of VOC per gallon of material.

Reporting & Record keeping:

All records listed below 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.

1. Monthly records must be kept which show the maximum VOC content and the quantity of each material used.
2. If the quantity of material used exceeds 4,333 gallons per year, then the permittee must demonstrate that they are in compliance with the VOC emission rate. This must be done by calculating the VOC emission rate using the following, for each material:
 - a. quantity used
 - b. VOC content
 - c. MSDS sheets or the equivalent
3. The arithmetic and methodology used in calculating the emission rate must be shown.
4. All records must be satisfactory for demonstrating compliance with the VOC emission limit and process throughput limits.

Authority for Requirement: Iowa DNR Construction Permit 96-A-829

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 23.8

Stack Diameter (inches): 14

Exhaust Flow Rate (acfm): 2,500

Exhaust Temperature (°F): 70

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Stack Location: Stack is located along the center of the southern wall of Building 2-13.

Authority for Requirement: Iowa DNR Construction Permit 96-A-829

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 Numbers: See Table COAT I

Table COAT I

Emission Point Number	Emission Unit Number	Emission Unit Description	Control Equipment Number*	Raw Material	Rated Capacity	Construction Permit #
2-05-2-1	2-05-2-4	Surface Coating	2-05-2/CE1	Paint	10 oz/min	80-A-030
2-10-17	2-10-1	Surface Coating	2-10/CE1	Paint	10 oz/min	90-A-141
2-10-23	2-10-13	Surface Coating	2-10/CE2	Zinc Chromate	10 oz/min	84-A-080
2-10-24	2-10-14	Surface Coating	2-10/CE3	Paint	10 oz/min	84-A-081
2-12-10	2-12-9	Surface Coating	2-12/CE3	Paint	10 oz/min	84-A-085
2-12-11	2-12-10	Surface Coating	2-12/CE4	Paint	10 oz/min	84-A-084

* These emission units are controlled by dry filters.

Applicable Requirements

(The following requirements apply to the emissions equipment described in Table COAT I)

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

The emissions from the emission points described in Table COAT I shall not exceed the following specified levels.

Pollutant: Opacity

Emission Limit: 40%

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

Pollutant: Particulate Matter

Emission Limit: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permits Specified in Table COAT I

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 ☒

Dry Filter Agency Operation and Maintenance Plan

Weekly

- Inspect the spray booths 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: 2-04-21

Associated Equipment

Associated Emission Unit ID Number: 2-04-4
Emissions Control Equipment ID Number: 2-04/CE1
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 2-04-4
Emission Unit Description: Base Coat Paint Booth
Raw Material/Fuel: Paint
Rated Capacity: 15 oz/min

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 88-A-028-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 88-A-028-S2

Pollutant: VOC

Emission Limit: 19.5 TPY

Authority for Requirement: Iowa DNR Construction Permit 88-A-028-S2

Operational Limits & Requirements

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

Process throughput:

1. Material usage in this paint booth shall be limited to 6,393 gallons per twelve-month rolling period.
2. The maximum VOC content of material used in this paint booth shall be 6.1 lbs VOC/gal as applied.

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall keep records of material usage at this booth, and update the twelve-month rolling total on a monthly basis.
2. The owner or operator shall keep Material Safety Data Sheets (MSDS) for all materials used in this booth, which show the VOC content of each material.

Authority for Requirement: Iowa DNR Construction Permit 88-A-028-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 33

Stack Opening (inches, diameter): 34

Exhaust Flow Rate (scfm): 9,800

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 88-A-028-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and 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: 2-04-22

Associated Equipment

Associated Emission Unit ID Number: 2-04-5
Emissions Control Equipment ID Number: 2-04/CE2
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 2-04-5
Emission Unit Description: Top Coat Paint Booth
Raw Material/Fuel: Paint
Rated Capacity: 112.5 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 88-A-027-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 88-A-027-S2

Pollutant: VOC

Emission Limit: 19.5 TPY

Authority for Requirement: Iowa DNR Construction Permit 88-A-027-S2

Operational Limits & Requirements

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

Process throughput:

1. Material usage in this paint booth shall be limited to 7,090 gallons per twelve month rolling period.
2. The maximum VOC content of material used in this paint booth shall be 5.5 lbs VOC/gal as applied.

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall keep records of material usage at this booth, and update the twelve month rolling total on a monthly basis.
2. The owner or operator shall keep Material Safety Data Sheets (MSDS) for all materials used in this booth, which show the VOC content of each material.

Authority for Requirement: Iowa DNR Construction Permit 88-A-027-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 33

Stack Opening (inches, diameter): 34

Exhaust Flow Rate (scfm): 9,800

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 88-A-027-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and 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 Numbers: See Table Stencil Mat I

Table Stencil Mat I

Emission Point Number	Emission Unit Number	Emission Unit Description	Control Equipment Number	Raw Material	Rated Capacity	Construction Permit #
2-10-31	2-10-31	Stencil Mat Machine	None	Developer, fixer, solvent	2310 gal/rolling 12 month period ⁽¹⁾	03-A-290
2-10-32						03-A-291
2-10-33						03-A-292
2-10-34						03-A-293
2-10-35						03-A-294-S1

⁽¹⁾Limit in construction permits referenced in Table Stencil Mat I

Applicable Requirements

(The following requirements apply to the emissions equipment described in Table Stencil Mat I)

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

The emissions from the emission points described in Table Stencil Mat I shall not exceed the following specified levels.

Pollutant: VOC

Emission Limit: 8.7 tpy⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits Specified in Table Stencil Mat I.

⁽¹⁾Standard is a 12-month rolling total, based on material usage limits. Limit is for stencil mat machine, which has five emission points.

Operational Limits & Requirements

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

Process throughput

1. The total amount of chemicals (i.e. solvents, developer, fixer, and replenisher) used in the stencil mat machine shall not exceed 2310 gallons per any rolling 12-month period.
2. The VOC content of any chemical (i.e. solvents, developer, fixer and replenisher) shall not exceed 7.5 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

1. The identification and the VOC content of any chemical (i.e. solvents, developer, fixer and replenisher) used in the stencil mat machine.
2. The total amount of chemicals (i.e. solvents, developer, fixer and replenisher) used in the stencil mat machine (gallons).
3. The rolling, 12-month total of the amount of chemicals (i.e. solvents, developer, fixer and replenisher) used in the stencil mat machine (gallons).

Authority for Requirement: Iowa DNR Construction Permits Specified in Table Stencil Mat I.

Emission Point Characteristics

The emission points shall conform to the conditions listed in Table Stencil Mat II.

Table Stencil Mat II

Emission Point Number	Emission Unit Number	Construction Permit #	Emission Point Characteristics				
			Height (feet)	Diameter (inches)	Exhaust Flowrate (scfm)	Exhaust Temp. (F)	Discharge Style
2-10-31	2-10-31	03-A-290	16	11	700	70	Vertical, unobstructed
2-10-32		03-A-291	8.5	4	180	70	Vertical, obstructed or horizontal
2-10-33		03-A-292	8.5	6	375	70	Vertical, obstructed or horizontal
2-10-34		03-A-293	8.5	2.5	85	70	Vertical, obstructed or horizontal
2-10-35		03-A-294-S1	19	24	3600	Ambient	Vertical, unobstructed

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Authority for Requirement: Iowa DNR Construction Permits specified in Table Stencil Mat II

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: 2-01-6

Associated Equipment

Associated Emission Unit ID Number: 2-01-6

Emission Unit vented through this Emission Point: 2-01-6

Emission Unit Description: Adhesive Application

Raw Material/Fuel: Adhesive and Paint

Rated Capacity: 2 grams/shell

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 applicable at this time.

Operational Limits & Requirements

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

Process throughput:

1. The maximum amount of material (i.e. paint, adhesive, solvents, etc.) used in this emission unit, EU 2-01-6, shall not exceed 1,000 gallons per twelve-month rolling period.
2. The maximum VOC content of any material used in this emission unit, EU 2-01-6, shall not exceed 7.0 pounds VOC per gallon.

Authority for Requirement: Iowa DNR Construction Permit 01-A-1136-S1

Reporting & Record keeping:

All records listed below 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.

1. The permit holder, owner or operator of the facility shall calculate and record the monthly total and the 12-month rolling total amount of material used in this emission unit, EU 2-01-6, in gallons.
2. The permit holder, owner or operator of the facility shall record the VOC content of any material used in this emission unit, EU 2-01-6, in pounds per gallon.
3. The permit holder, owner or operator of the facility shall maintain manufacturer/vendor provided information (i.e., Material Safety Data Sheets (MSDS), technical data sheets, etc.) of all materials used in the emission unit, which clearly indicates the VOC content of that material.

Authority for Requirement: Iowa DNR Construction Permit 01-A-1136-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 10.5

Stack Opening (inches, diameter): 16

Exhaust Flow Rate (scfm): 2,400

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 01-A-1136-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-05-2-17

Associated Equipment

Associated Emission Unit ID Number: 2-05-2-17
Emissions Control Equipment ID Number: 2-05-2/CE 17
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 2-05-2-17
Emission Unit Description: Propellant Loading
Raw Material/Fuel: Black Powder
Rated Capacity: 150 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 91-A-249-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 91-A-249-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 34

Stack Diameter (inches): 10

Exhaust Flow Rate (scfm): 1,050

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 91-A-249-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-10-26

Associated Equipment

Associated Emission Unit ID Numbers: 2-10-26

Emission Unit vented through this Emission Point: 2-10-26

Emission Unit Description: XOMAT Model B X-Ray Film Processor

Raw Material/Fuel: Fixer and Developer

Rated Capacity: 150 gal/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: VOC

Emission Limits: 11.0 tpy⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-117

(1) The annual limits for VOC is per any rolling 12-month period.

Operational Limits & Requirements

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

Process throughput:

1. The total amount of fixer and developer solution employed shall not exceed 39,285 gallons per any rolling 12-month period.
2. The VOC content of the fixer and developer solution employed shall not exceed 0.56 pound per gallon.

Reporting & Record keeping:

All records listed below 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.

1. The identification and the as-applied VOC content of the fixer and developer solution used in the film processor.
2. The total amount of fixer and developer solution used in the film processor (gallons).
3. The rolling, 12-month total of the amount of fixer and developer solution used in the film processor (gallons).

Authority for Requirement: Iowa DNR Construction Permit 02-A-117

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 15

Stack Diameter (inches): 18

Exhaust Flow Rate (scfm): 300

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 02-A-117

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-10-27

Associated Equipment

Associated Emission Unit ID Numbers: 2-10-27

Emission Unit vented through this Emission Point: 2-10-27

Emission Unit Description: Propellant Loading System

Raw Material/Fuel: Propellant

Rated Capacity: 750 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 01-A-636

⁽¹⁾ An exceedence of the indicator opacity of (5%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf, 6.75 TPY

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

Iowa DNR Construction Permit 01-A-636

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 38

Stack Diameter (inches): 15

Exhaust Flow Rate (scfm): 1,800

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-636

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-10-28

Associated Equipment

Associated Emission Unit ID Numbers: 2-10-28

Emission Unit vented through this Emission Point: 2-10-28

Emission Unit Description: Propellant Weighing and Handling Tables in Bay C (5)

Raw Material/Fuel: Explosive Propellant

Rated Capacity: 3000 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 01-A-674-S1

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limits: 1.88 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-674-S1

Pollutant: Particulate Matter

Emission Limits: 0.03 gr/dscf, 1.88 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-674-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 31.6

Stack Diameter (inches): 17

Exhaust Flow Rate (scfm): 7,300

Exhaust Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-674-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Operational Limits & Requirements

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

Process throughput:

1. The owner or operator shall use no more than 2,200 gallons of adhesive per rolling twelve-month period.
2. The adhesives used in this area shall have a VOC content less than or equal to 9.0 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall maintain a Material Safety Data Sheet (MSDS) which shows the VOC content of all adhesives used in this area.
2. The owner or operator shall maintain a record of the amount of adhesive used in this area each month. Each month, the owner or operator shall calculate a twelve-month rolling total of adhesives used in this area.

Authority for Requirement: Iowa DNR Construction Permit 01-A-674-S1

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: 2-10-29

Associated Equipment

Associated Emission Unit ID Numbers: 2-10-29

Emission Unit vented through this Emission Point: 2-10-29

Emission Unit Description: Propellant Weighing and Handling Tables in Bay C(2)

Raw Material/Fuel: Explosive Materials

Rated Capacity: 3000 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 01-A-675

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limits: 0.58 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-675

Pollutant: Particulate Matter

Emission Limits: 0.03 gr/dscf, 0.58 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-675

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 31

Stack Diameter (inches): 8

Exhaust Flow Rate (scfm): 2,240

Exhaust Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-675

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-10-30

Associated Equipment

Associated Emission Unit ID Numbers: 2-10-30

Emission Unit vented through this Emission Point: 2-10-30

Emission Unit Description: Propellant Weighing and Handling & adhesive application Station in Bay C

Raw Material/Fuel: Explosive Materials and adhesives

Rated Capacity: 1000 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 01-A-676-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limits: 0.75 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-676-S2

Pollutant: Particulate Matter

Emission Limits: 0.75 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-676-S2

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf when Adhesive Application is not in operation

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

Iowa DNR Construction Permit 01-A-676-S2

Pollutant: Particulate Matter

Emission Limits: 0.01 gr/dscf when Adhesive Application is in operation

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 01-A-676-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 30.25

Stack Diameter (inches): 17

Exhaust Flow Rate (scfm): 1,700

Exhaust Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-676-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Operational Limits & Requirements

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

Process throughput:

1. The Adhesive Application shall not use more than 2,200 gallons of adhesive per rolling twelve (12) month period.
2. The VOC content of the adhesives used in the Adhesive Application shall not exceed 9.0 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

1. The amount of adhesive used in the Adhesive Application for each month of operation.
2. The total amount of adhesives used in the Adhesive Application on a rolling twelve (12) month basis for each month of operation.
3. The Material Safety Data Sheet (MSDS) for each material used in the Adhesive Application.

Authority for Requirement: Iowa DNR Construction Permit 01-A-676-S2

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: 2-12-4

Associated Equipment

Associated Emission Unit ID Numbers: 2-12-4
Emissions Control Equipment ID Number: 2-12/CE 4
Emissions Control Equipment Description: Fabric Filter

Emission Unit vented through this Emission Point: 2-12-4
Emission Unit Description: Shell Loading System
Raw Material/Fuel: Explosives
Rated Capacity: 2083 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 03-A-571-S1

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 03-A-571-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 31.6

Stack Diameter (inches): 6

Exhaust Flow Rate (scfm): 480

Exhaust Temperature (°F): 90

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 03-A-571-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-13-1

Associated Equipment

Associated Emission Unit ID Numbers: 2-13-2

Emission Unit vented through this Emission Point: 2-13-2
Emission Unit Description: PCA System, Bay D(5 stations)
Raw Material/Fuel: Propellant
Rated Capacity: 17.76 lb/hr per station

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-1130

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-1130

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 36

Stack Diameter (inches): 18

Exhaust Flow Rate (scfm): 2,155

Exhaust Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-1130

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-13-2

Associated Equipment

Associated Emission Unit ID Numbers: 2-13-6

Emission Unit vented through this Emission Point: 2-13-6

Emission Unit Description: Bay D PCA Station (2 Weigh Tables)

Raw Material/Fuel: Propellant

Rated Capacity: 17.76 lbs/hr for each weigh station

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-672

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-672

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 36

Stack Diameter (inches): 14

Exhaust Flow Rate (scfm): 1,400

Exhaust Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-672

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-13-3

Associated Equipment

Associated Emission Unit ID Numbers: 2-13-7

Emission Unit vented through this Emission Point: 2-13-7

Emission Unit Description: Portable Weigh Table (Bay D PCA Station)

Raw Material/Fuel: Propellant

Rated Capacity: 17.76 lbs/hour per unit

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-673

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-673

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 15.5

Stack Diameter (inches): 8

Exhaust Flow Rate (scfm): 260

Exhaust Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-673

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 2-13-17

Associated Equipment

Associated Emission Unit ID Numbers: 2-13-17

Emission Unit vented through this Emission Point: 2-13-17

Emission Unit Description: Propellant screening and weigh – Bay G

Raw Material/Fuel: Explosive materials

Rated Capacity: 1500 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limits: 40%⁽¹⁾

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

Iowa DNR Construction Permit 02-A-119

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 02-A-119

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

			Emission Point Characteristics				
Emission Point Number	Emission Unit Number	Construction Permit #	Height (feet)	Diameter (inches)	Exhaust Flowrate (acfm)	Exhaust Temp. (F)	Discharge Style
2-13-17	2-13-17	02-A-119	20	24	2,200	70	Horizontal

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Authority for Requirement: Iowa DNR Construction 02-A-119

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: 2-13-18

Associated Equipment

Associated Emission Unit ID Numbers: 2-13-18, 2-13-19 & 2-13-20

Emissions Control Equipment ID Number: 2-13-18 and 2-13-19

Emissions Control Equipment Description: Wet Scrubber and Fabric Filter Baghouse

Emission Unit vented through this Emission Point: 2-13-18

Emission Unit Description: Demil Process – Primer Machine (1 station)

Raw Material/Fuel: Primers

Rated Capacity: 150 rounds/day equivalent to 150 lb/day

Emission Unit vented through this Emission Point: 2-13-19

Emission Unit Description: Demil Process – Tracer Machine (1 station)

Raw Material/Fuel: tracers

Rated Capacity: 150 rounds/day equivalent to 150 lb/day

Emission Unit vented through this Emission Point: 2-13-20

Emission Unit Description: Demil Process – Plasma Cutting (1 station)

Raw Material/Fuel: Steel

Rated Capacity: 1 inch/min

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 11-A-056

⁽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

Emission Limits: 0.05 gr/dscf

Authority for Requirement: 567 IAC 23.4(6)

Iowa DNR Construction Permit 11-A-056

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 (feet): 36

Stack Diameter (inches): 8

Exhaust Flow Rate (scfm): 1,200

Exhaust Temperature (°F): 70

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 11-A-056

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Scrubber & Baghouse Agency O & M Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Weekly

Baghouse

- The facility shall check the visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If the corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>40%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Scrubber

- Check and document the pressure drop across the scrubber. If the pressure drop falls out of the normal operating range (5-15 inches W. G.) corrective action will be taken within 8 hours to return the pressure drop to normal
- Conduct observation of the stack and areas adjacent to the stack to determine if droplet re-entrainment is occurring from the improperly operating mist eliminator. The signs of droplet reentrainment may include fallout of solid-containing droplets, discoloration of the stack and adjacent surfaces, or a mud lip around the stack. If droplet reentrainment is occurring, the appropriate measures for remediation will be implemented within 8 hours.

Quarterly

- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within 8 hours.

Annually

- Conduct an internal inspection of the scrubber and to search for signs of erosion, corrosion, or solid deposits in ductwork, spray nozzles, and adjustable throat dampers. If any of these conditions exist, the appropriate measures for remediation will be implemented within 8 hours.
- Conduct a thorough inspection of the interior of the baghouse and the bags for leaks and wear. If leaks or abnormal conditions are detected the appropriate measure for remediation will be initiated within 8 hours. Bag replacement should be documented by identifying the date and the number of bags replaced.

Record keeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for 5 years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturer's specifications.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 2-99-1

Associated Equipment

Associated Emission Unit ID Numbers: 2-99-1
Emissions Control Equipment ID Number: CE 2-99-1
Emissions Control Equipment Description: Bag Filter

Emission Unit vented through this Emission Point: 2-99-1
Emission Unit Description: Vacuum House
Raw Material/Fuel: Explosive/Inert Powder
Rated Capacity: 20 lb/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: 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

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

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: 3-04-8

Associated Equipment

Associated Emission Unit ID Numbers: 3-04-2

Emission Unit vented through this Emission Point: 3-04-2

Emission Unit Description: Adhesive Application

Raw Material/Fuel: Solvent, Adhesive

Rated Capacity: 4,333 gal/yr ⁽¹⁾

⁽¹⁾ Limited by construction permit 96-A-831

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: VOC

Emission Limit: 19.5 TPY

Authority for Requirement: Iowa DNR Construction Permit 96-A-831

Operational Limits & Requirements

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

Process throughput:

1. A maximum of 4,333 gallons of material is permitted to be used at this application station, per 12 months (rolled monthly).
2. The maximum VOC content of any material used must be 9 lbs of VOC per gallon of material.

Reporting & Record keeping:

All records listed below 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.

1. Monthly records must be kept which show the maximum VOC content and the quantity of each material used.
2. If the quantity of material used exceeds 4,333 gallons per rolling 12-month period, then the permittee must demonstrate that they are in compliance with the VOC emission rate. This must be done by calculating the VOC emission rate using the following, for each material:
 - a. Quantity used
 - b. VOC content
 - c. MSDS sheets or the equivalent
 - d. The arithmetic and methodology used in calculating the emission rate must be shown.
 - e. All records must be satisfactory for demonstrating compliance with the VOC emission limit and process throughput limits.

Authority for Requirement: Iowa DNR Construction Permit 96-A-831

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 22

Stack Diameter (inches): 9

Exhaust Flow Rate (acfm): 2,500

Exhaust Temperature (°F): 70

Discharge Style: Vertical, obstructed

Stack Location: Stack is located near the center of Building 3-04.

Authority for Requirement: Iowa DNR Construction Permit 96-A-831

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-10-2

Associated Equipment

Associated Emission Unit ID Number: 3-10-2
Emissions Control Equipment ID Number: 3-10/CE2
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 3-10-2
Emission Unit Description: Surface Coating Operations
Raw Material/Fuel: Paint, Latex
Rated Capacity: 10 oz/min

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 87-A-071-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 87-A-071-S2

Pollutant: VOC

Emission Limit: 9.4 TPY⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 87-A-071-S2

⁽²⁾ The limit is 9.4 tons VOC per any rolling 12-month period.

Operational Limits & Requirements

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

Process Throughput:

1. The amount of coatings used in the spray booth shall not exceed 7 gallons per day.
2. The amount of coatings used in the spray booth shall not exceed 2500 gallons per any rolling 12-month period.
3. The as-applied VOC content of any coating used in the spray booth shall not exceed 7.5 pounds per gallon.
4. The booth's filters must be maintained and replaced according to manufacturer's recommendations.
5. Only one spray gun may be operated at any one time in the spray booth.

Reporting & Record keeping:

All records listed below 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.

The permittee shall maintain the following daily records:

1. The permittee shall maintain a record on the amount of coatings used each day in the paint spray booth.

The permittee shall maintain the following monthly records:

2. The identification and the as-applied VOC content of each coating used in the paint spray booth.
3. The amount of coating used in the paint spray booth (gallons).
4. The rolling, 12-month total of the amount of coatings used in the paint spray booth (gallons).
5. The permittee shall record the date when the booth's dry filters are replaced.

Authority for Requirement: Iowa DNR Construction Permit 87-A-071-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 21

Stack Diameter (inches): 18

Exhaust Flow Rate (scfm): 2,800

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 87-A-071-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and 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: 3-10-9

Associated Equipment

Associated Emission Unit ID Number: 3-10-9
Emissions Control Equipment ID Number: 3-10/CE9
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 3-10-9
Emission Unit Description: Surface Coating Operations
Raw Material/Fuel: Paint, Latex
Rated Capacity: 10 oz./min

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 83-A-134-S1

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 83-A-134-S1

Pollutant: VOC

Emission Limit: 9.4 TPY⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 83-A-134-S1

⁽²⁾ The limit is 9.4 tons VOC per any rolling 12-month period.

Operational Limits & Requirements

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

Process throughput:

1. The amount of coatings used in the spray booth shall not exceed 2500 gallons per any rolling 12-month period.
2. The as-applied VOC content of any coating used in the spray booth shall not exceed 7.5 pounds per gallon.
3. The booth's filters must be maintained and replaced according to manufacturer's recommendations.
4. Only one spray gun may be operated at any one time in the spray booth.

Reporting & Record keeping:

All records listed below 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.

The permittee shall maintain the following monthly records:

1. The identification and the as-applied VOC content of each coating used in the paint spray booth.
2. The amount of coating used in the paint spray booth (gallons).
3. The rolling, 12-month total of the amount of coatings used in the paint spray booth (gallons).
4. The permittee shall record the date when the booth's dry filters are replaced.

Authority for Requirement: Iowa DNR Construction Permit 83-A-134-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 33

Stack Diameter (inches): 24

Exhaust Flow Rate (scfm): 5,600

Exhaust Temperature (°F): 70

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 83-A-134-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and 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: 3-12-6

Associated Equipment

Associated Emission Unit ID Number: 3-12-6
Emissions Control Equipment ID Number: CE 3-12-6
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 3-12-6
Emission Unit Description: Paint Booth
Raw Material/Fuel: Paint
Rated Capacity: 10 oz./min

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 12-A-001

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 12-A-001

Pollutant: VOC

Emission Limit: 9.4 TPY⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 12-A-001

⁽²⁾ The limit is 9.4 tons VOC per any rolling 12-month period.

Operational Limits & Requirements

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

Process throughput:

1. VOC containing material used at this booth shall be limited to 2,500 gallons per twelve month rolling period.
2. Material used at this booth shall have a maximum VOC content of 7.5 lbs VOC/gal.

Control Equipment Parameters:

1. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall keep records of control equipment inspections and maintenance.
2. The owner or operator shall record the amount of VOC containing materials used at the unit, and update the twelve month rolling total on a monthly basis.
3. The owner or operator shall keep Material Safety Data Sheets (MSDS) of all the materials used at this unit, which show the VOC content of the materials in lbs/gal.

Authority for Requirement: Iowa DNR Construction Permit 12-A-001

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 32

Stack Diameter (inches): 24

Exhaust Flow Rate (scfm): 2,800

Exhaust Temperature (°F): 70

Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permit 12-A-001

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and 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 Numbers: See Table EXPL I

Table EXPL I

Emission Point Number	Emission Unit Number	Emission Unit Description	Control Equipment Number	Control Equipment Description	Raw Material	Rated Capacity
3-05-2-1	3-05-2-1	West Kettle Hopper	3-05-2/CE 1	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-2	3-05-2-2	West Melt Kettle	3-05-2/CE 2	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-3	3-05-2-3	Center Melt Kettle	3-05-2/CE 3	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-4	3-05-2-4	Center Kettle Hopper	3-05-2/CE 4	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-5	3-05-2-5	East Kettle Hopper	3-05-2/CE 5	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-6	3-05-2-6	East Melt Kettle	3-05-2/CE 6	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-7	3-05-2-7	West Grid Hopper	3-05-2/CE 7	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-8	3-05-2-8	West Grid Melt	3-05-2/CE 8	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-9	3-05-2-9	Center Grid Melt	3-05-2/CE 9	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-10	3-05-2-10	Center Grid Hopper	3-05-2/CE 10	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-11	3-05-2-11	East Grid Hopper	3-05-2/CE 11	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-12	3-05-2-12	East Grid Melt	3-05-2/CE 12	Scrubber	Explosive Powder	1400 lb/hr
3-05-2-18	3-05-2-18	West Probe Machine-Bay C	None	N/A	Explosive Powder	2800 lb/hr
3-05-2-19	3-05-2-19	East Probe Machine-Bay C	None	N/A	Explosive Powder	2800 lb/hr
3-05-2-23	3-05-2-23	West Bay G Pour Machine-Vent A	3-05-2/CE 23	Scrubber	Explosive Powder	1400 lb/hr

Applicable Requirements

(The following requirements apply to the emissions equipment described in Table EXPL I)

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

The emissions from the emission points described in Table EXPL I shall not exceed the following specified levels.

Pollutant: Opacity

Emission Limit: 40%

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

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/scf

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

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 ☒

The following requirements apply to each piece of equipment that is indicated in Table EXPL 1 as having a scrubber for control equipment.

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: 3-05-1-26

Associated Equipment

Associated Emission Unit ID Number: 3-05-1-26
Emissions Control Equipment ID Number: 3-05-1/CE26
Emissions Control Equipment Description: Dry filter

Emission Unit vented through this Emission Point: 3-05-1-26
Emission Unit Description: Add/Pour Station (melt kettle)
Raw Material/Fuel: Explosive materials
Rated Capacity: 1500 lbs/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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-1255

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-1255

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 36

Stack Diameter (inches): 8

Stack Exhaust Flow Rate (scfm): 200

Stack Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-1255

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-05-1-27

Associated Equipment

Associated Emission Unit ID Number: 3-05-1-27
Emissions Control Equipment ID Number: 3-05-1/CE27
Emissions Control Equipment Description: Dry filter

Emission Unit vented through this Emission Point: 3-05-1-27
Emission Unit Description: Melt Kettle/Add Pour
Raw Material/Fuel: Explosive materials
Rated Capacity: 1500 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 02-A-120

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 02-A-120

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 36

Stack Diameter (inches): 8

Stack Exhaust Flow Rate (scfm): 200

Stack Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-120

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-05-1-29

Associated Equipment

Associated Emission Unit ID Number: 3-05-1-29
Emissions Control Equipment ID Number: 3-05-1/CE29
Emissions Control Equipment Description: Wet scrubber

Emission Unit vented through this Emission Point: 3-05-1-29
Emission Unit Description: Explosive Processing
Raw Material/Fuel: Explosive powder
Rated Capacity: 1500 lbs/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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-1257

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-1257

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 35

Stack Diameter (inches): 9

Stack Exhaust Flow Rate (scfm): 1200

Stack Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-1257

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-05-1-1

Associated Equipment

Associated Emission Unit ID Number: 3-05-1-1
Emissions Control Equipment ID Number: 3-05-1/CE1
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3-05-1-1
Emission Unit Description: Two TNT Sweatout Tanks
Raw Material/Fuel: Explosive Powder
Rated Capacity: 500 lbs/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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 79-A-199-S4

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

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 79-A-199-S4

Operational Limits & Requirements

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

Process throughput:

1. The total maximum rate of TNT recovery from the two TNT sweat-out tanks shall not exceed 500 pounds per hour.

Control equipment parameters:

1. The permit holder, owner and operator of the facility shall operate the wet scrubber, mist eliminator and exhaust fan within the operating limits specified by the manufacturer of the control equipment.

Reporting & Record keeping:

All records listed below 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.

1. The permittee shall keep the following daily records:
 - a. the amount of TNT recovered in the two sweat-out tanks (pounds);
 - b. the number of hours that the two sweat-out tanks operated; and
 - c. the average hourly TNT recovery rate, the amount of TNT recovered in the two sweat-out tanks divided by the number of hours that the two sweat-out tanks operated (a/b).
2. The permit holder, owner and operator of the facility shall also keep written records on the maintenance and repairs performed on the wet scrubber, the mist eliminator and the exhaust fan.

Authority for Requirement: Iowa DNR Construction Permit 79-A-199-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 23

Stack Diameter (inches): 13

Stack Exhaust Flow Rate (scfm): 1,000

Stack Temperature (°F): 125

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 79-A-199-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-05-1-5

Associated Equipment

Associated Emission Unit ID Number: 3-05-1-5
Emissions Control Equipment ID Number: 3-05-1/CE2
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3-05-1-5
Emission Unit Description: Explosive processing – Wash down facility
Raw Material/Fuel: Explosive Powder
Rated Capacity: 500 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 79-A-200-S3

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

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf, 1.08 lb/hr

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

Iowa DNR Construction Permit 79-A-200-S3

Operational Limits & Requirements

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

None at this time.

Reporting & Record keeping:

All records listed below 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.

This permit does not require operating condition monitoring for this emission unit at this time.

Authority for Requirement: Iowa DNR Construction Permit 79-A-200-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 23

Stack Diameter (inches): 21

Stack Exhaust Flow Rate (scfm): 4,200

Stack Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 79-A-200-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-05-1-16

Associated Equipment

Associated Emission Unit ID Number: 3-05-1-16

Emissions Control Equipment ID Number: 3-05-1/CE 16

Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3-05-1-16

Emission Unit Description: Probe Machine

Raw Material/Fuel: Explosive Powder

Rated Capacity: 1800 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-500

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-500

Operational Limits & Requirements

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

Control equipment parameters:

1. The wet scrubber shall be in operation at all times that this emissions unit is operated.

Authority for Requirement: Iowa DNR Construction Permit 01-A-500

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 34

Stack Diameter (inches): 10

Stack Exhaust Flow Rate (scfm): 600

Stack Temperature (°F): 120

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-500

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-05-1-32

Associated Equipment

Associated Emission Unit ID Number: 3-05-1-32
Emissions Control Equipment ID Number: 3-05-1/CE32
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3-05-1-32
Emission Unit Description: Screening table
Raw Material/Fuel: Explosive Materials
Rated Capacity: 1500 lbs/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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-1256

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-1256

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 23

Stack Diameter (inches): 9

Stack Exhaust Flow Rate (scfm): 1,200

Stack Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-1256

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-05-2-13

Associated Equipment

Associated Emission Unit ID Number: 3-05-2-13 and 3-05-2-14

Emissions Control Equipment ID Number: 3-05-2/CE13

Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3-05-2-13 and 3-05-2-14

Emission Unit Description: Explosive Loading Operation

Raw Material/Fuel: Explosive or Inert Materials

Rated Capacity: 208 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 09-A-680-S1

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 09-A-680-S1

Operational Limits & Requirements

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

Control equipment parameters:

1. The control equipment shall be maintained according to the manufacturer's specifications.

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall maintain a record of all inspections of the control equipment. The owner or operator shall document the results of the inspections and note any repairs that were the result of the inspections.

Authority for Requirement: Iowa DNR Construction Permit 09-A-680-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 34.75

Stack Diameter (inches): 14

Stack Exhaust Flow Rate (scfm): 1700

Stack Temperature (°F): 70

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 09-A-680-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-10-10

Associated Equipment

Associated Emission Unit ID Number: 3-10-10

Emission Unit vented through this Emission Point: 3-10-10

Emission Unit Description: X-ray Film Processing

Raw Material/Fuel: Developer/Fixer Ingredients

Rated Capacity: 150 gal/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: VOC

Emission Limits: 14.7 tons/12-month rolling total

Authority for Requirement: Iowa DNR Construction Permit 05-A-132

Operational Limits & Requirements

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

Process throughput:

1. The total amount of fixer and developer solution employed shall not exceed 52,560 gallons per any rolling 12-month period.
2. The VOC content of the fixer and developer solution employed shall not exceed 0.56 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

The permittee shall maintain the following monthly records:

1. The identification and the as-applied VOC content of the fixer and developer solution used in the film processor.
2. The total amount of fixer and developer solution used in the film processor (gallons).
3. The rolling, 12-month total of the amount of fixer and developer solution used in the film processor (gallons).

Authority for Requirement: Iowa DNR Construction Permit 05-A-132

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): Vents internally

Stack Diameter (inches): Vents internally

Stack Exhaust Flow Rate (scfm): Vents internally

Stack Temperature (°F): Vents internally

Discharge Style: Vents internally

Authority for Requirement: Iowa DNR Construction Permit 05-A-132

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-16-1

Associated Equipment

Associated Emission Unit ID Number: 3-16-1
Emissions Control Equipment ID Number: 3-16/CE1
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3-16-1
Emission Unit Description: High Shear Mixer
Raw Material/Fuel: Explosive materials
Rated Capacity: 4000 pounds of explosive mix per 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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 06-A-456-S1

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

Pollutant: PM-10

Emission Limit: 1.0 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 06-A-456-S1

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 06-A-456-S1

Pollutant: VOC

Emission Limit: 7.12 tpy

Authority for Requirement: Iowa DNR Construction Permit 06-A-456-S1

Operational Limits & Requirements

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

Control equipment parameters:

1. The owner or operator shall maintain the Schneible Wet Scrubber (3-16 CE1) according to manufacturer specifications and maintenance schedule.

Operating limit:

1. The owner or operator shall use no more than 2,190 gallons of VOC containing materials per rolling twelve-month period.
2. The VOC containing materials used in this area shall have a VOC content less than or equal to 6.5 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Schneible Wet Scrubber (3-16 CE 1).
2. The owner or operator shall maintain a Material Safety Data Sheet (MSDS) which shows the VOC content of all materials used in this area.
3. The owner or operator shall maintain a record of the amount of VOC containing material used in this area each month. Each month, the owner or operator shall calculate a twelve-month rolling total of VOC containing material used in this area.

Authority for Requirement: Iowa DNR Construction Permit 06-A-456-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 30.42

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 2,725

Stack Temperature (°F): 125

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 06-A-456-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-50-12

Associated Equipment

Associated Emission Unit ID Number: 3-50-12
Emissions Control Equipment ID Number: 3-50/CE1
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3-50-12
Emission Unit Description: TNT Screening
Raw Material/Fuel: TNT Explosive Powder
Rated Capacity: 3,500 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 93-A-375-S1

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

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 93-A-375-S1

Operational Limits & Requirements

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

Process throughput:

The maximum amount of explosives screened shall not exceed 3500 pounds per hour.

Control equipment parameters:

1. The scrubber shall be operated and maintained in accordance with the manufacturer's recommendations.

Reporting & Record keeping:

All records listed below 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.

1. The permittee shall maintain records on the maintenance performed on the scrubber.

Authority for Requirement: Iowa DNR Construction Permit 93-A-375-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 25

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 2,200

Stack Temperature (°F): Ambient

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 93-A-375-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3-50-13

Associated Equipment

Associated Emission Unit ID Number: 3-50-13
Emissions Control Equipment ID Number: 3-50/CE13
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3-50-13
Emission Unit Description: Explosive Screening Process
Raw Material/Fuel: Explosive Materials
Rated Capacity: 1,500 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 06-A-843-S1

⁽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

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 06-A-843-S1

Operational Limits & Requirements

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

Process throughput:

1. The maximum capacity of the screener shall not exceed 1,500 lb/hr.

Control equipment parameters:

1. The owner or operator shall maintain the wet scrubber (3-50/CE13) according to manufacturer specifications and maintenance schedule.

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the wet scrubber (3-50/CE13).

Authority for Requirement: Iowa DNR Construction Permit 06-A-843-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 25.58

Stack Diameter (inches): 11

Stack Exhaust Flow Rate (scfm): 2,100

Stack Temperature (°F): 125

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 06-A-843-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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: 3-99-3

Associated Equipment

Associated Emission Unit ID Numbers: 3-99-3
Emissions Control Equipment ID Number: CE 3-99-3
Emissions Control Equipment Description: Bag Filter

Emission Unit vented through this Emission Point: 3-99-3
Emission Unit Description: Vacuum House
Raw Material/Fuel: Explosive/Inert Powder
Rated Capacity: 25 lb/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: 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

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

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: 3-99-4

Associated Equipment

Associated Emission Unit ID Numbers: 3-99-4
Emissions Control Equipment ID Number: CE 3-99-4
Emissions Control Equipment Description: Bag Filter

Emission Unit vented through this Emission Point: 3-99-4
Emission Unit Description: Vacuum House
Raw Material/Fuel: Explosive/Inert Powder
Rated Capacity: 25 lb/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: 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

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

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: 3A-05-2-4

Associated Equipment

Associated Emission Unit ID Number: 3A-05-2-4
Emissions Control Equipment ID Number: 3A-05-2/CE1
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-05-2-4
Emission Unit Description: Wash Down Operation
Raw Material/Fuel: Wash liquid and steam
Rated Capacity: 1152 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit: 20%
Authority for Requirement: 567 IAC 22.3(2)"d"
Iowa DNR Construction Permit 96-A-1276

Pollutant: Particulate Matter
Emission Limit: 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
Iowa DNR Construction Permit 96-A-1276

Pollutant: Sulfur Dioxide
Emission Limit: 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"
Iowa DNR Construction Permit 96-A-1276

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 47
Stack Diameter (inches): 15
Stack Exhaust Flow Rate (cfm): 3,500
Stack Temperature (°F): 70
Discharge Style: Vertical, Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 96-A-1276

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Visible Emissions Monitoring:

The facility shall check the visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>20 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

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: 3A-12-4

Associated Equipment

Associated Emission Unit ID Number: 3A-12-4

Emission Unit vented through this Emission Point: 3A-12-4

Emission Unit Description: Cleaning Station

Raw Material/Fuel: Isopropyl alcohol

Rated Capacity: 1500 gal./year⁽¹⁾

⁽¹⁾ Limited by IDNR Construction Permit 06-A-845

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: VOC

Emission Limit: 4.88 tons per 12-month rolling period

Authority for Requirement: Iowa DNR Construction Permit 06-A-845

Operational Limits & Requirements

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

Process throughput:

1. The owner or operator shall use no more than 1,500 gallons of VOC containing materials per rolling twelve-month period.
2. The VOC containing materials used in this area shall have a VOC content less than or equal to 6.5 lbs/gallon.

Reporting & Record keeping:

All records listed below 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 and be maintained monthly:

1. The owner or operator shall maintain a Material Safety Data Sheet (MSDS) which shows the VOC content of all materials used in this area.
2. The owner or operator shall maintain a record of the amount of VOC containing material used in this area each month. Each month, the owner or operator shall calculate a twelve-month rolling total of VOC containing material used in this area.

Authority for Requirement: Iowa DNR Construction Permit 06-A-845

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 36

Stack Opening (inches, diameter): 10

Exhaust Flow Rate (scfm): 1250

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 06-A-845

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-12-7

Associated Equipment

Associated Emission Unit ID Number: 3A-12-7

Emission Unit vented through this Emission Point: 3A-12-7

Emission Unit Description: Cleaning Station

Raw Material/Fuel: Cleaning materials

Rated Capacity: 1500 gal./year⁽¹⁾

⁽¹⁾ Limited by IDNR Construction Permit 06-A-846

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: VOC

Emission Limit: 4.88 tons per 12-month rolling period

Authority for Requirement: Iowa DNR Construction Permit 06-A-846

Operational Limits & Requirements

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

Process throughput:

1. The owner or operator shall use no more than 1,500 gallons of VOC containing materials per rolling twelve-month period.
2. The VOC containing materials used in this area shall have a VOC content less than or equal to 6.5 lbs/gallon.

Reporting & Record keeping:

All records listed below 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 and be maintained monthly:

1. The owner or operator shall maintain a Material Safety Data Sheet (MSDS) which shows the VOC content of all materials used in this area.
2. The owner or operator shall maintain a record of the amount of VOC containing material used in this area each month. Each month, the owner or operator shall calculate a twelve-month rolling total of VOC containing material used in this area.

Authority for Requirement: Iowa DNR Construction Permit 06-A-846

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 38

Stack Opening (inches, diameter): 11

Exhaust Flow Rate (scfm): 3000

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 06-A-846

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-12-5

Associated Equipment

Associated Emission Unit ID Number: 3A-12-5
Emissions Control Equipment ID Number: 3A-12/CE5
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 3A-12-5
Emission Unit Description: Spray Paint Booth
Raw Material/Fuel: Paint
Rated Capacity: 1500 gal/year⁽¹⁾
⁽¹⁾ Limited by IDNR Construction Permit 03-A-543

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: 40%⁽¹⁾
Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR Construction Permit 03-A-543

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter
Emission Limit: 0.01 gr/scf
Authority for Requirement: 567 IAC 23.4(13)
Iowa DNR Construction Permit 03-A-543

Pollutant: VOC
Emission Limit: 4.8 tons per 12-month rolling period
Authority for Requirement: Iowa DNR Construction Permit 03-A-543

Operational Limits & Requirements

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

Process throughput:

1. Total material usage in this spray booth shall not exceed 1,500 gallons per twelve month rolling period.
2. The maximum VOC content of material used in this spray booth shall not exceed 6.5 lbs VOC/gal as applied.

Reporting & Record keeping:

All records listed below 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 and be maintained monthly:

1. The identification and the VOC content of any material applied in the spray booth.
2. The total amount of material used in the spray booth (gallons).
3. The rolling 12-month total of the amount of material used in the spray booth (gallons).

Authority for Requirement: Iowa DNR Construction Permit 03-A-543

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 40

Stack Opening (inches, diameter): 18

Exhaust Flow Rate (scfm): 2,500

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 03-A-543

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and 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: 3A-12-6

Associated Equipment

Associated Emission Unit ID Number: 3A-12-6
Emissions Control Equipment ID Number: 3A-12/CE6
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 3A-12-6
Emission Unit Description: Surface Coating Operations
Raw Material/Fuel: Paint
Rated Capacity: 10 oz/min

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 90-A-231-S4

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 90-A-231-S4

Pollutant: VOC

Emission Limit: 4.8 tons per 12-month rolling period

Authority for Requirement: Iowa DNR Construction Permit 90-A-231-S4

Operational Limits & Requirements

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

Process throughput:

1. Total material usage in this spray booth shall not exceed 1,500 gallons per twelve month rolling period.
2. The maximum VOC content of material used in this spray booth shall not exceed 6.5 lbs VOC/gal as applied.

Reporting & Record keeping:

All records listed below 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 and be maintained monthly:

1. The identification and the VOC content of any material applied in the spray booth.
2. The total amount of material used in the spray booth (gallons).
3. The rolling 12-month total of the amount of material used in the spray booth (gallons).

Authority for Requirement: Iowa DNR Construction Permit 90-A-231-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 40

Stack Opening (inches, diameter): 18

Exhaust Flow Rate (scfm): 2,500

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 90-A-231-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and 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: 3A-05-1-9

Associated Equipment

Associated Emission Unit ID Number: 3A-05-1-4 through 11 and 3A-05-1-15

Emissions Control Equipment ID Number: 3A-05-1/CE9

Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-05-1-4 through 11 and 3A-05-1-15

Emission Unit Description: Sump Out Explosive Material (8 sumps) and Funnel Washer

Raw Material/Fuel: TNT

Rated Capacity: Sump Operations 400 lb/hr for each sump and Funnel Washer 200 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 95-A-186-S6

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 95-A-186-S6

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 (feet): 27

Stack Diameter (inches): 14

Stack Exhaust Flow Rate (scfm): 2,100

Stack Temperature (°F): Ambient

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 95-A-186-S6

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-05-1-12

Associated Equipment

Associated Emission Unit ID Number: 3A-05-1-12
Emissions Control Equipment ID Number: 3A-05-1/CE12
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-05-1-12
Emission Unit Description: (2) TNT Screening Tables
Raw Material/Fuel: Explosive Powder
Rated Capacity: Each rated at 1.75 ton/hr. Only one can operate at a time

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 86-A-083-S3

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.9 lb/hr, 0.1 gr/dscf

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

Iowa DNR Construction Permit 86-A-083-S3

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 (feet): 44

Stack Diameter (inches): 10

Exhaust Flow Rate (scfm): 3,500

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 86-A-083-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-05-1-13

Associated Equipment

Associated Emission Unit ID Number: 3A-05-1-13
Emissions Control Equipment ID Number: 3A-05-1/CE13
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-05-1-13
Emission Unit Description: North TNT Grid Melt
Raw Material/Fuel: Explosive Powder
Rated Capacity: 1.75 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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-1086-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.12 lb/hr, 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-1086-S2

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 (feet): 44

Stack Diameter (inches): 10

Exhaust Flow Rate (scfm): 500

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 01-A-1086-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-05-1-15

Associated Equipment

Associated Emission Unit ID Number: 3A-05-1-3
Emissions Control Equipment ID Number: 3A-05-1/CE3
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-05-1-3
Emission Unit Description: North TNT Weigh Feeder and Melt Kettles
Raw Material/Fuel: Explosive Powder
Rated Capacity: Both rated at 1.75 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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 88-A-007-S4

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.28 lb/hr, 0.1 gr/dscf

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

Iowa DNR Construction Permit 88-A-007-S4

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 (feet): 13.3

Stack Diameter (inches): 10

Exhaust Flow Rate (scfm): 1100

Exhaust Temperature (°F): 70

Discharge Style: Vertical obstructed

Authority for Requirement: Iowa DNR Construction Permit 88-A-007-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-05-1-17

Associated Equipment

Associated Emission Unit ID Number: 3A-05-1-17
Emissions Control Equipment ID Number: 3A-05-1/CE17
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-05-1-17
Emission Unit Description: South TNT Grid Melt
Raw Material/Fuel: Explosive Powder
Rated Capacity: 1.75 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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-476-S3

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.12 lb/hr, 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-476-S3

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 (feet): 44

Stack Diameter (inches): 16

Exhaust Flow Rate (scfm): 500

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 01-A-476-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Scrubber Agency O & M Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Weekly

- The facility shall check the visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If the corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>40%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If

weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

- Check and document the pressure drop across the scrubber. If the pressure drop falls out of the normal operating range (5-15 inches W. G.) corrective action will be taken within 8 hours to return the pressure drop to normal
- Conduct observation of the stack and areas adjacent to the stack to determine if droplet re-entrainment is occurring from the improperly operating mist eliminator. The signs of droplet reentrainment may include fallout of solid-containing droplets, new discoloration of the stack and adjacent surfaces, or a mud lip around the stack. If droplet reentrainment is occurring, the appropriate measures for remediation will be implemented within 8 hours.

Quarterly

- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within 8 hours.

Annually

- Conduct an internal inspection of the scrubber to search for signs of erosion, corrosion, or solid deposits in ductwork, spray nozzles, and adjustable throat dampers. If any of these conditions exist, the appropriate measures for remediation will be implemented within 8 hours.

Recordkeeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for 5 years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturer's specifications.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 3A-05-1-19

Associated Equipment

Associated Emission Unit ID Number: 3A-05-1-19
Emissions Control Equipment ID Number: 3A-05-1/CE19
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-05-1-19
Emission Unit Description: South TNT Weigh Feeder and Melt Kettles
Raw Material/Fuel: Explosive Powder
Rated Capacity: Each rated at 1.75 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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-1087-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.28 lb/hr, 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-1087-S2

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 (feet): 13.3

Stack Diameter (inches): 10

Exhaust Flow Rate (scfm): 1100

Exhaust Temperature (°F): 70

Discharge Style: Vertical obstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-1087-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Scrubber Agency O & M Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Weekly

- The facility shall check the visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If the corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>40%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
- Check and document the pressure drop across the scrubber. If the pressure drop falls out of the normal operating range (5-15 inches W. G.) corrective action will be taken within 8 hours to return the pressure drop to normal
- Conduct observation of the stack and areas adjacent to the stack to determine if droplet re-entrainment is occurring from the improperly operating mist eliminator. The signs of droplet reentrainment may include fallout of solid-containing droplets, new discoloration of the stack and adjacent surfaces, or a mud lip around the stack. If droplet reentrainment is occurring, the appropriate measures for remediation will be implemented within 8 hours.

Quarterly

- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within 8 hours.

Annually

- Conduct an internal inspection of the scrubber to search for signs of erosion, corrosion, or solid deposits in ductwork, spray nozzles, and adjustable throat dampers. If any of these conditions exist, the appropriate measures for remediation will be implemented within 8 hours.

Recordkeeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for 5 years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturer's specifications.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 3A-05-1-20

Associated Equipment

Associated Emission Unit ID Number: 3A-05-1-20
Emissions Control Equipment ID Number: 3A-05-1/CE20
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-05-1-20
Emission Unit Description: Explosive Pouring Operation
Raw Material/Fuel: Explosive materials
Rated Capacity: 3,500 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 02-A-012-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.72 lb/hr, 0.1 gr/dscf

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

Iowa DNR Construction Permit 02-A-012-S2

Pollutant: PM-10

Emission Limits: 0.72 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-012-S2

Operational Limits & Requirements

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

Control equipment parameters:

1. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 02-A-012-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 30

Stack Diameter (inches): 14

Exhaust Flow Rate (scfm): 2,800

Exhaust Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-012-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Scrubber Agency O & M Plan

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to

demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Weekly

- The facility shall check the visible emissions weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Visible emissions shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If the corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>40%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
- Check and document the pressure drop across the scrubber. If the pressure drop falls out of the normal operating range (5-15 inches W. G.) corrective action will be taken within 8 hours to return the pressure drop to normal
- Conduct observation of the stack and areas adjacent to the stack to determine if droplet re-entrainment is occurring from the improperly operating mist eliminator. The signs of droplet reentrainment may include fallout of solid-containing droplets, new discoloration of the stack and adjacent surfaces, or a mud lip around the stack. If droplet reentrainment is occurring, the appropriate measures for remediation will be implemented within 8 hours.

Quarterly

- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be implemented within 8 hours.

Annually

- Conduct an internal inspection of the scrubber to search for signs of erosion, corrosion, or solid deposits in ductwork, spray nozzles, and adjustable throat dampers. If any of these conditions exist, the appropriate measures for remediation will be implemented within 8 hours.

Recordkeeping

- Maintain a record of all inspections and any action resulting from the inspection.
- Maintenance and inspection records will be kept for 5 years and made available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturer's specifications.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 3A-05-1-21

Associated Equipment

Associated Emission Unit ID Number: 3A-05-1-21

Emissions Control Equipment ID Number: 3A-05-1/CE21

Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-05-1-21

Emission Unit Description: Cooling Ovens (36) & Probe machines (2)

Raw Material/Fuel: Explosive materials

Rated Capacity: 3,500 lb/hr total for the ovens and 3,500 lb/hr total for the probe machines

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 Limits: 40%⁽¹⁾

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

Iowa DNR Construction Permit 02-A-122-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 02-A-122-S2

Pollutant: Particulate Matter

Emission Limits: 2.13 lb/hr

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

Iowa DNR Construction Permit 02-A-122-S2

Pollutant: PM-10

Emission Limits: 2.13 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-122-S2

Operational Limits & Requirements

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

Control equipment parameters:

1. Maintain the wet scrubber according to manufacturer's specifications.

Reporting & Record keeping:

All records listed below 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.

1. Record any maintenance performed on the wet scrubber.

Authority for Requirement: Iowa DNR Construction Permit 02-A-012-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 50

Stack Diameter (inches): 23

Exhaust Flow Rate (scfm): 8300

Exhaust Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-122-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-05-1-22

Associated Equipment

Associated Emission Unit ID Number: 3A-05-1-22
Emissions Control Equipment ID Number: 3A-05-1/CE22
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-05-1-22
Emission Unit Description: Funnel washing machines(2)
Raw Material/Fuel: Explosive materials
Rated Capacity: 400 lb/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 Limits: 40%⁽¹⁾

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

Iowa DNR Construction Permit 06-A-844-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 06-A-844-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 21.6

Stack Diameter (inches): 8

Exhaust Flow Rate (scfm): 600

Exhaust Temperature (°F): 70

Discharge Style: Vertical, obstructed

Authority for Requirement: Iowa DNR Construction Permit 06-A-844-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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: 3A-50-1-1

Associated Equipment

Associated Emission Unit ID Number: 3A-50-1-1
Emissions Control Equipment ID Number: 3A-50-1-1/CE1
Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-50-1-1
Emission Unit Description: Loading Hopper
Raw Material/Fuel: Explosive Powder
Rated Capacity: 3,500 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-185

⁽¹⁾ An exceedence of the indicator opacity of (20%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.08 gr/dscf, 1.03 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-185

Operational Limits & Requirements

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

Control equipment:

1. The wet scrubber shall be in operation at all times that this emissions unit is operated.

Authority for Requirement: Iowa DNR Construction Permit 01-A-185

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 26

Stack Diameter (inches): 9

Exhaust Flow Rate (scfm): 1,500

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-185

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-50-1-2

Associated Equipment

Associated Emission Unit ID Number: 3A-50-1-2

Emissions Control Equipment ID Number: 3A-50-1/CE2

Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-50-1-2

Emission Unit Description: Portable Hopper

Raw Material/Fuel: Explosives

Rated Capacity: 3500 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-186

- ⁽¹⁾ An exceedence of the indicator opacity of 20% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.08 gr/dscf, 0.69 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-186

Operational Limits & Requirements

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

Control equipment parameters:

1. The wet scrubber shall be in operation at all times that this emissions unit is operated.

Authority for Requirement: Iowa DNR Construction Permit 01-A-186

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 26

Stack Diameter (inches): 7

Exhaust Flow Rate (scfm): 1,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-186

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-50-1-3

Associated Equipment

Associated Emission Unit ID Number: 3A-50-1-3

Emissions Control Equipment ID Number: 3A-50-1/CE3

Emissions Control Equipment Description: Wet Scrubber

Emission Unit vented through this Emission Point: 3A-50-1-3

Emission Unit Description: Screening Table

Raw Material/Fuel: Explosives

Rated Capacity: 3,500 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-187

⁽¹⁾ An exceedence of the indicator opacity of 20% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.08 gr/dscf, 1.03 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-187

Operational Limits & Requirements

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

Control equipment parameters:

1. The wet scrubber shall be in operation at all times that this emissions unit is operated.

Authority for Requirement: Iowa DNR Construction Permit 01-A-187

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 26

Stack Diameter (inches): 11

Exhaust Flow Rate (scfm): 1,500

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-187

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-99-8

Associated Equipment

Associated Emission Unit ID Numbers: 3A-99-8
Emissions Control Equipment ID Number: CE 3A-99-8
Emissions Control Equipment Description: Bag Filter

Emission Unit vented through this Emission Point: 3A-99-8
Emission Unit Description: Vacuum House
Raw Material/Fuel: Explosive/Inert Powder
Rated Capacity: 25 lb/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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-1080

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-1080

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 3

Stack Diameter (inches): 6

Exhaust Flow Rate (scfm): 500

Exhaust Temperature (°F): 70

Discharge Style: Downward

Authority for Requirement: Iowa DNR Construction Permit 01-A-1080

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-100-1

Associated Equipment

Associated Emission Unit ID Numbers: 3A-100-1

Emission Unit vented through this Emission Point: 3A-100-1

Emission Unit Description: X-ray film processing

Raw Material/Fuel: Processing Chemicals

Rated Capacity: 150 gal/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: VOC

Emission Limit: 11.0 tons per rolling 12-month period

Authority for Requirement: Iowa DNR Construction Permit 02-A-121

Pollutant: HAP (Total)

Emission Limits: 5.9 tons per rolling 12-month period

Authority for Requirement: Iowa DNR Construction Permit 02-A-121

Operational Limits & Requirements

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

Process throughput:

1. The total amount of fixer and developer solution employed shall not exceed 39,285 gallons per any rolling 12-month period.
2. The VOC content of the fixer and developer solution employed shall not exceed 0.56 pound per gallon.
3. The total HAP⁽¹⁾ content of the fixer and developer solution employed shall not exceed 0.3 pound per gallon.

⁽¹⁾ Hazardous Air Pollutant as defined by 567 IAC 22.100

Reporting & Record keeping:

All records listed below 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.

The permittee shall maintain the following monthly records:

1. The identification, the as-applied VOC content, and the total HAP content of the fixer and developer solution used in the film processor.
2. The total amount of fixer and developer solution used in the film processor (gallons).
3. The rolling, 12-month total of the amount of fixer and developer solution used in the film processor (gallons).

Authority for Requirement: Iowa DNR Construction Permit 02-A-121

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 15

Stack Opening (inches): 6 inches x 8 inches

Exhaust Flow Rate (scfm): 300

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 02-A-121

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 3A-05-1E-5

Associated Equipment

Associated Emission Unit ID Number: 3A-05-1E-1

Emission Unit vented through this Emission Point: 3A-05-1E-1

Emission Unit Description: Diesel Generator

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 500 kW/hr / 750 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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 00-A-207

⁽¹⁾ An exceedence 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 exceedence. If the exceedence continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g. stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Pollutant: PM-10

Emission Limit: 3.29 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 00-A-207

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

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

Operation limit:

1. The diesel generator shall not operate in excess of 1,000 hours per rolling twelve month period.

Process throughput:

1. The fuel source shall be limited to #2 diesel fuel (or better i.e. #1 diesel fuel).
2. The sulfur content of the #2 (or #1) diesel fuel shall be limited to 0.5% by weight.

Reporting & Record keeping:

All records listed below 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.

1. Records demonstrating the type of fuel used and the sulfur content.
2. The number of hours the generator operates per twelve month period rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 00-A-207

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63, Subpart ZZZZ]

Authority for Requirement: 40 CFR Part 63, Subpart ZZZZ

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 13.58

Stack Diameter (inches): 8

Stack Exhaust Flow Rate (scfm): 1358

Stack Temperature (°F): 1,187

Discharge Style: Vertical obstructed

Authority for Requirement: Iowa DNR Construction Permit 00-A-207

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 4B-22-5

Associated Equipment

Associated Emission Unit ID Number: 4B-22-5
Emissions Control Equipment ID Number: 4B-22/CE 5
Emissions Control Equipment Description: Multi-Wash Scrubber

Emission Unit vented through this Emission Point: 4B-22-5
Emission Unit Description: Inspection Table
Raw Material/Fuel: Explosive materials
Rated Capacity: 4 lb/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%⁽¹⁾

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

Iowa DNR Construction Permit 00-A-244

⁽¹⁾ An exceedence 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 exceedence. If the exceedence continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 00-A-244

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 29

Stack Opening (inches, diameter): 9

Stack Exhaust Flow Rate (scfm): 1,200

Stack Exhaust Temperature (°F): Ambient

Discharge Style: Vertical with obstruction

Authority for Requirement: Iowa DNR Construction Permit 00-A-244

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 4B-22-6

Associated Equipment

Associated Emission Unit ID Number: 4B-22-6

Emission Unit vented through this Emission Point: 4B-22-6

Emission Unit Description: Humidification Cabinet

Raw Material/Fuel: Silicone Elastomer

Rated Capacity: 1500 gal/yr

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 00-A-605-S1

⁽¹⁾ An exceedence 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 exceedence. If the exceedence continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 00-A-605-S1

Pollutant: VOC

Emission Limit: 4.88 tpy

Authority for Requirement: Iowa DNR Construction Permit 00-A-605-S1

Operational Limits & Requirements

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

Process throughput:

1. Humidification cabinet (4B-22-6) is limited to application of 1,500 gallons of VOC containing material per rolling 12 month period.
2. The VOC content of VOC containing material used in humidification cabinet (4B-22-6) shall not exceed 6.5 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

1. Record on a monthly basis in gallons, the amount of VOC containing material applied in humidification cabinet (4B-22-6). Calculate and record rolling 12-month totals.
2. Maintain record of the VOC content of all VOC containing materials used in humidification cabinet (4B-22-6) in pounds per gallon.
3. Retain Material Safety Data Sheets (MSDS) of all VOC containing materials used in humidification cabinet (4B-22-6).

Authority for Requirement: Iowa DNR Construction Permit 00-A-605-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet, from the ground): 22
Stack Opening (inches, diameter): 12
Stack Exhaust Flow Rate (scfm): 850
Stack Exhaust Temperature (°F): Ambient
Discharge Style: Downward

Authority for Requirement: Iowa DNR Construction Permit 00-A-605-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 4B-22-10

Associated Equipment

Associated Emission Unit ID Number: 4B-22-2
Emissions Control Equipment ID Number: 4B-22/CE 1
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 4B-22-2
Emission Unit Description: Estane Application
Raw Material/Fuel: Estane Mixture
Rated Capacity: 8.47 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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 97-A-529

⁽¹⁾ If visible emissions are observed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: PM-10

Emission Limit: 0.18 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 97-A-529

Pollutant: Particulate Matter

Emission Limit: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 97-A-529

Operational Limits & Requirements

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

Process throughput:

1. The use of adhesive in the spray operation administered under DNR permit 97-A-529 shall not exceed 2,000 gallons per rolling twelve month period.

Reporting & Record keeping:

All records listed below 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.

1. The permit holder shall maintain records on the premises to show the rolling twelve-month total use of adhesive in the spray operation administered under DNR permit 97-A-529.

Authority for Requirement: Iowa DNR Construction Permit 97-A-529

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 19

Stack Diameter (inches): 18

Stack Exhaust Flow Rate (scfm): 2,100

Stack Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 97-A-529

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and Maintenance Plan

Weekly

- Inspect the spray 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: 4B-22-12

Associated Equipment

Associated Emission Unit ID Number: 4B-22-4
Emissions Control Equipment ID Number: 4B-22/CE 12
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 4B-22-4
Emission Unit Description: Adhesive/cleaning and painting
Raw Material/Fuel: Paint, adhesive, cleaning solvent
Rated Capacity: 4,333 gal/yr

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: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 96-A-835-S1

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 96-A-835-S1

Pollutant: VOC

Emission Limit: 19.5 TPY⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 96-A-835-S1

⁽²⁾ The VOC limit is 19.5 tons per any rolling 12-month period.

Operational Limits & Requirements

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

Process throughput:

1. Paint usage in this booth shall not exceed 0.5 gallon per hour, based on the average hourly usage rate for all paint used in one day.
2. Material usage in this booth shall not exceed 4,333 gallons per any rolling 12-month period. This shall include paint, adhesive and cleaning solvent.
3. The VOC content of any material used in this booth shall not exceed 9.0 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

1. The permittee shall maintain the following daily records on each day that paint is used:
 - a. the total amount of paint used (gallons);
 - b. the number of hours that the booth was used for painting; and
 - c. the average hourly paint usage rate (a/b).
2. The permittee shall maintain the following monthly records:
 - a. the total amount of paint, adhesive and cleaning solvent used in the booth (gallons);
 - b. the rolling, 12-month total of the amount of paint, adhesive and cleaning solvent used in the booth (gallons); and
 - c. the identification and the VOC content of each paint, adhesive and cleaning solvent used in the booth.

Authority for Requirement: Iowa DNR Construction Permit 96-A-835-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 15

Stack Diameter (inches): 12

Exhaust Flow Rate (scfm): 900

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 96-A-835-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and 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: 4B-22-13

Associated Equipment

Associated Emission Unit ID Number: 4B-22-13

Emission Unit vented through this Emission Point: 4B-22-13

Emission Unit Description: Adhesive Application & Cleaning Operations

Raw Material/Fuel: Adhesive and cleaning solvent

Rated Capacity: 2,890 gal/yr

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: VOC

Emission Limit: 13.1 TPY⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 96-A-818-S1

⁽¹⁾ The VOC limit is 13.1 tons per any rolling 12-month period.

Operational Limits & Requirements

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

Process throughput:

1. The total amount of material (e.g. adhesive, cleaning solvent) used in this emissions unit shall not exceed 2,890 gallons per any rolling, 12-month period.
2. The as-applied VOC content of any material used in this emissions unit shall not exceed 9.0 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

1. The permittee shall maintain the following monthly records:
 - a. The identification and the as-applied VOC content of each material used in the emissions unit.
 - b. The total amount of material used in the emissions unit (gallons).
 - c. The rolling, 12-month total of the amount of material used in the emissions unit (gallons).

Authority for Requirement: Iowa DNR Construction Permit 96-A-818-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 25

Stack Diameter (inches): 12

Exhaust Flow Rate (scfm): 815

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 96-A-818-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 4B-99-1

Associated Equipment

Associated Emission Unit ID Numbers: 4B-99-1

Emissions Control Equipment ID Number: CE 4B-99-1

Emissions Control Equipment Description: Bag Filter

Emission Unit vented through this Emission Point: 4B-99-1

Emission Unit Description: Vacuum House

Raw Material/Fuel: Explosive/Inert Powder

Rated Capacity: 45 lb/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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 01-A-1081

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Iowa DNR Construction Permit 01-A-1081

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 8

Stack Diameter (inches): 10

Exhaust Flow Rate (scfm): 520

Exhaust Temperature (°F): 70

Discharge Style: Downward

Authority for Requirement: Iowa DNR Construction Permit 01-A-1081

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 300-148-1

Associated Equipment

Associated Emission Unit ID Number: 300-148-1
Emissions Control Equipment ID Number: 300-148/CE1
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through this Emission Point: 300-148-1
Emission Unit Description: Maintenance Paint Booth
Raw Material/Fuel: Paint
Rated Capacity: 10 ounces/minute

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 03-A-674

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limits: 0.01 gr/scf

Authority for Requirement: 567 IAC 23.4(13)

Iowa DNR Construction Permit 03-A-674

Pollutant: VOC

Emission Limits: 6.83 tons per rolling 12-month period

Authority for Requirement: Iowa DNR Construction Permit 03-A-674

Operational Limits & Requirements

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

Process throughput:

1. Maintenance Paint Booth (300-148-1) is limited to 1500 gallons of material (solvent & paint) per rolling 12-month period.
2. The VOC content of materials (paint & solvent) used in Maintenance Paint Booth (300-148-1) shall not exceed 9.1 pounds per gallon.

Reporting & Record keeping:

All records listed below 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.

1. Record on a monthly basis, all materials (paint & solvent used in Maintenance Paint Booth (300-148-1) in gallons. Calculate and record rolling 12-month totals.
2. Record the VOC content of all materials (paint & solvent) used in Maintenance Paint Booth (300-148-1) in pounds per gallon.
3. Retain all Material Safety Data Sheets of materials used in Maintenance Paint Booth (300-148-1).

Authority for Requirement: Iowa DNR Construction Permit 03-A-674

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 32.75

Stack Diameter (inches): 33

Exhaust Flow Rate (scfm): 12,840

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 03-A-674

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒

Dry Filter Agency Operation and 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: 100-101-5

Associated Equipment

Associated Emission Unit ID Number: 100-101-5

Emission Unit vented through this Emission Point: 100-101-5

Emission Unit Description: Emergency Generator for Administration Department

Raw Material/Fuel: Diesel fuel

Rated Capacity: 75 gal/hr, 1000 kW

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 10-A-476-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limits: 1.47 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 10-A-476-S2

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf, 1.47 lb/hr

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

Iowa DNR Construction Permit 10-A-476-S2

Pollutant: Sulfur Dioxide

Emission Limits: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Iowa DNR Construction Permit 10-A-476-S2

Pollutant: VOC

Emission Limit: 0.95 lb/hr, 0.24 tpy

Authority for Requirement: Iowa DNR Construction Permit 10-A-476-S2

NSPS Emission Limits

Pollutant	Limit	Reference (567 IAC)
Particulate Matter (PM) (Filterable Only)	0.20 g/KW-hr ¹	23.1(2)"yyy" ²
Opacity	See Footnote 3	23.1(2)"yyy" ²
Nitrogen Oxides (NO _x) + Non-Methane Hydrocarbons (NMHC)	6.4 g/KW-hr ¹	23.1(2)"yyy" ²
Carbon Monoxide (CO)	3.5 g/KW-hr ¹	23.1(2)"yyy" ²
Fuel Sulfur Requirements beginning 10/01/2007	Max 500 ppm Sulfur and Min Cetane Index = 40 or Max Aromatic content = 35%vol	23.1(2)"yyy" ²
Fuel Sulfur Requirements beginning 10/01/2010	Max 15 ppm Sulfur and Min Cetane Index = 40 or Max Aromatic content = 35%vol	23.1(2)"yyy" ²

¹ Standard is expressed as the average of 3 test runs.

² Iowa reference to NSPS Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines; 40 CFR §60.4200 – 40 CFR §60.4219).

³ Per 40 CFR §89.113, exhaust opacity shall not exceed 20% during acceleration mode, 15% during lugging mode, and 50% during the peaks in either the acceleration or lugging modes.

Authority for Requirement: Iowa DNR Construction Permit 10-A-476-S2

Operational Limits & Requirements

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

Hours of operation:

1. This emissions unit may only operate 500 hours per rolling twelve month period.

Process throughput:

1. This emissions unit may only utilize 37,500 gallons of diesel fuel per rolling 12-month period.

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall record the monthly hours of operation for each month.
2. During the first twelve months of operation, record the hours of operation in hours per year, for each month of operation.
3. After the first twelve months of operation, record a twelve month rolling total for the hours of operation in hours per year, for each month of operation.

4. During the first twelve (12) months of operation determine the total amount of fuel used by the generator for each month of operation.
5. After the first twelve (12) months of operation determine the annual amount of fuel used by the generator on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 10-A-476-S2

NESHAP/NSPS

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63, Subpart ZZZZ]

Authority for Requirement: 40 CFR Part 63, Subpart ZZZZ

NSPS:

This emission unit is regulated by the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR, Part 60, Subpart IIII. This source meets the definition of an emergency engine that is not a fire pump with a displacement of less than 10 liters/cylinder. This engine is model year 2007 or later. Therefore, this source must comply with the emission standards in 60.4202(a)(2) and all other applicable requirements of Subpart IIII.

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 (feet): 10.5

Stack Diameter (inches): 12

Exhaust Flow Rate (scfm): 9,534

Exhaust Temperature (°F): 910

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 10-A-476-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 100-211-1

Associated Equipment

Associated Emission Unit ID Number: 100-211-1

Emission Unit vented through this Emission Point: 100-211-1
Emission Unit Description: Diesel Generator in Building 1-211
Raw Material/Fuel: Diesel fuel
Rated Capacity: 0.62 gal/hr, 25 kW

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 96-A-518-S1

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limits: 0.074 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 96-A-518-S1

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf, 0.074 lb/hr

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

Iowa DNR Construction Permit 96-A-518-S1

Pollutant: Sulfur Dioxide

Emission Limits: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Iowa DNR Construction Permit 96-A-518-S1

Pollutant: Nitrogen Oxide

Emission Limit: 0.2 tons per 12-month rolling total

Authority for Requirement: Iowa DNR Construction Permit 96-A-518-S1

Operational Limits & Requirements

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

Hours of operation:

1. The maximum number of hours of operation of this unit shall not exceed 250 hours per twelve (12) month period, rolled monthly.

Work practice standards:

1. This unit shall have a non-resettable hour meter installed as required by 40 CFR §63.6625(f).
2. The owner/operator shall perform the following maintenance on this unit as required by 40 CFR §63.6602:
 - a. Change the oil and filter every 500 hour of operation or annually whichever comes first;
 - b. Inspect all hoses and belts every 500 hours of operations or annually, whichever comes first and replace as necessary;
 - c. Inspect the air cleaner every 1000 hours of operation or annually whichever comes first.
3. The owner/operator shall minimize the amount of time this unit is operated at idle as required by 40 CFR §63.6602.
4. The owner/operator shall minimize the startup time at startup to a period needed for appropriate and safe loading of the engine as required by 40 CFR §63.6602.

Reporting & Record keeping:

All records listed below 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.

1. The owner/operator of this unit shall keep a record of each time the engine is used and the reason for the use as required by 63.6655(f).
2. The owner/operator shall record the number of hours this unit operates for each use of the unit.
3. At the end of each month, calculate and record the number of hours that this unit operated over the previous month.
4. At the end of each month, calculate and record the number of hours this unit operated over the previous twelve (12) months.
5. The owner/operator shall keep records of all maintenance activities that are undertaken on this unit as required by 40 CFR §63.6655(e).

Authority for Requirement: Iowa DNR Construction Permit 96-A-518-S1

NESHAP/NSPS

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

NSPS:

This emission unit is of the source type regulated by the requirements of the New Source Performance Standard (NSPS) for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart III; 567 IAC 23.1(12"yyy"). However, this unit was installed prior to the applicability date for this standard and there is no evidence at this time that this unit has been modified or reconstructed since the applicability date of this standard.

Authority for Requirement: Iowa DNR Construction Permit 96-A-518-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 12

Stack Diameter (inches): 2.38

Exhaust Flow Rate (scfm): 1,420

Exhaust Temperature (°F): 850

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 96-A-518-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 200-211-2

Associated Equipment

Associated Emission Unit ID Number: 200-211-2

Emission Unit vented through this Emission Point: 200-211-2

Emission Unit Description: Diesel Generator

Raw Material/Fuel: Diesel fuel

Rated Capacity: 2.0 gal/hr, 80 kW

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: 40%⁽¹⁾

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

Iowa DNR Construction Permit 96-A-520-S3

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limits: 0.236 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 96-A-520-S3

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf, 0.236 lb/hr

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

Iowa DNR Construction Permit 96-A-520-S3

Pollutant: Sulfur Dioxide

Emission Limits: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Pollutant: Nitrogen Oxide

Emission Limit: 0.42 tons per 12-month rolling total

Authority for Requirement: Iowa DNR Construction Permit 96-A-520-S3

Operational Limits & Requirements

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

Hours of operation:

1. This unit may only operate 250 hours per rolling twelve (12) month period.

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall record the monthly hours of operation for each month.
2. During the first twelve months of operation, record the cumulative hours of operation in hours per year, for each month of operation.
3. After the first twelve months of operation, record a twelve month rolling total for the hours of operation in hours per year, for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 96-A-520-S3

NESHAP :

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 9

Stack Diameter (inches): 8

Exhaust Flow Rate (scfm): 930

Exhaust Temperature (°F): 850

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 96-A-520-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 200-101-2-1

Associated Equipment

Associated Emission Unit ID Number: 200-101-2-1

Emission Unit vented through this Emission Point: 200-101-2-1

Emission Unit Description: Diesel Generator

Raw Material/Fuel: Diesel fuel

Rated Capacity: 22 gal/hr, 463 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: 40%

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

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide

Emission Limits: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

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

The Emission Unit qualifies 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).

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 a new stationary RICE as it was constructed on or after June 12, 2006.

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

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 + NO _x	CO	PM	Opacity	Rule Ref
Disp. < 10	225 ≤ kW < 450 (302 ≤ HP < 604)	2007+	4.0 (3.0)	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:

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:

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
100 ≤ HP ≤ 500	Within 1 year of engine startup, or non-permitted action ⁽¹⁾

⁽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 40.4209(a)) and 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 40.4214(b).
2. There is no time limit on use for emergency situations. 40 CFR 60.4211(f)(1).
3. 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.
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 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.
5. If your emergency engine has a maximum engine power of more than 100 HP and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 60.4211(f)(2)(ii) and (iii) or operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), you must submit an annual report according to the requirements in 40 CFR 60.4214(d)(1) through (3). See 40 CFR 60.4214(d) for more information.

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: 500-164-2-1

Associated Equipment

Associated Emission Unit ID Number: 500-164-2-1

Emission Unit vented through this Emission Point: 500-164-2-1
Emission Unit Description: Administrative Lift Station Generator
Raw Material/Fuel: Diesel fuel
Rated Capacity: 8.2 gal/hr, 158 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: 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

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

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

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 a new stationary RICE as it was constructed on or after June 12, 2006.

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

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 + NO _x	CO	PM	Opacity	Rule Ref
Disp. < 10	75 ≤ kW < 130 (100 ≤ HP < 175)	2007+	4.0 (3.0)	5.0 (3.7)	0.30 (0.22)	⁽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:

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:

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
100 ≤ HP ≤ 500	Within 1 year of engine startup, or non-permitted action ⁽¹⁾

⁽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 40.4209(a)) and 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 40.4214(b).
2. There is no time limit on use for emergency situations. 40 CFR 60.4211(f)(1).
3. 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.
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 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.
5. If your emergency engine has a maximum engine power of more than 100 HP and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 60.4211(f)(2)(ii) and (iii) or operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), you must submit an annual report according to the requirements in 40 CFR 60.4214(d)(1) through (3). See 40 CFR 60.4214(d) for more information.

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: 500-214-2-1

Associated Equipment

Associated Emission Unit ID Number: 500-214-2-1

Emission Unit vented through this Emission Point: 500-214-2-1

Emission Unit Description: Gate 3 Emergency Generator

Raw Material/Fuel: Natural Gas

Rated Capacity: 1.2 MMcf/hr, and 133 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: 40%

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

Pollutant: Particulate Matter

Emission Limits: 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)

NESHAP:

The emergency engine is subject to 40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).

According to 40 CFR 63.6590(a)(2)(ii) this spark ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

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 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 Requirements

Emission Standards:

(40 CFR 60.4233(e) and Table 1 to Subpart JJJJ)

Maximum Engine Power	Manufacture Date	Emission Standards ⁽¹⁾						
		g/HP-hr				ppmvd at 15% O ₂		
		NO _x	HC + NO _x	CO ⁽²⁾	VOC ⁽³⁾	NO _x	CO	VOC
HP ≥ 130	1/1/2009+	2.0	N/A	4.0	1.0	160	540	86

⁽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 O₂.

⁽²⁾ See rule for alternative CO certification standards for engines ≥ 100 hp and manufactured prior to 1/1/2011.

⁽³⁾ Formaldehyde emissions are not included.

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.

Maximum Engine Power	Initial Test	Subsequent Test
25 < HP ≤ 500	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(d)(1) and 4243(a).
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. Owners and operators must keep a record from the manufacturer that the engines are certified to meet applicable emission standards. 40 CFR 60.4245(a)(3).
5. Owners and operators of non-certified engines must keep records of the documentation that these engines meet the applicable emission standards. 40 CFR 60.4245(a)(4).

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

1. If your engine does not meet the applicable standards for non-emergency engines you must install a non-resettable hour meter. 40 CFR 60.4237.
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. If your engine does not meet the applicable standards for a non-emergency engine you must keep the following records. 40 CFR 60.4245(b).
6. If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 60.4243(d)(2)(ii) and (iii) or that operates for the purposes specified in 40 CFR 60.4243(d)(3)(i), you must submit an annual report according to the requirements in 40 CFR 60.4245(e)(1) through (3). 40 CFR 60.4245.

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 Numbers: 500-215-1

Associated Equipment

Associated Emission Unit ID Number: 500-215-1

Emission Unit vented through this Emission Point: 500-215-1

Emission Unit Description: 30 kW Diesel Generator

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 0.70 gal/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR Construction Permit 96-A-519

Pollutant: PM-10

Emission Limit: 0.088 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 96-A-519

Pollutant: Particulate Matter

Emission Limit: 0.088 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 96-A-519

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)
Iowa DNR Construction Permit 96-A-519

Pollutant: Nitrogen Oxides

Emission Limit: 0.2 tpy

Authority for Requirement: Iowa DNR Construction Permit 96-A-519

Operational Limits & Requirements

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

Hours of operation:

1. This unit may only operate for 250 hours per year.

Reporting & Record keeping:

All records listed below 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.

1. Daily records shall be kept on the hours of operation.
2. Record the monthly hours of operation for each month.
3. During the first 12 months of operation record the hours of operation in hours per year, for each month of operation.
4. After the first twelve months of operation, record a twelve month rolling total for the hours of operation in hours per year, for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 96-A-519

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 6.5

Stack Diameter (inches): 8

Exhaust Flow Rate (acfm): 1500

Exhaust Temperature (°F): 850

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 96-A-519

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 300-148-20

Associated Equipment

Associated Emission Unit ID Number: 300-148-20

Emission Unit vented through this Emission Point: 300-148-20

Emission Unit Description: Emergency Generator for Mechanical Department

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 35 gallons/hr, 500 kW

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: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 10-A-407

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Opacity

Emission Limit: 20%

Authority for Requirement: 40 CFR 89.113

Iowa DNR Construction Permit 10-A-407

Pollutant: PM-10

Emission Limit: 0.73 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 10-A-407

Pollutant: Particulate Matter

Emission Limit: 0.73 lb/hr, 0.1 gr/dscf

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

Iowa DNR Construction Permit 10-A-407

Pollutant: Particulate Matter

Emission Limit: 0.20 g/kw-hr

Authority for Requirement: 40 CFR 89.112 Table 1

Iowa DNR Construction Permit 10-A-407

Pollutant: Nitrogen Oxides
Emission Limit: 6.4 g/kw-hr
Authority for Requirement: 40 CFR 89.112 Table 1
Iowa DNR Construction Permit 10-A-407

Pollutant: VOC
Emission Limit: 0.12 tons/yr
Authority for Requirement: Iowa DNR Construction Permit 10-A-407

Pollutant: CO
Emission Limit: 3.5 g/kw-hr
Authority for Requirement: 40 CFR 89.112 Table 1
Iowa DNR Construction Permit 10-A-407

Operational Limits & Requirements

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

NESHAP/NSPS

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

NSPS:

This emission unit is regulated by the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR, Part 60, Subpart IIII. This source meets the definition of an emergency engine that is not a fire pump with a displacement of less than 10 liters/cylinder. This engine is model year 2007 or later. Therefore, this source must comply with the emission standards in 60.4202(a)(2) and all other applicable requirements of Subpart IIII.

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

Process throughput:

1. The fuel of use shall be limited to #1 or #2 fuel oil.
2. The sulfur content of the fuel oil shall not exceed 0.5% by weight.
3. The owner or operator shall install a non-resettable hour meter on the engine

4. Per 40 CFR 80.510(b) the non-road diesel fuel utilized in this generator will have a maximum Sulfur content of 15 ppm.
5. This emissions unit may only operate 500 hours per rolling twelve month period.
6. This emission unit may only utilize 18,500 gallons of diesel fuel per rolling 12-month period.
7. If the engine is equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

Authority for Requirement: Iowa DNR Construction Permit 10-A-407

Reporting & Record keeping:

All records listed below 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.

1. Change oil and filter every 500 hours of operation or annually, whichever comes first;¹
2. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first
3. The owner or operator shall record the monthly hours of operation for each month.
4. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary
5. During the first twelve months of operation, record the hours of operation in hours per year, for each month of operation.
6. After the first twelve months of operation, record a twelve month rolling total for the hours of operation in hours per year, for each month of operation.

¹Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

Authority for Requirement: Iowa DNR Construction Permit 10-A-407

1. Record diesel fuel usage, in gallons, on a 12-month rolling basis rolled monthly.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 10.5

Stack Diameter (inches): 10

Exhaust Flow Rate (scfm): 3899

Exhaust Temperature (°F): 851

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 10-A-407

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 500-139-5

Associated Equipment

Associated Emission Unit ID Number: 500-139-5

Applicable Requirements

Emission Unit vented through this Emission Point: 500-139-5

Emission Unit Description: Internal Combustion Engine

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 24.6 gallons/hr, 1341 bhp

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: 40% ⁽¹⁾

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

Iowa DNR Construction Permit 96-A-521-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit: 0.63 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 96-A-521-S2

Pollutant: Particulate Matter

Emission Limit: 0.63 lb/hr, 0.1 gr/dscf

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

Iowa DNR Construction Permit 96-A-521-S2

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Pollutant: Nitrogen Oxides

Emission Limit: 17.4 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 96-A-521-S2

Operational Limits & Requirements

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

Hours of operation:

1. Operation of this unit shall not exceed 1000 hours per year.

Authority for Requirement: Iowa DNR Construction Permit 96-A-521-S2

Process throughput:

1. The sulfur content of the diesel fuel combusted in this emission unit shall not exceed 0.5 percent by weight.

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

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall record the monthly hours of operation for each month.
2. During the first 12 months of operation, record the cumulative hours of operation in hours per year, for each month of operation.
3. After the first 12 months of operation, record a twelve month rolling total for the hours of operation in hours per year, for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 96-A-521-S2

1. The permit holder shall maintain records to show the supplier certification of the sulfur content of the diesel fuel used.

Authority for Requirement: 567 IAC 22.108(3)

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 38

Stack Diameter (inches): 12

Exhaust Flow Rate (scfm): 3395

Exhaust Temperature (°F): 885

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 96-A-521-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 30-144-3

Associated Equipment

Associated Emission Unit ID Number: 30-144-3

Emission Unit vented through this Emission Point: 30-144-3

Emission Unit Description: Steam Boiler

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 45 gallons/hr, 6.21 MMBtu/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR Construction Permit 96-A-881

Pollutant: Particulate Matter

Emission Limit: 0.6 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"
Iowa DNR Construction Permit 96-A-881

Pollutant: Sulfur Dioxide

Emission Limit: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"
Iowa DNR Construction Permit 96-A-881

Operational Limits & Requirements

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

Process throughput:

1. This boiler may be fired with Fuel Oil No. 2 only.
2. The sulfur content of the fuel oil combusted in this boiler shall not exceed 0.05% by weight.

Reporting & Record keeping:

All records listed below 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.

1. Records showing the type of fuel combusted in this boiler.
2. Records showing the sulfur content of any fuel combusted in this boiler, in weight percent.

Authority for Requirement: Iowa DNR Construction Permit 96-A-881

NESHAP:

This equipment is of the source category affected by the following federal regulation: 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 (feet): 18.5

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (acfm): 2,550

Stack Temperature (°F): 375

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 96-A-881

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 30-144-4

Associated Equipment

Associated Emission Unit ID Number: 30-144-4

Emission Unit vented through this Emission Point: 30-144-4

Emission Unit Description: F Yard Burnham Boiler

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 45 gallons/hr, 6.21 MMBtu/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40%

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

Pollutant: Particulate Matter

Emission Limit: 0.6 lb/MMBtu

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

Pollutant: Sulfur Dioxide

Emission Limit: 2.5 lb/MMBtu

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

Operational Limits & Requirements

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

Process throughput:

1. The sulfur content of the fuel oil combusted in this boiler shall not exceed 0.05% by weight.

Reporting & Record keeping:

All records listed below 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.

1. Records showing the sulfur content of any fuel combusted in this boiler, in weight percent.

Authority for Requirement: 567 IAC 22.108(3)

NESHAP:

This equipment is of the source category affected by the following federal regulation: 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)

Emission Point ID Number: 500-139-1

Associated Equipment

Associated Emission Unit ID Numbers: 500-139-1 & 500-139-2

Emissions Control Equipment ID Number: 500-139-3 and 500-139-4

Emissions Control Equipment Description: Fabric Filter

Continuous Emissions Monitors ID Numbers: 500-139/ME 3 & 4 Opacity Monitoring

Emission Unit vented through this Emission Point: 500-139-1

Emission Unit Description: Spreader Stoker (163.9 MMBtu/hr)

Raw Material/Fuel: Bituminous Coal

Rated Capacity: 6.66 tons/hr

Emission Unit vented through this Emission Point: 500-139-2

Emission Unit Description: Spreader Stoker (163.9 MMBtu/hr)

Raw Material/Fuel: Bituminous Coal

Rated Capacity: 6.66 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: 40%

Authority for Requirement: Iowa DNR Construction Permit 81-A-150-S3

Pollutant: Particulate Matter

Emission Limit: 0.07 lb/MMBtu

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

Iowa DNR Construction Permit 81-A-150-S3

Pollutant: Sulfur Dioxide

Emission Limit: 6 lb/MMBtu

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

Iowa DNR Construction Permit 81-A-150-S3

Operational Limits & Requirements

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

I. Special construction permit requirements for major stationary sources in areas designated attainment or unclassified.

- A. This project consists of the following: the modification of two existing coal-fired boilers (EU 500-139-1 and 500-139-2), the installation of a new diesel IC engine for emergency power (EU 500-139-6), two new reagent bins for calcium hydroxide ($\text{Ca}(\text{OH})_2$) and bromated powder activated carbon (B-PAC), and a new fly ash receiver on the fly ash silo.
- B. In accordance with 567 IAC 33.3(2)"c", this project is not considered a major modification because it will not result in a significant emissions increase of a regulated NSR pollutant. In accordance with 567 IAC 33.3(2)"e", a significant emissions increase of a regulated NSR pollutant is projected to occur if the difference between the "projected actual emissions" and the "baseline actual emissions" for this project equals or exceeds the significant amount for that pollutant. The significant amounts for the NSR pollutants are listed in 33.3(1).
- C. The baseline actual emissions for the project are the sum of the baseline actual emissions for the coal fired boilers, the IC engine, the reagent bins and the fly ash receiver/silo and are calculated in accordance with the definition of "baseline actual emissions" in 33.3(1). The **baseline actual emissions** for these units are:

Particulate matter: 19 tons
PM₁₀: 19 tons
Sulfur dioxide: 1378 tons
Oxides of nitrogen: 140 tons
Carbon monoxide: 64 tons
VOC: 0.64 ton
Lead: 0.01 ton

- D. The projected actual emissions for the project are the sum of the projected actual emissions for the coal fired boilers, the IC engine, the reagent bins and the fly ash receiver/silo and are calculated in accordance with the definition of "projected actual emissions" in 33.3(1). The **projected actual emissions** for these units are:

Particulate matter: 19.21 tons
PM₁₀: 19.21 tons
Sulfur dioxide: 1379.37 tons
Oxides of nitrogen: 143.46 tons
Carbon monoxide: 65.93 tons
VOC: 0.71 ton
Lead: 0.01 ton

II. Other Limits

- E. The maximum steam output capacity for each of the two boilers is 100,000 pounds per hour.
- F. The permittee shall operate and maintain the fabric filter baghouses in accordance with the recommendations of the manufacturer.
- G. Except during a cold start up of the boilers, the fabric filter baghouses shall not be bypassed. It is anticipated that the time required to bypass the baghouses during a cold start up shall be less than 11 hours. The permittee shall comply with the requirements of 567 IAC 24.1(1), Excess Emissions.

Reporting and Record keeping:

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

- A. In accordance with 567 IAC 33.3(18), the permittee shall maintain the following records in writing on the emissions units that are part of project 07-439 (i.e. two coal fired boilers (EU 500-139-1, 500-139-2), diesel engine (EU 500-139-6), two reagent bins, and the fly ash receiver/silo):
 - i. monitor the emissions of any regulated NSR pollutant that could increase as a result of the project; and
 - ii. calculate the annual emissions for the emissions unit in the project, in tons per year on a calendar year basis, for a period of five years after following the resumption of regular operations and maintain a record of regular operations after the change. Resumption of regular operations shall begin when the modifications to both coal fired boilers are completed.

The written record containing the information required above shall be retained by the permittee for a period of ten years after the project is completed. This information shall be made available for review upon request for inspection by the Iowa DNR - Air Quality Bureau or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 22.107(6).

- B. The permittee shall submit a report to the Iowa DNR - Air Quality Bureau if annual emissions, in tons per year, from the equipment that is part of this project exceed the "baseline actual emissions" by an amount that is "significant" (as defined in subrule 33.3(1)) for a regulated NSR pollutant and if such emissions differ from the estimate of the "projected actual emissions". Such report shall be submitted to the Iowa DNR - Air Quality Bureau within 60 days after the end of such year. The report shall contain the following information:
 - i. The name, address and telephone number of the major stationary source;
 - ii. The annual emissions from the emissions units that are part of project 07-439;
 - iii. Any other information that the permittee wishes to include in the report (e.g. an explanation as to why the emissions differ from the preconstruction projection).

- C. The permittee shall maintain records on the number of hours each year that the boilers bypass the fabric filter baghouses. Emissions during this period shall be included in the records required under Section 15 (A).
- D. The permittee shall maintain records on the hourly steam output of the two boilers (pounds of steam per hour).
- E. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each of the fabric filter baghouses while the emissions units are in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
- F. The permittee shall maintain the certificate of analysis from the supplier showing the sulfur content (% by weight) of the coal for each load of coal received. A load is defined as a shipment or shipments of coal represented by a single certificate of analysis from the supplier.

The permittee shall also record the total quantity of coal received in each shipment

- G. The permittee shall record monthly the total amount of coal burned in the two boilers (EU 500-139-1 and 500-139-2) and the average sulfur content of the coal burned (% by weight).

Authority for Requirement: Iowa DNR Construction Permit 81-A-150-S3

NESHAP:

This equipment is of the source category affected by the following federal regulation: 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 (feet): 150

Stack Diameter (inches): 108

Stack Exhaust Flow Rate (scfm): 78,690

Stack Temperature (°F): 403

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 81-A-150-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Stack Testing:

Pollutant – PM (State)

Stack Test to be Completed: January 11, 2014 (2 years from the issuance of this permit)

Test Method – Iowa Compliance Sampling Manual Method 5

Authority for Requirement – 567 IAC 22.108(3)

Continuous Emissions Monitoring:

The permittee shall install, calibrate, maintain and operate a continuous emission monitoring system (CEMS) for measuring the opacity of the emissions discharged to the atmosphere by each of the two boilers and shall record the output of the systems. The systems shall be designed to meet Performance Specification 1 (PS1) from 40 CFR Part 60, Appendix B and the 40 CFR Part 60.13.

Within 90 days from the completion of the modifications allowed by this permit, the permittee shall conduct a performance specification test on the monitoring system pursuant to 40 CFR Part 60 PS1. The Iowa DNR - Air Quality Bureau shall be notified of the date of the specification test at least thirty (30) days before the anticipated test date.

Authority for Requirement: IDNR Construction Permit 81-A-150-S3

Continuous Emissions Monitoring:

Pollutant – Opacity

Operational Specifications – 40 CFR 60, Appendix B, Performance Specification 1.

Date of Initial System Calibration and Quality Assurance – The system was installed and serviced on July 27, 2010. The field portion of the test was completed August 25, 2011. The performance specification test including the 7 day drift test was completed on boiler 1 December 9 – 16, 2011. The 7 day drift test was completed on boiler 2 November 12 – 18, 2011.

Ongoing System Calibration/Quality Assurance – Daily calibrations per 40 CFR 60 Appendix F, Section 4

Reporting & Recordkeeping – Quarterly per 567 IAC 25.1(6). Such information must include but is not limited to all emissions data (raw data, adjusted data, and any or all adjusted factors used to convert emissions from units of measurements to units of the applicable standard) performance evaluations, calibrations and zero checks, and records of all malfunctions of monitoring equipment or source and repair procedures performed.

Authority for Requirement – 567 IAC 25.1

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

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

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

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐
(See the following page to view the plan.)

Authority for Requirement: 567 IAC 22.108(3)
40 CFR Part 64

CAM Plan for EP 500-139-1 Bag house

I. Background

A. Emissions Unit

Description: Two Coal Fired Boilers

Identification: EU 500-139-1 and EU 500-139-2

Facility: Iowa Army Ammunition Plant

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Permit 81-A-150 S3

Particulate emission limit: 0.07 lb/hr MMBTU PM,

Opacity emission limit: 40%

Current Monitoring requirements: Stack testing within 2 years of Title V Issuance. Check
Pressure Drop Gages Daily
One Hour Opacity Average

C. Control Technology

Fabric Filter

II. Monitoring Approach

General Monitoring Guidelines

- CAM involves the observation of control equipment compliance indicators: pressure drop across the baghouse and one hour opacity average from the opacity monitor. This plan defines acceptable ranges for these indicators. CAM also includes control equipment inspections when excursions of the indicator have taken place and possible corrective action and maintenance if necessary.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.

Excursion from Compliance Indicators

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.
- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion.

	Indicator #1	Indicator #2
I. Indicator	Differential pressure across baghouse	Continuous Opacity Monitoring System
Measurement Approach	Differential pressure measured daily, in inches, across the baghouse.	One hour Opacity Average
II. Indicator Range	An excursion is defined as a differential pressure reading across the baghouse module outside the acceptable range. The acceptable range is 0.2 to 7 inches water. Excursions trigger an inspection, corrective action and a recordkeeping requirement.	An excursion is defined as any exceedence of a pre-determined excursion point. Excursions are triggered when the one-hour opacity CAM indicator exceeds 4.60 %. Excursions trigger an inspection, corrective action and a recordkeeping requirement.
III. Performance Criteria		
A. Data Representativeness	An observation of the differential pressure below 0.2 inches of water or greater than 7 inches of water across the baghouse or the one-hour opacity average greater than 4.60 % could reveal a decrease in the performance of the control equipment and potentially result in an increase of particulate emissions if corrective actions are not initiated.	
B. Record Keeping and Reporting (Verification of Operational Status)	*Daily pressure drop readings *Record any excursions and corrective actions resulting from readings outside the indicator range, inspections and maintenance.	*Whenever the opacity is greater than 4.60 %, document the duration and cause if known, corrective actions taken and any inspections and maintenance conducted.
C. QA/QC Practices and Criteria	Pressure gauge will be calibrated, operated, and maintained according to the manufacturer's specifications.	The COM shall follow 40 CFR Part 60 requirements.
D. Monitoring Frequency	The differential pressure will be inspected a minimum of once per day when the baghouse is operating.	Record all excursion events.
E. Data Collection Procedures	Daily results will be recorded and maintained for 5 years.	Records will be recorded and maintained for 5 years.

IV. Justification

A. Background

This facility manufactures large and small caliber munitions. The pollutant specific emission unit is the bag filter that controls particulate emissions from two coal fired boilers. The controlled exhaust flow rate is approximately 78,690 standard cubic feet per minute.

B. Rationale for Selection of Performance Indicator

The daily pressure drop readings were selected as the performance indicator because it is indicative of operation of the bag house in a manner necessary to comply with the particulate emission standard. A pressure drop greater than 7 inches or less than 0.2 inches is indicative of a potential increase in particulate emissions due to a decrease in the performance of this bag house. Therefore, the detection of excessive pressure drop is used as a performance indicator.

The opacity reading from the Continuous Opacity Monitor or COM system was selected as a secondary indicator.

C. Rationale for Selection of Indicator Level

The selected indicator range is a pressure drop of greater than 0.2 inches of water but not greater than a pressure drop beyond 7 inches of water. If a pressure drop outside of the range noted above is observed, corrective action will be taken within 8 hours.

The changes in pressure drop noted above were selected as the indicator range because a pressure drop greater than 7 inches or less than 0.2 inches is indicative of a potential increase in particulate emissions due to a decrease in the performance of this bag house. If the bag house is operating properly, there will not be a pressure drop greater than 7 inches or less than 0.2 inches of water except during start up, shut down, and upset conditions.

4.60 % opacity was selected as the upper opacity monitoring level not to be exceeded without making an inspection and taking corrective action. This value was based on performing a regression analysis using the opacity monitor data recorded during the particulate stack test performed in February 2011 and the stack test results.

The selected QIP threshold for the bag house is 6 excursions in a 6-month reporting period. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented.

Emission Point ID Number: 500-139-4

Associated Equipment

Associated Emission Unit ID Number: 500-139-4

Emission Unit vented through this Emission Point: 500-139-4

Emission Unit Description: Internal Combustion Engine

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 72 gallons/hr, 1,000 kW, 1341 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: 40 % ⁽¹⁾

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

Iowa DNR Construction Permit 95-A-521-S1

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.1 gr/dscf

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

Iowa DNR Construction Permit 95-A-521-S1

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Pollutant: Nitrogen Oxides

Emission Limit: 34.2 lb/hr, 39 TPY

Authority for Requirement: Iowa DNR Construction Permit 95-A-521-S1

Operational Limits & Requirements

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

Hours of operation:

1. This emissions unit may only operate 2,280 hours per 12 month rolling period.

Authority for Requirement: Iowa DNR Construction Permit 95-A-521-S1

Process throughput:

1. The sulfur content of the diesel fuel combusted in this emission unit shall not exceed 0.5 percent by weight.

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

Reporting & Record keeping:

All records listed below 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.

1. The owner or operator shall record the monthly hours of operation for each month.
2. During the first twelve months of operation, record the hours of operation in hours per year, for each month of operation.
3. After the first twelve months of operation, record a twelve month rolling total for the hours of operation in hours per year, for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 95-A-521-S1

4. The permit holder shall maintain records to show the supplier certification of the sulfur content of the diesel fuel used.

Authority for Requirement: 567 IAC 22.108(3)

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

Emission Point Characteristics

This emission point shall conform to the conditions listed below.

Stack Height (feet): 38

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 3,350

Stack Temperature (°F): 886

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 95-A-521-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 500-139-6

Associated Equipment

Associated Emission Unit ID Numbers: 500-139-6

Emission Unit vented through this Emission Point: 500-139-6

Emission Unit Description: Emergency Diesel Generator

Raw Material/Fuel: Diesel fuel

Rated Capacity: 72.5 gals/hr, 1350 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: 40%

Authority for Requirement: Iowa DNR Construction Permit 07-A-1083

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit: 0.20 g/kW-hr

Authority for Requirement: 567 IAC 23.1(2)"yyy"
40 CFR 60, Subpart IIII
Iowa DNR Construction Permit 07-A-1083

Pollutant: Sulfur Dioxide

Emission Limit: 2.5 lbs/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"
Iowa DNR Construction Permit 07-A-1083

Pollutant: Carbon Monoxide

Emission Limit: 3.5 g/kW-hr

Authority for Requirement: 567 IAC 23.1(2)"yyy"
40 CFR 60, Subpart IIII
Iowa DNR Construction Permit 07-A-1083

Pollutant: Nitrogen Oxides + NMHC

Emission Limit: 6.4 g/kW-hr

Authority for Requirement: 567 IAC 23.1(2)"yyy"
40 CFR 60, Subpart IIII
Iowa DNR Construction Permit 07-A-1083

Operational Limits & Requirements

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

I. Special construction permit requirements for major stationary sources in areas designated attainment or unclassified.

- A. This project consists of the following: the modification of two existing coal-fired boilers (EU 500-139-1 and 500-139-2), the installation of a new diesel IC engine for emergency power (EU 500-139-6), two new reagent bins for calcium hydroxide ($\text{Ca}(\text{OH})_2$) and bromated powder activated carbon (B-PAC), and a new fly ash receiver on the fly ash silo.
- B. In accordance with 567 IAC 33.3(2)"c", this project is not considered a major modification because it will not result in a significant emissions increase of a regulated NSR pollutant. In accordance with 567 IAC 33.3(2)"e", a significant emissions increase of a regulated NSR pollutant is projected to occur if the difference between the "projected actual emissions" and the "baseline actual emissions" for this project equals or exceeds the significant amount for that pollutant. The significant amounts for the NSR pollutants are listed in 33.3(1).
- C. The baseline actual emissions for the project are the sum of the baseline actual emissions for the coal fired boilers, the IC engine, the reagent bins and the fly ash receiver/silo and are calculated in accordance with the definition of "baseline actual emissions" in 33.3(1). The **baseline actual emissions** for these units are:

Particulate matter: 19 tons
PM₁₀: 19 tons
Sulfur dioxide: 1378 tons
Oxides of nitrogen: 140 tons
Carbon monoxide: 64 tons
VOC: 0.64 ton
Lead: 0.01 ton

- D. The projected actual emissions for the project are the sum of the projected actual emissions for the coal fired boilers, the IC engine, the reagent bins and the fly ash receiver/silo and are calculated in accordance with the definition of "projected actual emissions" in 33.3(1). The **projected actual emissions** for these units are:

Particulate matter: 19.21 tons
PM₁₀: 19.21 tons
Sulfur dioxide: 1379.37 tons
Oxides of nitrogen: 143.46 tons
Carbon monoxide: 65.93 tons
VOC: 0.71 ton
Lead: 0.01 ton

II. Other Limits

- E. This emissions unit shall not operate more than 500 hours in any 12 month period.
- F. Only number 1 or number 2 fuel oil shall be burned in this emissions unit. Prior to burning any other fuels, the permittee shall submit an application to the Iowa DNR - Air Quality Bureau to modify this permit.
- G. The sulfur content of the oil burned in this engine shall not exceed 0.5 percent by weight. This limit applies at all times, including periods of startup, shutdown and malfunctions.
- H. Per §60.4205, this unit must comply with the emission standards for new nonroad Compression Ignition engines in §60.4202 for all pollutants, for the same model year and maximum engine power. The engine's manufacturer must certify that the unit will meet the emission standards for new nonroad engines for the same model year and maximum engine power from 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.
- I. Per §60.4206, the permittee must operate and maintain the unit according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer over the entire life of the engine.
- J. The permittee must use diesel fuel in this unit that complies with the requirements of §60.4207.
- K. The permittee shall operate and maintain the unit according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. The permittee may change only those settings that are permitted by the manufacturer. The unit must meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable.
- L. Per §60.4211(c), the permittee must purchase an engine that is certified to the emissions 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.
- M. Per §60.4211(e), the unit may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.

Reporting and Record keeping:

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

- A. In accordance with 567 IAC 33.3(18), the permittee shall maintain the following records in writing on the emissions units that are part of project 07-439 (i.e. two coal fired boilers (EU 500-139-1, 500-139-2), diesel engine (EU 500-139-6), two reagent bins, and the fly ash receiver/silo):

i. monitor the emissions of any regulated NSR pollutant that could increase as a result of the project; and

ii. calculate the annual emissions for the emissions unit in the project, in tons per year on a calendar year basis, for a period of five years after following the resumption of regular operations and maintain a record of regular operations after the change. Resumption of regular operations shall begin when the modifications to both coal fired boilers are completed.

The written record containing the information required above shall be retained by the permittee for a period of ten years after the project is completed. This information shall be made available for review upon request for inspection by the Iowa DNR - Air Quality Bureau or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 22.107(6).

B. The permittee shall submit a report to the Iowa DNR - Air Quality Bureau if annual emissions, in tons per year, from the equipment that is part of this project exceed the “baseline actual emissions” by an amount that is “significant” (as defined in subrule 33.3(1)) for a regulated NSR pollutant and if such emissions differ from the estimate of the “projected actual emissions”. Such report shall be submitted to the Iowa DNR - Air Quality Bureau within 60 days after the end of such year. The report shall contain the following information:

i. The name, address and telephone number of the major stationary source;

ii. The annual emissions from the emissions units that are part of project 07-439;

iii. Any other information that the permittee wishes to include in the report (e.g. an explanation as to why the emissions differ from the preconstruction projection).

C. The permittee shall maintain the following monthly records:

i. the total number of hours that the emissions unit operated;

ii. the number of hours that the emissions unit operated for maintenance checks and readiness testing;

iii. the rolling, 12-month total of the number of hours that the emissions unit operated; and

iv. the number of hours that the engine was operated for maintenance checks and readiness testing in any rolling 12-month period.

In accordance with §60.4209, the unit shall be equipped with a non-resettable hour meter.

D. The permittee shall keep on site a record of the fuel oil specifications as provided by the supplier and applicable to the oil used. The record shall include information on the sulfur content of the oil burned.

Authority for Requirement: Iowa DNR Construction Permit 07-A-1083

NESHAP/NSPS

NESHAP:

This equipment is of the source category affected by the following federal regulation: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63, Subpart ZZZZ]

Authority for Requirement: 40 CFR Part 63, Subpart ZZZZ

NSPS:

This emission unit is regulated by the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR, Part 60, Subpart IIII. This source meets the definition of an emergency engine that is not a fire pump with a displacement of less than 10 liters/cylinder. This engine is model year 2007 or later. Therefore, this source must comply with the emission standards in 60.4202(a)(2) and all other applicable requirements of Subpart IIII.

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

This unit is of the source type regulated by the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (567 IAC 23.1(2) "yyy", 40 CFR Part 60, Subpart IIII). This unit will be used to provide emergency electrical power and meets the definition of an emergency stationary internal combustion engine. The engine's model year will be 2007 or newer.

This unit is of the source type regulated by the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (567 IAC 23.1(4) "cz", 40 CFR Part 63, Subpart ZZZZ). In accordance with §63.6590(b), because this unit meets the definition of a new emergency reciprocating internal combustion engine, it is not required to meet the requirements of subpart ZZZZ except for the initial notification requirement of §63.6645(d).

Authority for Requirement: Iowa DNR Construction Permit 07-A-1083

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 38

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 3,361

Stack Temperature (°F): 834

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 07-A-1083

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design

characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 500-162-1

Associated Equipment

Associated Emission Unit ID Numbers: 500-162-1

Emission Unit vented through this Emission Point: 500-162-1

Emission Unit Description: Waste Treatment Pit

Raw Material/Fuel: Waste water

Rated Capacity: 45,000 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.

None applicable at this time.

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table FUG

Table FUG

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
500-137-2-1	500-137-2-1	Inert Solid Waste Landfill	Solid Waste	6417.60 tpy
IAAAP-2	IAAAP-3	Coal Pile	Coal	116,683 tpy
IAAAP-3	IAAAP-4	Unpaved Roads	Fugitive Dust	71.6 VMT/hr
IAAAP-6	IAAAP-8	Fly Ash Landfill	Fugitive Fly Ash	1,966.8 tpy
IAAAP-7	IAAAP-9	Open Burning of Propellants/Explosives ⁽¹⁾	Unstable Propellants/Explosives	4,092 lb/hr

⁽¹⁾ The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2.

Authority for Requirement: 567 IAC 23.2

Applicable Requirements

(The following requirements apply to the emissions equipment described in Table FUG)

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

The emissions from the emission points described in Table FUG shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit 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, without taking reasonable precautions to prevent a nuisance. All persons 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.

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

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

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Windsor Heights, Iowa 50324, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources

determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report

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

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

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

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

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

G8. Duty to Provide Information

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

G9. General Maintenance and Repair Duties

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

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

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

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

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

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

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

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

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

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

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

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

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

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

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 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. 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. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The oral report may be made 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 oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)

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

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. 567 IAC 22.108(16)

G15. Permit Deviation Reporting Requirements

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

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

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

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

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

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act.

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

- i. A brief description of the change within the permitted facility,
- ii. The date on which the change will occur,
- iii. Any change in emission as a result of that change,
- iv. The pollutants emitted subject to the emissions trade
- v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
- vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
- vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

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

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

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

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

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that is required to do 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 Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

- i. Do not violate any applicable requirements
- 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 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.

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

- i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
- ii. The permittee's suggested draft permit
- iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and
- iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

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

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

apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under *567 IAC 22.1(2)*, the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to *567 IAC 22.8*, or permits required pursuant to *567 IAC 22.4* and *567 IAC 22.5*. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *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, training fires and controlled burning of a demolished building. *567 IAC 23.1(3)"a"*, and *567 IAC 23.2*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by *567 IAC 23.2. 567 IAC 23.2 except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

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

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

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must

- comply with the standards for recycling and recovery equipment pursuant to § 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
- 3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
- 5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

- 1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
- 2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*
- 3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material

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

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

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

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

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

G25. Permit Shield

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

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

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

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

- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
- d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

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

G27. Property Rights

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

G28. Transferability

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

G29. Disclaimer

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

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

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. 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. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

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

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Windsor Heights, IA 50324
(515) 242-6001

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

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

G31. Prevention of Air Pollution Emergency Episodes

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

G32. Contacts List

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

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(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
7900 Hickman Road, Suite #1
Windsor Heights, IA 50324
(515) 242-5100

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

Field Office 1

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

Field Office 2

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

Field Office 3

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

Field Office 4

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

Field Office 5

401 SW 7th Street, Suite I
Des Moines, IA 50309
(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 Dept.

Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

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Appendix A: EPA Region VII Letter Dated February 23, 2004

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Appendix B: IAAAP Control Plant and Waste Management Plan for Contaminated Waste Processor (CWP)

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Appendix C: 40 CFR Part 63, Subpart ZZZZ

Web Link to the National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines

www.gpo.gov/fdsys/

See Featured Collections

- **Code of Federal Regulations**
- **Choose year**
- **Title 40**
- **Part 63**

Appendix D: 40 CFR Part 63, Subpart DDDDD

Web Link to National Emissions Standards for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers and Process Heaters

www.epa.gov/airquality/combustion/actions.html

See Emission Standards for Major Source

- Final Rule