

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

Name of Permitted Facility: John Deere Dubuque Works

**Facility Location: 18600 South John Deere Road
Dubuque, Iowa 52004**

Air Quality Operating Permit Number: 01-TV-021R2-M005

Expiration Date: June 8, 2019

Permit Renewal Application Deadline: December 8, 2018

EIQ Number: 92-1315

Facility File Number: 31-01-009

Responsible Official

Mark A. Dickson

General Manager

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Permit Contact Person for the Facility

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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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V. Appendix A148

NESHAPS:

40 CFR Part 63, Subpart MMMM: Web Link to National Emissions Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products

40 CFR Part 63, Subpart PFFFF: Web link to National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stand.

40 CFR Part 63, Subpart ZZZZ: Web Link to National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines

40 CFR Part 63, Subpart DDDDD: Web Link to National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters

Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE	control equipment
CEM.....	continuous emission monitor ⁰⁹
gr./dscf	grains per dry standard cubic foot
HC.....	hydrocarbon
HP-hr.....	horsepower hour
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
kg/l.....	kilograms per liter
Mgal.....	1000 gallons
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS.....	new source performance standard
ppmv	parts per million by volume
lb./hr	pounds per hour
lb./MMBtu	pounds per million British thermal units
SCC.....	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC.....	Standard Industrial Classification
TPH.....	tons per hour
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 hydrocarbon

I. Facility Description and Equipment List

Facility Name: John Deere Dubuque Works

Permit Number: 01-TV-021R2-M004

Facility Description: Manufacture of Construction Machinery (SIC 3531)

Equipment List			
Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
C2-DSP-1	2-DSP	Parts and Vehicle Touchup Paint Booth	88-A-197-S
C2-DSP-2			
3-DSP-1	3-DSP	Experimental Parts Touch-up Booth	16-A-246
1-MSP-1	1-MSP	131-W2 Carpenter/Touch-Up Paint Booth	80-A-093-S1
5-PBD-1	5-PBD	186-W3 Crawler Paint Kitchen	03-A-714
6-PBD-1	6-PBD	163-W1 Backhoe Paint Kitchen	03-A-715
7-PBD-1	7-PBD	163-W1 Paint Kitchen 2	05-A-250-S1
8-PBD-1	8-PBD	Crawler Paint Kitchen	05-A-769
17-PSP-1	17-PSP	Crawler Base Coat Paint Booth	97-A-990-S2
17-PSP-2			97-A-991-S2
18-PSP-1	18-PSP	Crawler Top Coat Paint Booth	97-A-992-S2
18-PSP-2			97-A-993-S2
19-PSP-1	19-PSP	163-W1 Backhoe Primer Paint Booth	98-A-081-S2
19-PSP-2			98-A-082-S2
20-PSP-1	20-PSP	163-W1 Backhoe Top Coat Paint Booth	98-A-083-S1
20-PSP-2			98-A-084-S1
21-PSP-1	21-PSP	Forestry Touch-Up Paint Booth	06-A-621-S1
21-PSP-2			06-A-622-S1
22-PSP-1	22-PSP	Backhoe Touch-up Booth	14-A-428-S1
6-PDF-1	6-PDF	Brake Bonding Oven	Exempt
10-PDF-1	10-PDF	186-W3 Crawler Paint Curing Oven	97-A-994
10-PDF-2		186-W3 Crawler Paint Curing Oven	97-A-995
11-PDF-1	11-PDF	Backhoe Paint Curing Oven	98-A-079-S1
11-PDF-2			98-A-080-S1
1-GAA-1F	1-GAA	Adhesive Assembly	Grandfathered
1-WTC-1	1-WTC	Solvent Still	03-A-647
1-GCS-1F	1-GCS	Miscellaneous Solvent Usage	Grandfathered
1-GSR-1F	1-GSR	Anti-Rust Spray Application	Grandfathered
6-DQE-1	6-DQE	X2-6 Engine Test Cell	01-A-913-S3
7-DQE-1	7-DQE	X2 Bay 7 Dyno Engine Exhaust	Exempt ⁽¹⁾
8-DQE-1	8-DQE	X2 Bay 8 Dyno Engine Exhaust	09-A-669-S2

33-DQE-1	33-DQE	X2 Bay 9 Dyno 1 Exhaust	09-A-445
35-DQE-1	35-DQE	X2 Bay 9 Dyno 2 Exhaust	09-A-446-S1
36-DQE-1	36-DQE	X2 Bay 9 Dyno 3 Exhaust	09-A-447-S1
34-DQE-1	34-DQE	Electrification Lab Engines	09-A-319-S2
37-DQE-1	37-DQE	Electrification Lab	10-A-163-S1
1-PSA-1	1-PSA1	Brake Bonding Booth	Grandfathered
1-PCA-1	1-PCA	Brake Bonding Shot Blast M12212	Grandfathered
1-PDA-1	1-PDA	Plastilock Air Dry Cabinets	Grandfathered
1-UUS-1B	1-UUS(2)	#1 Boiler	71-A-089-S4
2-UUS-1B	2-UUS(2)	#2 Boiler	71-A-090-S3
3-UUS-1B	3-UUS(2)	#3 Boiler	12-A-339-S1
2-WBB-1	2-WBB	C-26 Bulk Lime Delivery	91-A-175
3-PQU-1	3-PQU	163-W1 Backhoe Assembly PT Check 1	Exempt ⁽¹⁾
3-PQU-2	3-PQU	163-W1 Backhoe Assembly PT Check 2	Exempt ⁽¹⁾
3-PQU-3	3-PQU	163-W1 Backhoe Assembly PT Check 3	Exempt ⁽¹⁾
3-PQU-4	3-PQU	163-W1 Backhoe Assembly PT Check 4	Exempt ⁽¹⁾
4-PQU-1	4-PQU	163-W1 Backhoe Assembly Function Test 1	Exempt ⁽¹⁾
4-PQU-2	4-PQU	163-W1 Backhoe Assembly Function Test 2	Exempt ⁽¹⁾
4-PQU-3	4-PQU	163-W1 Backhoe Assembly Function Test 3	Exempt ⁽¹⁾
5-PQU-1	5-PQU	163-W1 Backhoe QA Test Module	Exempt ⁽¹⁾
6-PQU-1	6-PQU	187-W3 H Crawler Assembly Function Test; C-	Exempt ⁽¹⁾
7-PQU-1	7-PQU	187-W4 H Crawler Assembly Function Test; W-	Exempt ⁽¹⁾
8-PQU-1	8-PQU	187-W3 H Crawler Assembly Function Test; E-	Exempt ⁽¹⁾
9-PQU-1	9-PQU	163-W1 Backhoe Assembly Tire & Bucket Mount	Exempt ⁽¹⁾
10-PQU-1	10-PQU	120 W4 HSD Assembly 1	Exempt ⁽¹⁾
12-PQU-1	12-PQU	158-W5 Skid Steer Fuel Station	Exempt ⁽¹⁾
15-PQU-1 15-PQU-2	15-PQU	158-W5 Skid Steer CTL Tracking Test	Exempt ⁽¹⁾
		158-W5 Skid Steer CTL Tracking Test	Exempt ⁽¹⁾
		158-W5 Skid Steer CTL Tracking Test	Exempt ⁽¹⁾
16-PQU-1	16-PQU	158-W5 CTL/Skid Steer Repair Station	Exempt ⁽¹⁾
17-PQU-1	17-PQU	158-W5 CTL/Skid Steer Test Station	Exempt ⁽¹⁾
18-PQU-1	18-PQU	177 Z Log Loader Indoor Test Cycle	Exempt ⁽¹⁾
19-PQU-1	19-PQU	177 Z FB/Harvester Indoor Test Cycle	Exempt ⁽¹⁾
20-PQU-1	20-PQU	177 Z/FB/Harvester Indoor Test Cycle	Exempt ⁽¹⁾
22-PQU-1	22-PQU	BHL Mobile Equipment Test	Exempt ⁽¹⁾
23-PQU-1	23-PQU	W3 Crawler Mobile Equipment	Exempt ⁽¹⁾
24-PQU-1	24-PQU	W5 HSD, CWL Loader, Production Crawler Assy	Exempt ⁽¹⁾
3-UUE-1	3-UUE	#5 Standby Generator	94-A-042-S1
4-UUE-1	4-UUE	#6 Standby Generator	94-A-043-S1
5-UUE-1	5-UUE	#7 Standby Generator	94-A-044-S1
6-UUE-1	6-UUE	#8 Standby Generator	94-A-045-S1
7-UUE-1	7-UUE	#9 Standby Generator	94-A-046-S1

8-UUE-1	8-UUE	#10 Standby Generator	94-A-047-S1
1-PBT-1	1-PBT	Bulk Storage Tank (10,000 gal.)	00-A-508
2-PBT-1	2-PBT	Bulk Storage Tank (10,000 gal.)	00-A-509
3-PBT-1	3-PBT	Bulk Storage Tank (10,000 gal.)	00-A-510
4-PBT-1	4-PBT	Bulk Storage Tank (10,000 gal.)	00-A-511
5-PBT-1	5-PBT	Bulk Storage Tank (10,000 gal.)	00-A-512
6-PBT-1	6-PBT	Bulk Storage Tank (10,000 gal.)	00-A-513
7-PBT-1	7-PBT	Bulk Storage Tank (10,000 gal.)	00-A-514
8-PBT-1	8-PBT	Bulk Storage Tank (10,000 gal.)	00-A-515
9-PBT-1	9-PBT	Bulk Storage Tank (10,000 gal.)	00-A-516
10-PBT-1	10-PBT	Bulk Storage Tank (10,000 gal.)	00-A-517
11-PBT-1	11-PBT	Bulk Storage Tank (10,000 gal.)	00-A-518
12-PBT-1	12-PBT	Bulk Storage Tank (10,000 gal.)	00-A-519
13-PBT-1	13-PBT	Bulk Storage Tank (10,000 gal.)	00-A-520
14-PBT-1	14-PBT	Bulk Storage Tank (10,000 gal.)	00-A-521
15-PBT-1	15-PBT	Bulk Storage Tank (10,000 gal.)	00-A-522
16-PBT-1	16-PBT	Bulk Storage Tank (10,000 gal.)	00-A-523
1-UBT-1	1-UBT	G2-Emergency Generator Diesel Tank	01-A-687
1-UBT-2	1-UBT	G2-Emergency Generator Diesel Tank	01-A-688
2-UBT-1	2-UBT	G2-Emergency Generator Diesel Tank	01-A-689
2-UBT-2	2-UBT	G2-Emergency Generator Diesel Tank	01-A-690
1-PWA-1	1-PWA	942-W2 Reclaim Weld Booth	98-A-595
2-PWA-1	2-PWA	155-W5 Reclaim Weld Booth	03-A-163
3-PXP-1F	3-PXP	Plasma Arc 15683 (2 Torches)	Fugitive
5-DWA-1	5-DWA	314-1XE Rework Weld Booth	98-A-931
18-UVM-1F	18-UVM	Air Makeup Unit X-21, All Weather Test Site	00-A-817
1-GWA-1F	1-GWA	BHL Mainframe Welding	Fugitive
2-GWA-1F	2-GWA	BHL Component Welding	Fugitive
3-GWA-1F	3-GWA	Crawler Fabrication Welding	Fugitive
4-GWA-1F	4-GWA	SSL Boom Welding	Fugitive
5-GWA-1F	5-GWA	SSL Mainframe Welding	Fugitive
6-GWA-1F	6-GWA	Service Parts Welding	Fugitive
7-GWA-1F	7-GWA	Crawler Construction Frame Welding	Fugitive
8-GWA-1F	8-GWA	Crawler and Forestry Large Frame Welding	Fugitive
7-PCW-1	7-PCW	BHL Paint Pretreatment Washer 1&2	Exempt
7-PCW-2	7-PCW	BHL Paint Pretreatment Washer 1&2	Exempt
8-PCW-1	8-PCW	CWL Paint Pretreatment Washer 1&2	Exempt
8-PCW-2	8-PCW	CWL Paint Pretreatment Washer 1&2	Exempt
9-PCW-1F	9-PCW	Forestry Pre-paint Wash Bay	Fugitive
1-PUG-1	1-PUG	Crawler Paint Wash Heater	Exempt
2-PUG-1	2-PUG	Crawler Paint Wash Heater	Exempt
3-PUG-1	3-PUG	BHL Paint Wash Heater	Exempt

4-PUG-1	4-PUG	BHL Paint Washer Heater	Exempt
5-PUG-1	5-PUG	Forestry Pre-paint Wash Bay Heater	Fugitive
6-PUG-1 6-PUG-2	6-PUG	Forestry Pre-paint Wash Booth Heaters	Fugitive
5-UUS-1	5-UUS	Tank Farm Boiler	Exempt
1-UUE-1	1-UUE	Powerhouse Emergency Generator	Exempt ⁽¹⁾
2-UUE-1	2-UUE	Telephone Service Backup Generator	Exempt ⁽¹⁾
2-UUW-1	2-UUW	#8 Fire Well	Exempt ⁽¹⁾
1-UUW-1	1-UUW	#6 Fire Well	Exempt ⁽¹⁾
9-UUE-1	9-UUE	Computer Room Backup Generator	Exempt ⁽¹⁾
10-UUE-1	10-UUE	Sanitary Wastewater Treatment Back-up Generator	Exempt ⁽¹⁾

⁽¹⁾ This equipment meets construction permit exemption 567 IAC 22.1(2)"r", an internal combustion engine with a brake horsepower rating of less than 400 measured at the shaft.

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
1-GHG	Factory Gas Usage (Space heaters and water heaters, all individually under 10 MMBtu/hr)
1-DXL	Laser Cutter
2 DXP	Experimental Plasma Arc
1-DBT	X-18 Diesel Tank #1
1-GVH	12 Maintenance Torpedo Heaters
1-MBT	W2 Gasoline Tank (1000 gal.)
1-MXF	Tool Room Flame Cut-14283 (2 Torches)
1-PWT	288-H 4 Solder and Brazing Tables
1-PXL	Laser Cut-16312
2-PXL	Laser Cut-16306
26-PXL	Laser Cut 170139
2-DCW	X-18 NG Fired Wash Unit
2-DUG	X-18 NG Hill Wash Heater
3-DCW	X-Shop Wash Bay
3-DUG	X-Shop Wash Heater
2-DXF	Product Engineering Flame Cut 16490 (2 torches)
2-MSP	955 K Test Paint Booth
1-MCW	Bldg. F Maintenance Wash Booth
1-PCW	W4 Crawler Wash Booth
2-PCW	W5 Skid Steer Wash Booth
6-PCW	W-1 NG Fired Wash Unit
11-PCW	SS Production Wash System
7-PUG	Backhoe Wash Heater

Insignificant Emission Unit Number	Insignificant Emission Unit Description
8-PUG	Skid Steer Wash Heater
9-PUG	Crawler Wash Heater
10-PUG	1050 Crawler Wash Heater
11-PUG	SS Production Wash Heater
13-PUG	1050 Crawler Final Wash Heater
10-PCW	1050 Crawler Wash Bay
13-PCW	1050 Crawler Final Wash Booth
1-MUG	Maintenance Wash Heater

Insignificant Activities Equipment List (Small Unit Exemption) ⁽²⁾

Insignificant Emission Unit Number	Insignificant Emission Unit Description
12-PCA	Heat Treat Shot Blast – 15158
14-PCA	Plate Cleaning Shot Blast – 16258
16-PCA	Plate Cleaning Shot Blast – 16445
17-PCA	Plate Cleaning Shot Blast – 16444
18-PCA	Skid Steer Shot Blast – M16766
5-PXP	Hi-Def Plasma 139479
5-PXL	Laser Cut 16493
6-PXF	Flame Cut-15728
6-PXP	HI-Def Plasma 137635
7-PXL	Laser Cut 16590
8-PXL	Laser Cut 16591
9-PXL	Laser Cut-16592
10-PXL	Laser Cut-16593
11-PXL	Laser Cut 16757
12-PXL	Laser Cut 16759
13-PXL	Laser Cut – 16761
14-PXL	Laser Cut – 16763
17-PXL	Laser Cut 17024
18-PXL	Laser Cut-17026
19-PXL	Laser Cut-17104
20-PXL	Laser Cut 137201
21-PXL	Laser Cut 137203
22-PXL	Laser Cut 138934
23-PXL	Laser Cut 139236
24-PXL	Laser Cut 141007
25 PXL	Laser Cut 143007
1-PSR	58-F3 Anti-Rust Spray Booth
2-DQU	X1E Mobile Unit Test 1

Insignificant Emission Unit Number	Insignificant Emission Unit Description
3-DQU	X1E Mobile Unit Test 2
4-DQU	X1E Mobile Unit Test 3
5-DQU	X1E Mobile Unit Test 4
6-DQU	X1E Mobile Unit Test 5
7-DQU	X1EE Mobile Unit Test 1
8-DQU	X1EE Mobile Unit Test 2
9-DQU	X1EE Mobile Unit Test 3
10-DQU	X1EE Mobile Unit Test 4
11-DQU	X1EE Mobile Unit Test 5
12-DQU	X1EE Mobile Unit Test 6
13-DQU	X1EE Mobile Unit Test 7
14-DQU	X18 Mobile Unit Test
15-DQU	X18 Mobile Unit Test 2
16-DQU	X18E Mobile Unit Test 1
17-DQU	X18E Mobile Unit Test 2
18-DQU	X18E Mobile Unit Test 3
19-DQU	X18EE Mobile Test Unit 1
20-DQU	X18EE Mobile Test Unit 2
21-DQU	B2 Mobile Test Unit 1
22-DQU	B2 Mobile Test Unit 2
23-DQU	B2 Mobile Test Unit 3
24-DQU	B2 Mobile Unit Test 4
25-DQU	B2 Mobile Unit Test 5
26-DQU	B2 Mobile Unit Test 6
27-DQU	B2 Mobile Unit Test 7
28-DQU	X1E Mobile Unit Test 6
4-DQE	X2 Bay 4 AC Test Lab (mobile)
5-DQE	X2 Bay 5 Misc. Test (mobile)
20-DQE	X4 Bay 2 Exp. Test 3
21-DQE	X4 Bay 2 Exp. Test 4
22-DQE	X4 Bay 3 Exp. Test 1
23-DQE	X4 Bay 3 Exp. Test 2
27-DQE	X4 Bay 5 Cold Room (mobile)
28-DQE	X4 Bay 6 Wind Tunnel (mobile)
29-DQE	X4 Bay 1 Mobile Unit Test 1
30-DQE	Z Wind Tunnel 1
31-DQE	Z Wind Tunnel 2
32-DQE	XE Mobile Unit Test
38-DQE	Experimental Cold Trailer
39-DQE	Cold Trailer Mobile Equipment Exhaust
40-DQE	Mobile Test Bay

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

II. Plant-Wide Conditions

Facility Name: John Deere Dubuque Works
Permit Number: 01-TV-021R2-M004

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: June 9, 2014
Ending on: June 8, 2019

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"

III. Emission Point-Specific Conditions

Facility Name: John Deere Dubuque Works
Permit Number: 01-TV-021R2-M004

Emission Point ID Numbers: C2-DSP-1, C2-DSP2

Associated Equipment

Associated Emission Unit ID Number: 2-DSP
Emissions Control Equipment ID Numbers: 10-EFM
Emissions Control Equipment Description: Dry Filter

Emission Unit vented through these Emission Points: 2-DSP
Emission Unit Description: Parts and Vehicle Touchup Paint Booth
Raw Material/Fuel: Paint
Rated Capacity: 11.90 gal/hr

Applicable Requirements

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

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

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

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr/dscf
Authority for Requirement: 567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.83 tons/yr.
Authority for Requirement: DNR Construction Permit 88-A-197-S

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40

CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

Operational Limits & Requirements

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

Process throughput:

1. Total annual paint consumption through this booth shall not exceed 1,000 gallons per 12-month rolling period, rolled monthly.

Reporting & Recordkeeping:

Records shall be kept on-site for at least five (5) years and shall be available for inspection by the Department. Records shall be maintained in legible and orderly manner and shall indicate the following:

1. A log of monthly paint usage and 12-month totals, rolled monthly.

Authority for Requirement: DNR Construction Permit 88-A-197-S

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

Spray Booth Filter Agency Operation & 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.

Recordkeeping 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 manufacturers recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 3-DSP-1

Associated Equipment

Associated Emission Unit ID Number: 3-DSP

Emission Unit vented through these Emission Points: 3-DSP
Emission Unit Description: Experimental Parts Touch-up Booth
Raw Material/Fuel: Paint
Rated Capacity: 3.2 gal/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

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

Authority for Requirement: DNR Construction Permit 16-A-246
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: DNR Construction Permit 16-A-246
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 5.0 tons/yr.

Authority for Requirement: DNR Construction Permit 16-A-246

Pollutant: Total Hazardous Air Pollutants (HAPs)

Emission Limit(s): 2.6 lb/gal solids ⁽²⁾

⁽²⁾ Per 40 CFR §63.3890(b)(1), each existing general use coating affected source is limited to organic hazardous air pollutant (HAP) emissions of no more than 2.6 pounds organic HAP per gallon coating solids (0.31 kg/l) used during each 12-month compliance period.

Authority for Requirement: DNR Construction Permit 16-A-246
567 IAC 23.1(4)"cm" ⁽³⁾

⁽³⁾ Iowa reference to National Emission Standard for Hazardous Air Pollutant for the Surface Coating of Miscellaneous Metal Parts and Products (40 CFR Part 63, Subpart MMMM).

Operational Limits & Requirements

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

National Emission Standards for Hazardous Air Pollutants (NESHAP):

The following subparts apply to this Emission Unit:

Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
A	General Provisions	NA	23.1(4)	§63.1 – §63.15
MMMM	National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products	Existing General Use	23.1(4)"cm"	§63.3880 – §63.3981

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

Authority for Requirement: 40 CFR Subpart MMMM
567 IAC 23.1(4)"cm"

Operational Limits & Requirements

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

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The owner or operator shall maintain the following daily records:
 - i. The identification of each VOC-containing material used in the Experimental Parts Touch-up Booth (EP 3-DSP-1).
 - ii. The amount, in gallons, of each VOC-containing material used in the Experimental Parts Touch-up Booth (EP 3-DSP-1). For the purposes of calculating emissions, all VOC may be considered emitted on the day the materials are delivered to the facility or to the production line.
- B. The owner or operator shall maintain the following monthly records:
 - i. The identification of each VOC-containing material used in the Experimental Parts Touch-up Booth (EP 3-DSP-1).
 - ii. The amount, in gallons, of each VOC-containing material used at the Experimental Parts Touch-up Booth (EP 3-DSP-1). For the purposes of

calculating emissions, all VOC may be considered emitted on the day the materials are delivered to the facility or to the production line.

- iii. The amount of VOC emissions from material usage for the Experimental Parts Touch-up Booth (EP 3-DSP-1), in tons.
 - iv. The 12-month rolling total of the amount of VOC emissions from material usage for the Experimental Parts Touch-up Booth (EP 3-DSP-1), in tons.
- C. If the 12-month rolling total of the VOC emissions from material usage for the Experimental Parts Touch-up Booth (EP 3-DSP-1) exceed 4.0 tons, the owner or operator shall immediately begin keeping the following daily records:
- i. The amount of VOC emissions from material usage for the Experimental Parts Touch-up Booth (EP 3-DSP-1), in tons.
 - ii. The 365-day rolling total of the amount of VOC emissions from material usage for the Experimental Parts Touch-up Booth (EP 3-DSP-1), in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from material usage for the Experimental Parts Touch-up Booth (EP 3-DSP-1) drops below 4.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per Section C, shown above. If the emissions once again exceed 4.0 tons, daily recordkeeping will be required per Section C, shown above.

- D. The owner or operator may take credit for any waste VOC shipped off-site. To take credit the owner or operator shall record the amount of the waste shipped off-site each day, and analyze the VOC content of the waste once every calendar quarter. The sample analyzed shall be taken as a representative sample (as defined in 40 CFR §260.10) of the waste sent off-site for that quarter and shall be used as representative until the subsequent quarter's analysis is received. The credit (calculated from the most current analysis and the amount shipped off-site) may be subtracted from the VOC rolling totals as of the date the waste is shipped off-site.
- E. The owner or operator shall limit organic HAP emission to the atmosphere as per the emission requirements of 40 CFR §63.3890.
- F. The owner or operator shall comply with the compliance procedures and monitoring requirements of 40 CFR §63.3900.
- G. The owner or operator shall submit the notifications for NESHAP MMMM as required by 40 CFR §63.3910.
- H. The owner or operator shall submit the reports for NESHAP MMMM as required by 40 CFR §63.3920.
- I. The owner or operator shall maintain records for NESHAP MMMM as required by 40 CFR §63.3930.
- J. Retain Material Safety Data Sheets (MSDS) for VOC/HAP containing materials (coating, primer, adhesive, solvent, etc.) used.
- K. The owner or operator shall operate, inspect and maintain all the equipment associated with the process and the Dry Filters (13-EFM) in accordance with good air pollution

control practices and manufacturer's specifications.

- i. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from the inspection or maintenance of the Dry Filters (13-EFM).

Authority for Requirement: DNR Construction Permit 16-A-246

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 46

Stack Diameter (inches): 30

Stack Exhaust Flow Rate (scfm): 19,200

Stack Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 16-A-246

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Spray Booth Filter Agency Operation & 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.

Recordkeeping 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 manufacturers recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 1-MSP-1

Associated Equipment

Associated Emission Unit ID Number: 1-MSP
Emissions Control Equipment ID Number: 6-EFM
Emissions Control Equipment Description: Woodfiber Filter Mat

Emission Unit vented through this Emission Point: 1-MSP
Emission Unit Description: 131-W2 Carpenter Spray Paint Booth
Raw Material/Fuel: Paint
Rated Capacity: 12.6 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(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permit 80-A-093-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: DNR Construction Permit 80-A-093-S1
567 IAC 23.4(13)

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

Process throughput:

1. The maximum amount of coating materials (i.e. paints, solvents, etc.) utilized in the affected emission unit, EU 1-MSP, shall not exceed 4600 gallons in any rolling twelve-month period.
2. The maximum volatile organic compound (VOC) content of the coating materials, as applied, utilized in the affected emission unit, EU 1-MSP, shall not exceed 7.0 pounds per gallon.

Reporting & Recordkeeping:

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

1. The permit holder, owner and operator of the facility shall maintain a log of all materials used in the affected emission unit, EU 1-MSP, and their respective VOC content (in lb/gal).
2. The permit holder, owner and operator of the facility shall record on a monthly basis, the amount of coating material used in the affected emission unit, EU 1-MSP, in gallons. Calculate and record 12-month rolling totals for material usage.
3. The permit holder, owner and operator of the facility shall maintain a copy of the Material Safety Data Sheet (MSDS) for each material used in the affected emission unit.

Authority for Requirement: DNR Construction Permit 80-A-093-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 50

Stack Diameter (inches): 42

Stack Exhaust Flow Rate (scfm): 24,800

Stack Temperature (°F): Ambient

Discharge Style: Vertical unobstructed

Authority for Requirement: DNR Construction Permit 80-A-093-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Spray Booth Filter Agency Operation & 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.

Recordkeeping 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 manufacturers recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 5-PBD-1

Associated Equipment

Associated Emission Unit ID Numbers: 5-PBD

Emission Unit vented through this Emission Point: 5-PBD
Emission Unit Description: 186-W3 Crawler Paint Kitchen
Raw Material/Fuel: Paint
Rated Capacity: N/A

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.

There are no emission limits at this time.

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 34

Stack Diameter (inches): 22 x 22

Stack Exhaust Flow Rate (scfm): 6000

Stack Temperature (°F): Ambient

Discharge Style: Vertical obstructed

Authority for Requirement: DNR Construction Permit 03-A-714

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator

shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 6-PBD-1

Associated Equipment

Associated Emission Unit ID Numbers: 6-PBD

Emission Unit vented through this Emission Point: 6-PBD
Emission Unit Description: 163-W1 Backhoe Paint Kitchen 1
Raw Material/Fuel: Paint
Rated Capacity: 63,444 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.

There are no emission limits at this time.

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 34
Stack Diameter (inches): 22 x 22
Stack Exhaust Flow Rate (scfm): 6000
Stack Temperature (°F): Ambient
Discharge Style: Vertical obstructed
Authority for Requirement: DNR Construction Permit 03-A-715

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the

emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 7-PBD-1

Associated Equipment

Associated Emission Unit ID Numbers: 7-PBD

Emission Unit vented through this Emission Point: 7-PBD
Emission Unit Description: 163-W1 Paint Kitchen 2
Raw Material/Fuel: Paint
Rated Capacity: 63,444 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(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-250-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 05-A-250-S1
567 IAC 23.3(2)"a"

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height (feet): 34
- Stack Diameter (inches): 22 x 22
- Stack Exhaust Flow Rate (scfm): 6000
- Stack Temperature (°F): 70
- Discharge Style: Vertical obstructed
- Authority for Requirement: DNR Construction Permit 05-A-250-S1

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 8-PBD-1

Associated Equipment

Associated Emission Unit ID Numbers: 8-PBD

Emission Unit vented through this Emission Point: 8-PBD
Emission Unit Description: Crawler Paint Kitchen
Raw Material/Fuel: Paint
Rated Capacity: N/A

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.

There are no emission limits at this time.

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 34
Stack Diameter (inches): 22 x 22
Stack Exhaust Flow Rate (scfm): 6000
Stack Temperature (°F): Ambient
Discharge Style: Vertical obstructed
Authority for Requirement: DNR Construction Permit 05-A-769

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator

shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: Crawler Paint Booths

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Crawler Paint Booths

Table: Crawler Paint Booths

Emission Point Number	Emission Unit Number	Emission Unit Description	Maximum Design Capacity	Control Equipment & ID	DNR Construction Permits
17-PSP-1	17-PSP	Crawler Base Coat Paint Booth	2 Spray guns, each gun capable of 7.1 gallons/hour	Dry Filters 14-EFM	97-A-990-S2
17-PSP-2	17-PSP	Crawler Base Coat Paint Booth	2 Spray guns, each gun capable of 7.1 gallons/hour		97-A-991-S2
18-PSP-1	18-PSP	Crawler Top Coat Paint Booth	2 Spray guns, each gun capable of 7.1 gallons/hour	Dry Filters 15-EFM	97-A-992-S2
18-PSP-2	18-PSP	Crawler Top Coat Paint Booth	2 Spray guns, each gun capable of 7.1 gallons/hour		97-A-993-S2

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

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

See DNR Construction permits in Table: Crawler Paint Booths

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

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf, 0.82 lb/hr ⁽²⁾

Authority for Requirement: 567 IAC 23.4(13)

See DNR Construction permits in Table: Crawler Paint Booths

⁽²⁾ Limit based on stack test data collected at emission points 19-PSP-2, 20-PSP-1, and 20-PSP-2 in October 2015.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 72.5 tons/yr ⁽³⁾

Authority for Requirement: See DNR Construction permits in Table: Crawler Paint Booths

⁽³⁾ Total allowed for the following emission units: Crawler Base Coat Spray Booth (EU 17-PSP) and Crawler Top Coat Spray Booth (EU 18-PSP). See Operating Requirements and Associated Recordkeeping, shown below.

Pollutant: Total HAP

Emission Limit(s): 2.6 lb/gal ⁽⁴⁾

Authority for Requirement: 40 CFR Part 63 Subpart M

567 IAC 23.1(4)"cm"

See DNR Construction permits in Table: Crawler Paint Booths

⁽⁴⁾ Per 40 CFR §63.3890(b)(1), each existing general use coating affected source is limited to organic hazardous air pollutant (HAP) emissions of no more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period).

Operational Limits & Requirements

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

National Emission Standards for Hazardous Air Pollutants (NESHAP):

The following subparts apply to the emission unit(s) in these permits:

EU ID	Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
17-PSP	A	General Conditions	23.1(3)	§63.1 – §63.15
18-PSP	MMMM	Surface Coating of Miscellaneous Metal Parts and Products	567 IAC 23.1(4)"cm"	§63.3880 – §63.3981

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

Authority for Requirement: 40 CFR Subpart M

567 IAC 23.1(4)"cm"

Operating Requirements and Associated Recordkeeping

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

- A. Total VOC emissions from emission units 17-PSP and 18-PSP shall not exceed 72.5 tons per twelve-month rolling period.
- B. Retain Material Safety Data Sheets (MSDS) for all reagents, surface coating materials, solvents and other HAP and VOC-containing materials used in emission units 17-PSP and 18-PSP.
- C. Record the VOC content in pounds per gallon for each surface coating material and solvent used in emission units 17-PSP and 18-PSP.
- D. Record daily the amount of each surface coating material and solvent used in emission units 17-PSP and 18-PSP in gallons. Calculate and record 12-month rolling totals. For the purposes of recording daily surface coating material and solvent usage, the facility shall assume all purchased materials are used the day the materials are delivered to the booth. Reclaimed solvent previously accounted for as emitted VOC shall be excluded from the 12-month rolling total.
- E. Calculate the VOC emissions from emission units 17-PSP and 18-PSP on a monthly basis and keep a 12-month rolling total. Records for VOC emissions shall be kept on a monthly basis until the VOC emissions exceed 58 TPY. At this point the owner or operator shall immediately begin keeping a 365-day rolling total amount of VOC emitted from emission units 17-PSP and 18-PSP. Calculation requirements will revert back to a monthly basis if the 12-month rolling total of VOC is returned to below 58 TPY.
- F. The owner or operator may take credit for any waste VOC shipped off-site. The owner or operator shall record the amount of waste shipped off-site from emission units 17-PSP and 18-PSP, and also analyze the VOC content of the waste once every calendar year quarter. The sample analyzed shall be taken as a representative sample (as defined in 40 CFR §260.10) of the waste sent off-site for that quarter and shall be taken as representative until the subsequent quarter's analysis is received. The credit (calculated from the most current analysis and the amount shipped off-site) may be subtracted from the VOC rolling totals as of the date the waste is shipped off-site.
- G. The owner or operator shall limit organic HAP emission to the atmosphere as per the emission requirements of 40 CFR §63.3890.
- H. The owner or operator shall comply with the compliance procedures and monitoring requirements of 40 CFR §63.3900.
- I. Submit the notifications for NESHAP MMMM as required by 40 CFR 63.3910.
- J. Submit the reports for NESHAP MMMM as required by 40 CFR 63.3920.

K. Maintain records for NESHAP MMMM as required by 40 CFR 63.3930.

L. The owner or operator shall maintain records of control equipment inspections and maintenance.

Authority for Requirement: See DNR Construction permits in Table: Crawler Paint Booths

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft., from the ground): 56.5 feet

Stack Opening (inches, dia.): 48 inches

Exhaust Flow Rate (acfm): 26,800

Exhaust Temperature (°F): 70

Discharge Style: Vertical, unobstructed

Authority for Requirement: See DNR Construction permits in Table: Crawler Paint Booths

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Spray Booth Filter Agency Operation & Maintenance Plan

Weekly

- Inspect the pressure differential of the spray booth filters. The pressure differential is an indicator for the operating efficiency of the collection system.
- Maintain a written record of the observation and any action resulting from the inspection.

Recordkeeping and Reporting

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

Quality Control

- The filter equipment will be operated within the range of normal operating pressure and maintained according to the manufacturers recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Backhoe Paint Booths

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Backhoe Paint Booths

Table: Backhoe Paint Booths

Emission Point Number	Emission Unit Number	Emission Unit Description	Control Equipment & ID	Raw Material & Rated Capacity (gal/hr)	DNR Construction Permits
19-PSP-1	19-PSP	Backhoe Primer Paint Booth ⁽¹⁾	Dry Filter 19-PSP-1	Paint 10	98-A-081-S2
19-PSP-2			Dry Filter 19-PSP-2		98-A-082-S2
20-PSP-1	20-PSP	Backhoe Topcoat Paint Booth ⁽¹⁾	Dry Filter 20-PSP-1	Paint 10	98-A-083-S1
20-PSP-2			Dry Filter 20-PSP-2		98-A-084-S1
22-PSP-1	22-PSP	Backhoe Touchup Paint Booth	Dry Filter 22-PSP-1	Paint 10	14-A-428-S1

⁽¹⁾ The construction permits incorrectly listed 19-PSP as the topcoat booth and 20-PSP as the primer booth.

Applicable Requirements

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

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

Table: Backhoe Paint Booths – Emission Limits

Emission Point Number	Associated Emission Unit Number	Opacity Limit 567 IAC 23.3(2)"d"	PM Limit (gr./dscf) 567 IAC 23.4(13)	PM Limit (lb/hr)	PM ₁₀ Limit (lb/hr)	PM _{2.5} Limit (lb/hr)	Authority for Requirement (Construction Permit Number)
19-PSP-1	19-PSP	40% ⁽¹⁾	0.01	1.04	0.66	0.48	98-A-081-S2
19-PSP-2		40% ⁽¹⁾	0.01	1.04	0.66	0.48	98-A-082-S2
20-PSP-1	20-PSP	40% ⁽¹⁾	0.01	1.04	0.66	0.48	98-A-083-S1
20-PSP-2		40% ⁽¹⁾	0.01	1.04	0.66	0.48	98-A-084-S1
22-PSP-1	22-PSP	40% ⁽¹⁾	0.01	2.08	1.32	0.96	14-A-428-S1

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 89.25 TPY ⁽²⁾

Authority for Requirement: See DNR Construction permits in Table: Backhoe Paint Booths-
Emission Limits

Pollutant: total HAP

Emission Limit(s): 2.6 lb organic HAP/gal solids

Authority for Requirement: See DNR Construction permits in Table: Backhoe Paint Booths
40 CFR Subpart Mmmm
567 IAC 23.1(4)"cm" ⁽³⁾

⁽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).

⁽²⁾ Limit for units 19-PSP, 20-PSP and 22-PSP combined.

⁽³⁾ IDNR reference to NESHAP Subpart Mmmm – Surface Coating of Miscellaneous Metal Parts & Products (40 CFR §63.3880). For an existing general use coating, organic HAP emissions are limited to no more than 2.6 lb organic HAP per gallon of coating solids used during each 12-month compliance period.

Operational Limits & Requirements

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

NESHAP Requirements

These sources are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart Mmmm – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart Mmmm
567 IAC 23.1(4)"cm"

Operating Limits

Operating limits for this emission unit shall be:

- A. Total VOC emissions from emission units EU 19-PSP, 20-PSP and 22-PSP shall not exceed 89.25 tons per twelve-month rolling period.
- B. The owner or operator shall limit organic HAP emission to the atmosphere as per the emission requirements of 40 CFR §63.3890.
- C. The owner or operator shall comply with the compliance procedures and monitoring

requirements of 40 CFR §63.3900.

D. Maintain the pollution control equipment according to the manufacturer's specifications.

Reporting & Recordkeeping:

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. Record the VOC content in pounds per gallon for each surface coating material and solvent used in emission units EU 19-PSP, 20-PSP and 22-PSP.
- B. Record daily the amount of each surface coating material and solvent used in emission units EU 19-PSP, 20-PSP and 22-PSP in gallons. Calculate and record 12-month rolling totals. For the purposes of recording daily surface coating material and solvent usage, the facility shall assume all purchased materials are used the day the materials are delivered to the booth. Reclaimed solvent previously accounted for as emitted VOC shall be excluded from the 12-month rolling total.
- C. Calculate the VOC emissions from emission units EU 19-PSP, 20-PSP and 22-PSP on a monthly basis and keep a 12-month rolling total. Records for VOC emissions shall be kept on a monthly basis until the VOC emissions exceed 71.4 tons/yr. At this point the owner or operator shall immediately begin keeping a 365-day rolling total amount of VOC emitted from emission units EU 19-PSP, 20-PSP and 22-PSP. Calculation requirements will revert back to a monthly basis if the 12-month rolling total of VOC is returned to below 71.4 tons/yr.
- D. The owner or operator may take credit for any waste VOC shipped off-site. The owner or operator shall record the amount of waste shipped off-site from EU 19-PSP, 20-PSP and 22-PSP, and also analyze the VOC content of the waste once every calendar year quarter. The sample analyzed shall be taken as a representative sample (as defined in 40 CFR §260.10) of the waste sent off-site for that quarter and shall be taken as representative until the subsequent quarter's analysis is received. The credit (calculated from the most current analysis and the amount shipped off-site) may be subtracted from the VOC rolling totals as of the date the waste is shipped off-site.
- E. Retain Material Safety Data Sheets (MSDS) for all reagents, surface coating materials, solvents and other HAP and VOC-containing materials used in emission units EU 19-PSP, 20-PSP and 22-PSP.
- F. Submit the notifications for NESHAP MMMM as required by 40 CFR 63.3910.
- G. Submit the reports for NESHAP MMMM as required by 40 CFR 63.3920.
- H. Maintain records for NESHAP MMMM as required by 40 CFR 63.3930.

Authority for Requirement: See DNR Construction permits in Table: Backhoe Paint Booths

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point Number	Stack Height (ft, from the ground)	Stack Diameter (inches)	Exhaust Flow Rate (scfm)	Stack Temperature (°F)	Discharge Style	Authority for Requirement
19-PSP-1	56	48	26,775	70	Vertical, unobstructed	98-A-081-S2
19-PSP-2	56	48	26,775	70	Vertical, unobstructed	98-A-082-S2
20-PSP-1	56	48	26,775	70	Vertical, unobstructed	98-A-083-S1
20-PSP-2	56	48	26,775	70	Vertical, unobstructed	98-A-084-S1
22-PSP-1	60	56	46,200	70	Vertical, unobstructed	14-A-428-S1

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

Monitoring Requirements

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

Stack Testing:

Emission Point to be Tested – EP 19-PSP-1 or EP 19-PSP-2

Pollutant – Particulate Matter

Stack Test to be Completed by June 8, 2016

Test Method – 40 CFR Part 60, Appendix A, Method 5 and 40 CFR 51 Appendix M, Method 22

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10

Stack Test to be Completed by June 8, 2016

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

Authority for Requirement – 567 IAC 22.108(3)

Emission Point to be Tested – EP 22-PSP-1

Pollutant – Particulate Matter

Stack Test to be Completed by ⁽¹⁾

Test Method – 40 CFR Part 60, Appendix A, Method 5 and 40 CFR 51 Appendix M, Method 202
Authority for Requirement – DNR Construction Permits 14-A-428-S1

Emission Point to be Tested – EP 22-PSP-1
Pollutant – PM-10
Stack Test to be Completed by ⁽¹⁾
Test Method – 40 CFR 51, Appendix M, 201A with 202 or Approved alternative
Authority for Requirement – DNR Construction Permit 14-A-428-S1

Pollutant – Opacity
Stack Test to be Completed by ⁽¹⁾
Test Method – 40 CFR 60, Appendix A, Method 9
Authority for Requirement – DNR Construction Permit 14-A-428-S1

⁽¹⁾ Tests must 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.

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)

Backhoe Paint Booth Agency O&M Plan

Performance Indicator Type:

Each paint booth is equipped with a gauge to measure the differential pressure through the dry filter control device. This is observed to verify the equipment is operating effectively.

Applicable Regulations:

PM Emission Limit: 0.01 grains per dry standard cubic foot
(Limit for each stack)

PM₁₀ Emission Limit: 0.66 pounds per hour
(Limit for each stack)

PM_{2.5} Emission Limit: 0.48 pounds per hour
(Limit for each stack)

Monitoring Approach:

1. Indicator:
Pressure checks while the unit is in operation will be conducted no less than three times per week. These readings will be used as an indicator of the controls operation efficiency. These checks are not required if the paint booth is not operating.
2. Measurement Approach:
Each paint booth is equipped with a measurement device to measure the pressure differential across the filters. The measurement readings shall be documented.
3. Indicator Range:
Prime Booth Paint Dry Filter System ΔP (Normal Operating Range 0.4-2.0)
Top Coat Booth Paint Dry Filter System ΔP (Normal Operating Range 0.4-2.0)
Touchup Booth Paint Dry Filter System ΔP (Normal Operating Range 0.2-2.0)
4. Corrective Action:
If the pressure differential is outside of the normal operating range, this must be initiated within 8 hours. This could include checking the measuring device or inspection of the control device.
5. If at any time the control is observed to be non-functioning, the paint booth shall be shut down until the problem has been corrected. This will not include a malfunctioning measurement device.
6. Verification of Operational Status:
Records of the pressure reading shall be kept for a minimum of 5 years.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: Forestry Paint Booth

Associated Equipment

Associated Emission Unit ID Number: See Table Forestry Paint Booth

Emissions Control Equipment ID Number: CE 12-EFM

Emissions Control Equipment Description: Dry Filter

Table Forestry Touch-up Paint Booth

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material /Fuel	Rated Capacity (gallons/hr)	Construction Permit
21-PSP-1	21-PSP	Forestry Touch-up Paint Booth	Paint	7.03	06-A-621-S1
21-PSP-2					06-A-622-S1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

Authority for Requirement: See DNR Construction permits in Table: Forestry Paint Booth
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/scf, 0.86 lb/hr

Authority for Requirement: See DNR Construction permits in Table: Forestry Paint Booth
567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 25.0 TPY (combined limit for both stacks)

Authority for Requirement: See DNR Construction permits in Table: Forestry Paint Booth

Pollutant: total HAP

Emission Limit(s): 2.6 lb organic HAP/gal solids

Authority for Requirement: See DNR Construction permits in Table: Forestry Paint Booths
40 CFR Subpart MMMM
567 IAC 23.1(4)"cm"

NESHAP:

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

Operational Limits & Requirements

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

Operating limits:

1. Total VOC emissions from emission unit 21-PSP shall not exceed 25.0 tons per twelve-month rolling period.
2. The owner or operator shall limit organic HAP emission to the atmosphere as per the emission requirements of 40 CFR §63.3890.
3. The owner or operator shall comply with the compliance procedures and monitoring requirements of 40 CFR §63.3900.
4. Maintain the pollution control equipment according to the manufacturer's specifications.
5. The spray booth shall be limited to the use of one spray gun at any one time.

Reporting & Recordkeeping:

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

1. Record the VOC content, in pounds per gallon for each surface coating material and solvent used in emission unit 21-PSP.
2. Record daily the amount of each surface coating material and solvent used in emission unit 21-PSP in gallons. Calculate and record 12-month rolling totals. For the purposes of recording daily surface coating material and solvent usage, the facility shall assume all purchased materials are used the day the materials are delivered to the booth. Reclaimed solvent previously accounted for as emitted VOC shall be excluded from the 12-month rolling total.
3. Calculate the VOC emissions from emission unit 21-PSP on a monthly basis and keep a 12-month rolling total. Records for VOC emissions shall be kept on a monthly basis until the VOC emissions exceed 20.0 TPY. At this point the owner or operator shall immediately begin keeping a 365-day rolling total amount of VOC emitted from emission unit 21-PSP.

Calculation requirements will revert back to a monthly basis if the 12-month rolling total of VOC is returned to below 20.0 TPY.

4. The owner or operator may take credit for any waste VOC shipped off-site. The owner or operator shall record the amount of waste shipped off-site from 21-PSP, and also analyze the VOC content of the waste once every calendar year quarter. The sample analyzed shall be taken as a representative sample (as defined in 40 CFR §260.10) of the waste sent off-site for that quarter and shall be taken as representative until the subsequent quarter's analysis is received. The credit (calculated from the most current analysis and the amount shipped off-site) may be subtracted from the VOC rolling totals as of the date the waste is shipped off-site.
5. Retain Material Safety Data Sheets (MSDS) for all reagents, surface coating materials, solvents and other HAP and VOC containing materials used in emission unit 21-PSP.
6. Submit the notifications for NESHAP MMMM as required by 40 CFR 63.3910
7. Submit the reports for NESHAP MMMM as required by 40 CFR 63.3920
8. Maintain records for NESHAP MMMM as required by 40 CFR 63.3930.

Authority for Requirement: See DNR Construction permits in Table: Forestry Paint Booths

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft., from the ground): 41 feet

Stack Opening (inches, dia.): 42 inches

Exhaust Flow Rate (acfm): 20,000

Exhaust Temperature (°F): 72

Discharge Style: Vertical unobstructed

Authority for Requirement: See DNR Construction permits in Table: Forestry Paint Booths

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Spray Booth Filter Agency Operation & 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.

Recordkeeping 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 manufacturers recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 6-PDF-1

Associated Equipment

Associated Emission Unit ID Numbers: 6-PDF

Emission Unit vented through this Emission Point: 6-PDF
Emission Unit Description: Brake Bonding Oven
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.6 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(s): 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

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

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

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: Crawler Paint Curing Oven

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Crawler Paint Curing Oven

Table: Crawler Curing Ovens

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	DNR Construction Permits
10-PDF-1	10-PDF	186-W3 Crawler Paint Curing Oven	Natural Gas or Propane	4 MMBtu/hr	97-A-994
10-PDF-2					97-A-995

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 20 %

Authority for Requirement: See DNR Construction permits in Table: Crawler Paint Curing Oven
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: See DNR Construction permits in Table: Crawler Paint Curing Oven
567 IAC 23.3(2)"a"

Pollutant: PM-10

Emission Limit(s): 0.21 tons/yr.

Authority for Requirement: See DNR Construction permits in Table: Crawler Paint Curing Oven

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

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

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Process throughput:

- 1. This source is limited to the firing of natural gas and propane only.

Reporting & Recordkeeping:

Records shall be kept on-site for at least five (5) years and shall be available for inspection by the Department. Records shall be maintained in legible and orderly manner and shall indicate the following:

- 1. The type of fuel fired in this oven.

Authority for Requirement: See DNR Construction permits in Table: Crawler Paint Curing Oven

Emission Point Characteristics

These emission points shall conform to the conditions listed in the table below.

Emission Point #	Stack Height (feet)	Stack Opening (inches)	Stack Exhaust Flow Rate (acfm)	Stack Temperature (°F)	Authority For Requirement
10-PDF-1	41.5	30	9,745	200	97-A-994
10-PDF-2	41.5	42	21,700	200	97-A-995

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Backhoe Paint Curing Oven

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Backhoe Paint Curing Oven

Table: Backhoe Paint Curing Oven

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	DNR Construction Permits
11-PDF-1	11-PDF	163-W1 Backhoe Paint Curing Oven	Natural Gas or Propane	4 MMBtu/hr	98-A-079-S1
11-PDF-2					98-A-080-S1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: See DNR Construction permits in Table: Backhoe Paint Curing Oven

567 IAC 23.3(2)"d"

⁽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(s): 0.1 gr/dscf

Authority for Requirement: IDNR Construction Permits 98-A-079-S1 & 98-A-080-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: IDNR Construction Permits 98-A-079-S1 & 98-A-080-S1
567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M MMM – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M MMM
567 IAC 23.1(4)"cm"

Process throughput:

- 1. This emission unit is limited to the firing of natural gas or propane only.

Reporting & Recordkeeping:

Records shall be kept on-site for at least five (5) years and shall be available for inspection by the Department. Records shall be maintained in legible and orderly manner and shall indicate the following:

- 1. Record the type of fuel fired in this oven

Authority for Requirement: DNR Construction Permit 98-A-079-S1 & 98-A-080-S1

Emission Point Characteristics

These emission points shall conform to the conditions listed in the table below.

Emission Point #	Stack Height (feet)	Stack Opening (inches)	Stack Exhaust Flow Rate (acfm)	Stack Temperature (°F)	Discharge Style	Authority For Requirement
11-PDF-1	41	30	9,745	170	Vertical, unobstructed	98-A-079-S1
11-PDF-2	41	42	21,700	Ambient	Vertical, unobstructed	98-A-080-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 1-GAA-1F

Associated Equipment

Associated Emission Unit ID Number: 1-GAA

Emission Unit vented through this Emission Point: 1-GAA

Emission Unit Description: Adhesive Assembly

Raw Material/Fuel: Adhesive

Rated Capacity: 0.15 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(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: 567 IAC 23.4(13)

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M

567 IAC 23.1(4)"cm"

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-WTC-1

Associated Equipment

Associated Emission Unit ID Numbers: 1-WTC

Emission Unit vented through this Emission Point: 1-WTC

Emission Unit Description: Solvent Still

Raw Material/Fuel: Methyl Amyl Ketone

Rated Capacity: 1.88 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.

There are no emission limits at this time.

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 50

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (acfm): 1,500 ⁽¹⁾

Stack Temperature (°F): Ambient

Discharge Style: Vertical

Authority for Requirement: DNR Construction Permit 03-A-647

⁽¹⁾ The flowrate was incorrectly listed as 6,000 scfm in the construction permit.

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

discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 1-GCS-1F

Associated Equipment

Associated Emission Unit ID Number: 1-GCS

Emission Unit vented through this Emission Point: 1-GCS
Emission Unit Description: Miscellaneous Solvent Usage
Raw Material/Fuel: Solvents
Rated Capacity: 4.08 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.

There are no emission limits at this time.

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

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-GSR-1F

Associated Equipment

Associated Emission Unit ID Number: 1-GSR

Emission Unit vented through this Emission Point: 1-GSR
Emission Unit Description: Anti-Rust Spray Application
Raw Material/Fuel: Rust Protective Material
Rated Capacity: 1.97 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.

There are no emission limits at this time.

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

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: 6-DQE-1

Associated Equipment

Associated Emission Unit ID Number: 6-DQE

Emission Unit Description

Emission Unit vented through this Emission Point: 6-DQE

Emission Unit Description: X2-6 Engine Test Cell

Raw Material/Fuel: #2 Diesel Fuel

Rated Capacity: 36.4 gallons/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permit 01-A-913-S3

567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

DNR Construction Permit 01-A-913-S3

Pollutant: Particulate Matter

Emission Limit(s): 0.33 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-913-S3

Pollutant: PM₁₀

Emission Limit(s): 0.33 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-913-S3

Pollutant: PM_{2.5}

Emission Limit(s): 0.33 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-913-S3

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"(2)
DNR Construction Permit 01-A-913-S3

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 8.42 lb/hr ⁽²⁾, 15 tons/yr
Authority for Requirement: DNR Construction Permit 01-A-913-S3

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.56 lb/hr ⁽²⁾
Authority for Requirement: DNR Construction Permit 01-A-913-S3

⁽²⁾ The hourly NO_x, VOC, and CO limits are based on EPA Tier 2 non-road engine emission standards at a power output of 800 HP.

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 5.76 lb/hr ⁽²⁾
Authority for Requirement: DNR Construction Permit 01-A-913-S3

⁽²⁾ The hourly NO_x, VOC, and CO limits are based on EPA Tier 2 non-road engine emission standards at a power output of 800 HP.

Operational Limits & Requirements

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

NESHAP Requirements

- A. The engines tested in the X2 Bay 6 Dyno Engine Test Cell (EU 6-DQE) are exempt from the requirements of 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE), in accordance with 40 CFR §60.4200(b): *“The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.”*
- B. The engines tested in the X2 Bay 6 Dyno Engine Test Cell (EU 6-DQE) are expected to be capable of meeting at least Tier 2 emission standards as listed in Table 1 to 40 CFR §89.112, for engines with a rating of ≤ 800 bhp, adjusted by the Not-to-Exceed numerical value as indicated in 40 CFR §60.4212 (c).
- C. The engines tested in the X2 Bay 6 Dyno Engine Test Cell (EU 6-DQE) are exempt from the requirements of 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), in accordance with 40 CFR §63.6585: *“You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.”*
- D. The X2 Bay 6 Dyno Engine Test Cell (EU 6-DQE) is part of an affected source subject to the requirements of 40 CFR Part 63, Subpart PPPPP – National Emission Standards for

Hazardous Air Pollutants for Engine Test Cells/Stands. In accordance with 40 CFR §63.9290(a), an affected source is *“the collection of all equipment and activities associated with engine test cells/stands used for testing uninstalled stationary or uninstalled mobile engines located at a major source of HAP emissions.”* Furthermore, the X2 Bay 6 Dyno Engine Test Cell (EU 6-DQE) meets the definition of an “existing affected source” as specified in 40 CFR §63.9290(a)(1). As a result and in accordance with §63.9290(b), the X2 Bay 6 Dyno Engine Test Cell (EU 6-DQE) does not have to meet the requirements of Subpart P P P P P and of Subpart A.

- E. Failure to specifically include any requirements for NSPS or NESHAP in this permit does not relieve the owner or operator of those requirements.

Authority for Requirement: 40 CFR Part 63, Subpart P P P P P
IAC 567 23.1(4)"dp"

Operating Limits:

Operating limits for this emission unit shall be:

- A. The fuels burned in the X2 Bay 6 Dyno Engine Test Cell (EU 6-DQE) shall be limited to the following: No. 2 diesel fuel, blends of No. 1 and No. 2 diesel fuels, Jet A (hydrodesulfurized kerosene), and diesel blends that contain up to 20% biodiesel (e.g., Biodiesel B₂₀).
- B. The owner or operator must request a modification of this permit prior to burning other fuels in the X2 Bay Dyno Engine Test Cell (EU 6-DQE).
- C. The sulfur content of the fuels burned in the X2 Bay Dyno Engine Test Cell (EU 6-DQE) shall not exceed 0.05% by weight.
- D. The number of engines tested at any one time in the X2 Bay Dyno Engine Test Cell (EU 6-DQE) shall be limited to one.
- E. The engines tested in the X2 Bay 6 Dyno Engine Test Cell (EU 6-DQE) shall be limited to those capable of meeting Tier 2 or higher standards as specified in 40 CFR §89.112 and 40 CFR §1039, adjusted by the Not-to-Exceed numerical value as indicated in 40 CFR §60.4212(c), 40 CFR §1039.101(e), and 40 CFR 1039.102(g)(1).
- F. The maximum rating of each engine tested in the X2 Bay 6 Dyno Engine Test Cell (EU 6-DQE) shall not exceed 800 bhp (597 kW).

Reporting & Recordkeeping:

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain the following monthly records:
- a. The identification of the fuels burned in the X2 Bay Dyno Engine Test Cell (EU 6-DQE).
 - b. The sulfur content of each shipment of fuel received. The analysis on the sulfur content of the fuel may be obtained from the supplier or may be performed by the permittee. The sulfur analysis does not have to be for each shipment of oil received, but shall be documented by receipts from the fuel supplier, a statement from the fuel supplier on the specification of the sulfur content of the purchased fuel oil, or other supporting documentation.
 - c. The rating, in bhp, for each engine tested in the X2 Bay Dyno Engine Test Cell (EU 6-DQE).
 - d. Demonstration that each engine tested in the X2 Bay Dyno Engine Test Cell (EU 6-DQE) is capable of meeting Tier 2 or higher standards.
- B. The owner or operator is required to record the daily number of hours that the X2 Bay Dyno Engine Test Cell (EU 6-DQE) is in use.
- C. At the end of each month, the owner or operator is required to calculate the total NO_x emissions for the month using the following equation:
- $$E = (8.42 \times H) / 2000$$
- Where E = NO_x emissions in tons per month,
H = Total number of hours in operation,
2000 is the conversion factor between lbs and tons, and
8.42 is the emission factor in lb/hr
- D. During the first 12 months, the owner or operator must sum the total amount of NO_x emissions to demonstrate compliance with the 15.0 tons/yr. limit establish in Section 15.
- E. After the first 12 months, the owner or operator must calculate the rolling 12 month total amount of NO_x emissions on a monthly basis.

Authority for Requirement: DNR Construction Permit 01-A-913-S3

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 27

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 2,000

Stack Temperature (°F): 1,000

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 01-A-913-S3

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 7-DQE-1

Associated Equipment

Associated Emission Unit ID Numbers: 7-DQE

Emission Unit Description

Emission Unit vented through this Emission Point: 7-DQE
Emission Unit Description: X2 Bay 7 Dyno Engine Exhaust
Raw Material/Fuel: Diesel Fuel
Rated Capacity: 20 gallons/hr

Applicable Requirements

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

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

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

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

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

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

NESHAP Requirements

This test cell is an affected source under 40 CFR 63, Subpart P P P P P – National Emission Standards for Hazardous Air Pollutant for Engine Test Cells/Stand. According to 40 CFR 63.9290(b), this existing affected source does not have to meet the requirements of Subparts P P P P P and A of 40 CFR 63.

Authority for Requirement: 40 CFR Part 63, Subpart P P P P P
IAC 567 23.1(4)"dp"

Process throughput:

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

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

Reporting & Recordkeeping:

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

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

Authority for Requirement: 567 IAC 22.108(3)

2. Records shall be kept at the facility describing the specific construction permit exemption claimed for these sources and a description of the associated equipment, specifically the size of the engine being tested.

Authority for Requirement: 567 IAC 22.1(2)

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: 8-DQE-1

Associated Equipment

Associated Emission Unit ID Numbers: 8-DQE

Emission Unit Description

Emission Unit vented through this Emission Point: 8-DQE
Emission Unit Description: X2 Bay 8 Dyno Engine Exhaust
Raw Material/Fuel: Diesel Fuel
Rated Capacity: 20 gallons/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permit 09-A-669-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 09-A-669-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.61 lb/hr ⁽²⁾

Authority for Requirement: DNR Construction Permit 09-A-669-S2

Pollutant: PM-10

Emission Limit(s): 0.61 lb/hr

Authority for Requirement: DNR Construction Permit 09-A-669-S2

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 09-A-669-S2
567 IAC 23.3(3)"b"(2)

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 8.40 lb/hr ⁽²⁾ and 15.0 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 09-A-669-S2

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 4.80 lb/hr ⁽²⁾
Authority for Requirement: DNR Construction Permit 09-A-669-S2

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 3.40 lb/hr ⁽²⁾
Authority for Requirement: DNR Construction Permit 09-A-669-S2

⁽²⁾ Limits established to limit the PTE. The hourly NO_x, VOC and CO limits are based on EPA Tier 2 non-road engine emission standards at a power output of 750 HP.

Operational Limits & Requirements

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

NESHAP Requirements

NESHAP:

This test cell is an affected source under 40 CFR 63, Subpart PPPPP – National Emission Standards for Hazardous Air Pollutant for Engine Test Cells/Stand. According to 40 CFR 63.9290(a)(3), an affected source is considered reconstructed if it meets the definition of reconstruction in 40 CFR 63.2 of Subpart A. This source does not meet the definition of reconstruction at the time of issuance of this permit. Therefore, this affected source does not have to meet the requirements of Subparts PPPPP and A of 40 CFR 63 at this time.

Authority for Requirement: 40 CFR Part 63, Subpart PPPPP
IAC 567 23.1(4)"dp"

Operating Limits

Operating limits for this emission unit shall be:

- A. The fuels burned in this emissions unit are limited to the following: #2 diesel fuel, #1 diesel fuel, blends of #1 and #2 diesel fuels, Jet A (hydrodesulfurized kerosene), and diesel blends that contain up to 20% biodiesel (e.g. B20). Prior to burning other fuels in this emissions unit, the permittee shall apply to modify this permit.
- B. The rated capacity of the dynamometer is 800 horsepower. An engine rated at greater than 800 horsepower is permitted to be connected to the dynamometer, provided that power generated by the engine does not exceed 800 horsepower. Prior to replacing the dynamometer with a dynamometer of a greater capacity, the permittee shall apply to modify this permit.

- C. The engines tested in this emissions unit shall be engines capable of meeting EPA Tier 2, EPA standards for non-road engines.
- D. The maximum sulfur content of the fuel oil burned in this engine shall not exceed 500 ppm (0.05%) by weight.

Reporting & Recordkeeping:

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The permittee shall maintain records on the identification and the sulfur content of the fuels burned in this emissions unit.
- B. The permittee shall maintain the following daily records:
 - a. The identification and the size of each engine tested (horsepower); and
 - b. The amount of time each engine operated (hours).
- C. The permittee shall maintain the following monthly records:
 - a. The amount of NOx emitted from the emissions unit (tons or pounds); and
 - b. the rolling,12-month total of the amount of NOx emitted by emissions unit (tons).

The monthly NOx emission rate shall be calculated by the following equation:

$$NOx = \sum_{i=1}^n (HP_i)(H_i)(EL_i)(1/454)(1/1.34)$$

Where:

NOx = Total NOx monthly emission rate, pounds

HP_i = Horsepower of engine, i,

H_i = hours that engine, i, operated

EL_i = NOx emission limit for Tier 2, Tier 3, interim Tier 4 or final Tier 4 non-road engines (grams/kw-hr) for the engine or engine family being tested.

454 = converts grams to pounds

1.34 = converts horsepower to kilowatts

To convert the monthly NOx emission rate from pounds to tons, divide by 2000.

- D. If the 12-month rolling total of NOx emissions exceeds 12.0 tons, the permittee shall immediately begin keeping the following daily records:
- i. The amount of NOx emissions from this emissions unit (pounds); and
 - ii. The 365-day rolling total of the amount of NOx emissions from this emissions unit (tons).

Daily calculation of NOx emissions shall continue until the 365-day rolling total from the emissions unit drops below 12 tons for the remainder of the current calendar month plus one additional calendar month. At that time, the rolling daily calculation of NOx emissions may cease and the permittee may return to the monthly recordkeeping required by Section C (shown above) of this permit. If the NOx emissions ever again exceed 12.0 tons, the daily Recordkeeping as required by Section D (shown above) of this permit shall be implemented.

Authority for Requirement: DNR Construction Permit 09-A-669-S2

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 25.92
 Stack Diameter (inches): 10
 Stack Exhaust Flow Rate (scfm): 710
 Stack Temperature (°F): 420
 Discharge Style: Vertical Unobstructed
 Authority for Requirement: DNR Construction Permit 09-A-669-S2

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 33-DQE-1, 35-DQE-1 and 36-DQE-1

Associated Equipment

Associated Emission Unit ID Numbers: 33-DQE, 35-DQE and 36-DQE

Emission Unit Description

Table: Bay 9 Dyno Engine Exhaust

Emission Point Number	Emission Unit Number	Emission Unit Description	Fuel	Rated Capacity (gal./hr)
33-DQE-1	33-DQE	X2 Bay 9 Dyno 1 Exhaust	Diesel	15 gal/hr
35-DQE-1	35-DQE	X2 Bay 9 Dyno 2 Exhaust	Diesel	25 gal/hr
36-DQE-1	36-DQE	X2 Bay 9 Dyno 3 Exhaust	Diesel	25 gal/hr

Applicable Requirements

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

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

Table: Dyno Emission Limits

Emission Point Number	Associated Emission Unit Number	PM Limit (lb/hr)	PM₁₀ Limit (lb/hr)	NO_x Limit (lb/hr)	VOC Limit (lb/hr)	CO Limit (lb/hr)	Authority for Requirement (Construction Permit Number)
33-DQE-1	33-DQE	0.69	0.69	1.72	0.11	0.31	09-A-445
35-DQE-1	35-DQE	0.41	0.41	5.26	1.34	3.60	09-A-446-S1
36-DQE-1	36-DQE	0.41	0.41	5.26	1.34	3.60	09-A-447-S1

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permits 09-A-445, 09-A-446-S1 & 09-A-447-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf (Emission limit applies to each individual emission point.)

Authority for Requirement: DNR Construction Permits 09-A-445, 09-A-446-S1
& 09-A-447-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu (Emission limit applies to each individual emission point.)

Authority for Requirement: DNR Construction Permits 09-A-445, 09-A-446-S1
& 09-A-447-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 10.0 Tons/yr (Limit applicable only to 35-DQE and 36-DQE. Each have a 10 tpy limit)

Authority for Requirement: DNR Construction Permits 09-A-446-S1 & 09-A-447-S1

Operational Limits & Requirements

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

Operating Limits Specific to 33-DQE

Operating limits for this emission unit shall be:

- A. The rated capacity of the dynamometer is 315 horsepower. An engine rated at greater than 315 horsepower is permitted to be connected to the dynamometer, provided that power generated by the engine does not exceed 315 horsepower. Prior to replacing the dynamometer with a dynamometer of a greater capacity, the permittee shall apply to modify this permit.
- B. The engines tested in this emissions unit shall be engines capable of meeting EPA Tier 3, interim Tier 4 or final Tier 4 standards for non-road engines.
- C. The maximum sulfur content of the fuel oil burned in this engine shall not exceed 15 ppm (0.0015%) by weight.

Reporting and Recordkeeping Specific to 33-DQE

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

- A. The permittee shall maintain records on the types of engines tested in this emissions unit (i.e. Tier 3, interim Tier 4 or final Tier 4).
- B. The permittee shall perform an analysis and shall maintain records on the sulfur content

of each shipment of oil received. Alternatively, the permittee shall have the oil supplier provide analyses on the sulfur content of the oil received.

Authority for Requirement: DNR Construction Permits 09-A-445

Operating Requirements with Associated Monitoring and Recordkeeping Requirement for 35-DQE and 36-DQE

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

- A. The rated capacity of the dynamometer is 500 horsepower. An engine rated at greater than 500 horsepower is permitted to be connected to the dynamometer, provided that power generated by the engine does not exceed 500 horsepower. Prior to replacing the dynamometer with a dynamometer of a greater capacity, the permittee shall apply to modify this permit.
- B. The engines tested in this emissions unit shall be engines capable of meeting European Stage II, Stage III, Stage IV, Stage V, EPA Tier 2, Tier 3, Interim Tier 4 or final Tier 4 standards for non-road engines.
 - i. The permittee shall maintain the following daily records:
 - (1) The identification and the size of each engine tested (horsepower); and
 - (2) The amount of time each engine operated (hours).
- C. The owner or operator shall maintain the following monthly records:
 - a. The amount of NOx emitted from the emission unit (tons or pounds); and
 - b. The rolling, 12-month total of the amount of NOx emitted by emissions unit (tons).

The monthly NOx emission rate shall be calculated by the following equation:

$$NO_x = \sum_{i=1}^n (HP_i) (H_i)(EL_i)(1/454) (1 / 1.34)$$

Where:

NOx = Total NOx monthly emission rate, pounds

HP_i = Horsepower of engine, i,

H_i = hours that engine, i, operated

EL_i = NO_x emission limit for European Stage II, Stage III, Stage IV, Stage V, EPA Tier 2, Tier 3, Interim Tier 4 or final Tier 4 non-road engines (grams/kw-hr) for the engine or engine family being tested.

454 = converts grams to pounds

1.34 = converts horsepower to kilowatts

To convert the monthly NO_x emission rate from pounds to tons, divide by 2000.

- D. If the 12-month rolling total of NO_x emissions exceeds 8.0 tons, the owner or operator shall immediately begin keeping the following daily records:
- iii. The amount of NO_x emissions from this emissions unit (pounds); and
 - iv. The 365-day rolling total of the amount of NO_x emissions from this emissions unit (tons).

Daily calculation of NO_x emissions shall continue until the 365-day rolling total from the emissions unit drops below 8.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, the rolling daily calculation of NO_x emissions may cease and the permittee may return to the monthly recordkeeping required by Section C (see above) of this permit. If the NO_x emissions ever again exceed 8.0 tons, the daily Recordkeeping as required by Section D (see above) of this permit shall be implemented.

- E. The maximum sulfur content of the fuel oil burned in this engine shall not exceed 15 ppm (0.0015%) by weight.

The permittee shall perform an analysis and shall maintain records on the sulfur content of each shipment of oil received. Alternatively, the permittee shall have the oil supplier provide analyses on the sulfur content of the oil received.

Authority for Requirement: DNR Construction Permits 09-A-446-S1 & 09-A-447-S1

33-DOE Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 26.5 feet

Stack Opening (inches, dia.): 8 inches

Exhaust Flow Rate (scfm): 1,000

Exhaust Temperature (°F): 820

Discharge Style: Vertical, unobstructed

Authority for Requirement: DNR Construction Permits 09-A-445

35-DQE & 36-DQE Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft., from the ground): 26.5 feet

Stack Opening (inches, dia.): 8 inches

Exhaust Flow Rate (scfm): 1,150

Exhaust Temperature (° F): 820

Discharge Style: Vertical, unobstructed

Authority for Requirement: DNR Construction Permits 09-A-446-S1 & 09-A-447-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 34-DQE-1

Associated Equipment

Associated Emission Unit ID Number: 34-DQE

Emission Unit Description

Emission Unit vented through this Emission Point: 34-DQE

Emission Unit Description: Electrification Lab Engines

Raw Material/Fuel: Diesel Fuel

Rated Capacity: Maximum 500 brake horsepower

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permit 09-A-319-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.20 lb/hr and see footnote ⁽²⁾

Authority for Requirement: DNR Construction Permit 09-A-319-S2

Pollutant: PM-10

Emission Limit(s): 0.20 lb/hr

Authority for Requirement: DNR Construction Permit 09-A-319-S2

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): See footnote ⁽²⁾

Authority for Requirement: DNR Construction Permit 09-A-319-S2

Pollutant: VOC

Emission Limit(s): See footnote ⁽²⁾

Authority for Requirement: DNR Construction Permit 09-A-319-S2

Pollutant: CO

Emission Limit(s): See footnote ⁽²⁾

Authority for Requirement: DNR Construction Permit 09-A-319-S2

⁽²⁾ As required by 40 CFR 60.4201(a), all engines used in this lab shall be certified that they meet the appropriate emission limitations from 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107 and 40 CFR 1039.115 as applicable for all pollutants, for the same model year and maximum engine power.

Operational Limits & Requirements

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

NESHAP Requirements

The non-emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(ii) this non-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)(7), a new compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions must meet the requirements of Part 63 by meeting the requirements of 40 CFR part 60 subpart III. No further requirements apply for this engine under Part 63.

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

NSPS Subpart III Requirements

According to 40 CFR 60.4204(b) and 4201, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

Maximum Engine Power	Model Year(s)	NOx	NMHC	NMHC + NOx	CO	PM	Opacity	Rule Ref
kW < 8 (HP < 11)	2007	-	-	7.5 (5.6)	8.0 (6.0)	0.80 (0.60)	(1)	(2)
	2008+					0.40 (0.30)		(4),(5)
8 ≤ kW < 19 (11 ≤ HP < 25)	2007	-	-	7.5 (5.6)	6.6 (4.9)	0.80 (0.60)		(2)
	2008+					0.40 (0.30)		(4),(5)
19 ≤ kW < 37 (25 ≤ HP < 50)	2007	-	-	7.5 (5.6)	5.5 (4.1)	0.60 (0.45)		(2)
	2008-2012					0.30 (0.22)		(4),(5)
	2013+			4.7 (3.5)		0.03 (0.022)		
37 ≤ kW < 56 (50 ≤ HP < 75)	2007	-	-	7.5 (5.6)	5.0 (3.7)	0.40 (0.30)		(2)
	2008-2012			4.7 (3.5)		0.30 (0.22)		(4),(5)
	2013+					0.03 (0.022)		
56 ≤ kW < 75	2007	-	-	7.5 (5.6)	5.0	0.40 (0.30)	(2)	

(75≤HP<100)	2008-2011			4.7 (3.5)	(3.7)		
	2012+	0.40 (0.30)	0.19 (0.14)	-		0.02 (0.015)	(4),(5)
75≤kW<130 (100≤HP<175)	2007-2011	-	-	4.0 (3.0)	5.0	0.30 (0.22)	(2)
	2012+	0.40 (0.30)	0.19 (0.14)	-	(3.7)	0.02 (0.015)	(4),(5)
130≤kW<560 (175≤HP<751)	2007-2010	-	-	4.0 (3.0)	3.5	0.20 (0.15)	(2)
	2011+	0.40 (0.30)	0.19 (0.14)	-	(2.6)	0.02 (0.015)	(4),(5)

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

⁽²⁾ 40 CFR 89.112 and 40 CFR 89.113.

⁽³⁾ Table 1 to Subpart III.

⁽⁴⁾ 40 CFR 1039.102. Refer to this section for optional and alternate emission standards.

⁽⁵⁾ 40 CFR 1039.101. Refer to this section for optional and alternate emission standards.

⁽⁶⁾ NO_x limit is 0.67 (0.50) for generator sets with maximum engine power > 900 kW (1,207 hp).

⁽⁷⁾ NO_x limit is 0.67 (0.50) and PM limit is 0.03 (0.022) for generator sets.

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. If your engine is equipped with a diesel particulate filter (DPF) to comply with the emission standards, the DPF must be installed with a backpressure monitor that notifies you when the high backpressure limit of the engine is approached. 40 CFR 60.4209(b).
2. 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.
3. 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).
4. 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.

5.

Maximum Engine Power	Initial Test
HP < 100	Within 1 year of non-permitted action ⁽¹⁾
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.

Notification and Recordkeeping Requirements

1. If your engine is equipped with a diesel particulate filter (DPF), you must keep records of any corrective action taken after the backpressure monitor has notified you that the high backpressure limit of the engine is approached. 40 CFR 60.4214(c).

Authority for Requirement: 40 CFR 60 Subpart III
567 IAC 23.1(2)“yyy”

Additional Operational Limits & Requirements

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

Process throughput:

1. The rated power of engines used in this lab shall not exceed 500 brake horsepower.
2. No more than one engine shall be installed and operated in this lab at any one time other than the mobile engine connected to EP 37-DQE-1.
3. As required by 40 CFR 60.4207, all fuel used in these engines shall meet the specifications outlined in 40 CFR 80.510(a) prior to October 1, 2010. After October 1, 2010, all fuel used in these engines shall meet the specifications outlined in 40 CFR 80.510(b), except for a period of a maximum of 6 months after October 1, 2010 in which existing non-compliant fuel inventories may be used if the owner/operator petitions the Administrator and the petition is approved.

Reporting & Recordkeeping:

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

1. The owner/operator of this lab shall maintain a log of the engines installed and used in this lab. This log shall contain, but may not be limited to the following information:

- a. The rated power (brake horsepower) of each engine used in this lab;
 - b. The date each engine was installed in the lab;
 - c. The date each engine was manufactured;
 - d. The model year of each engine;
 - e. The date each engine was removed from the lab.
2. The owner/operator shall maintain copies of all certifications and documentation required to document compliance of the engines used with the requirements of the applicable NSPS and NESHAP standards.

Authority for Requirement: DNR Construction Permit 09-A-319-S2

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 38

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 1,500

Stack Temperature (°F): 820

Discharge Style: Vertical unobstructed

Authority for Requirement: DNR Construction Permit 09-A-319-S2

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 37-DQE-1

Associated Equipment

Associated Emission Unit ID Numbers: 37-DQE

Emission Unit Description

Emission Unit vented through this Emission Point: 37-DQE
Emission Unit Description: Electrification Lab Mobile Engines
Raw Material/Fuel: Diesel Fuel
Rated Capacity: Maximum 600 brake horsepower

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permit 10-A-163-S1
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.25 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-163-S1

Pollutant: PM-10

Emission Limit(s): 0.25 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-163-S1

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 10-A-163-S1
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 rated power of any engine connected to EP 37-DQE-1 shall not exceed 600 brake horsepower.
2. No more than one engine shall be connected to EP 37-DQE-1 and operated at one time.
3. The sulfur content of any fuel used in the engines connected to EP 37-DQE-1 shall not exceed 0.0015% by weight.
4. The engines connected to EP 37-DQE-1 shall be capable of meeting EPA Tier 3, interim Tier 4 or final Tier 4 standards for non-road engines.
5. The permittee shall not use a stationary internal combustion engine, as specified in 40 CFR Part 60 NSPS Subpart IIII-Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, in this emission unit.
6. The permittee shall not use a stationary internal combustion engine, as specified in 40 CFR Part 63 NESHAP Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, in this emission unit.
7. The permittee shall not use an uninstalled stationary or uninstalled mobile engine, as specified in 40 CFR 63.9285, or the engine shall meet one of the exemptions in 40 CFR 63.9290(d).

Reporting & Recordkeeping:

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

1. The permittee shall maintain the following records for each portable engine located in this emission unit:
 - a. the identification of the engine;
 - b. the date the engine was installed in the emission unit;
 - c. the date the engine was removed from the emission unit;
 - d. the total amount of time the unit was located in the emission unit.
2. The permittee shall maintain records on the types of engines tested in this emission unit (i.e. Tier 3, interim Tier 4 or final Tier 4.)
3. The permittee shall perform an analysis and shall maintain records on the sulfur content of each shipment of oil received. Alternatively, the permittee shall have the oil supplier provide analyses on the sulfur content of the oil received.

Authority for Requirement: DNR Construction Permit 10-A-163-S1

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 38

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 1,500

Stack Temperature (°F): 820

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 10-A-163-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 1-PSA-1

Associated Equipment

Associated Emission Unit ID Number: 1-PSA1
Emissions Control Equipment ID Number: 4-EFM
Emissions Control Equipment Description: Filter Mat

Emission Unit vented through this Emission Point: 1-PSA1
Emission Unit Description: Brake Bonding Booth
Raw Material/Fuel: Plastilock Adhesive
Rated Capacity: 3.20 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(s): 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr/dscf
Authority for Requirement: 567 IAC 23.4(13)

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

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)

Spray Booth Filter Agency Operation & 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.

Recordkeeping 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 manufacturers recommendations.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 1-PCA-1

Associated Equipment

Associated Emission Unit ID Number: 1-PCA
Emissions Control Equipment ID Number: 1-EFF
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 1-PCA
Emission Unit Description: Brake Bonding Shot Blast M12212
Raw Material/Fuel: Shot
Rated Capacity: 16 tons/hr

Applicable Requirements

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

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

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

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

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-PDA-1

Associated Equipment

Associated Emission Unit ID Number: 1-PDA

Emission Unit vented through this Emission Point: 1-PDA
Emission Unit Description: Plastilock Air Dry Cabinets
Raw Material/Fuel: Plastilock Adhesive
Rated Capacity: 3.20 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.

There are no emission limits at this time.

Operational Limits & Requirements

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

NESHAP Requirements

This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Boilers

Associated Equipment

Associated Emission Unit ID Number: See Table: Boilers

Emissions Control Equipment ID Numbers: See Table: Boilers

Emissions Control Equipment Description: See Table: Boilers

Table: Boilers

EP ID	EU ID	EU Description	Control Equipment	Control Equipment Number	Raw Material/Fuel	Rated Capacity (MMBtu/hr)	Construction Permit Number
1-UUS-1B	1-UUS(2)	#1 Boiler	Multiple Cyclone	1-EMC	Natural Gas	99	71-A-089-S4
2-UUS-1B	2-UUS(2)	#2 Boiler	Multiple Cyclone	2-EMC	Natural Gas	99	71-A-090-S3
3-UUS-1B	3-UUS(2)	#3 Boiler	Multiple Cyclone	3-EMC	Natural Gas	94	12-A-339-S1

Applicable Requirements

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

The emissions from the emission units above shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

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

See DNR Construction Permits in Table: Boilers

⁽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

Emission Limit(s): 0.6 lb/MMBtu, 1.0 lb/hour (Emission limits apply to each individual emission point)

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

See DNR Construction Permits in Table: Boilers

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv (Emission limit applies to each individual emission point)

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

See DNR Construction Permits in Table: Boilers

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 29.4 Tons/yr [Emission limit is for the combined emissions from emission units 1-UUS(2), 2-UUS(2) & 3-UUS(2)]

Authority for Requirement: See DNR Construction Permits in Table: Boilers

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 24.7 Tons/yr [Emission limit is for the combined emissions from emission units 1-UUS(2), 2-UUS(2) & 3-UUS(2)]

Authority for Requirement: See DNR Construction Permits in Table: Boilers

Operational Limits & Requirements

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

NESHAP Requirements

These boilers are subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR Part 63, Subpart DDDDD

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Operating Requirements and Associated Recordkeeping

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

- A. These units shall be fired on natural gas only.
- B. The total combined heat input of fuel fired in #1 Boiler, #2 Boiler and #3 Boiler shall not exceed 500,000 MMBtu per 12-month rolling period.
 - i. Record the total combined heat input of fuel fired in #1 Boiler, #2 Boiler and #3 Boiler. Calculate and record monthly and 12-month rolling totals.
- C. The owner or operator is not required to operate or maintain the pollution control efficiency of the multiclones CE 1-EMC, CE 2-EMC and CE 3-EMC.

Authority for Requirement: See DNR Construction Permits in Table: Boilers

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point Number	Stack Height (feet)	Stack Diameter (inches)	Exhaust Flow Rate (scfm)	Stack Temperature (°F)	Discharge Style	Authority for Requirement
1-UUS-1B	69.5	58	23,577	365	Vertical, Unobstructed	71-A-089-S4
2-UUS-1B	69.5	58	20,558	365	Vertical, Unobstructed	71-A-090-S3
3-UUS-1B	69.5	58	21,235	456	Vertical, Unobstructed	12-A-339-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 2-WBB-1

Associated Equipment

Associated Emission Unit ID Number: 2-WBB
Emissions Control Equipment ID Number: 16-EFF
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: 2-WBB
Emission Unit Description: C-26 Bulk Lime Delivery
Raw Material/Fuel: Lime
Rated Capacity: 0.087 Ton/Hour

Applicable Requirements

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

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

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

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.68 lb./hr, and 3.0 tons/yr.
Authority for Requirement: DNR Construction Permit 91-A-175
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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Backhoe, Crawler, Skid Steer Assembly

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Backhoe, Crawler, Skid Steer Assembly

Table: Backhoe, Crawler, Skid Steer Assembly

Emission Point Number	Emission Unit Number	Emission Unit Description	Fuel	Rated Capacity (gal./hr)
3-PQU-1	3-PQU	163-W1 Backhoe Assembly PT Check 1	Diesel	6.55 gal/hr
3-PQU-2	3-PQU	163-W1 Backhoe Assembly PT Check 2	Diesel	6.55 gal/hr
3-PQU-3	3-PQU	163-W1 Backhoe Assembly PT Check 3	Diesel	6.55 gal/hr
3-PQU-4	3-PQU	163-W1 Backhoe Assembly PT Check 4	Diesel	6.55 gal/hr
4-PQU-1	4-PQU	163-W1 Backhoe Assembly Function Test 1	Diesel	6.55 gal./hr
4-PQU-2	4-PQU	163-W1 Backhoe Assembly Function Test 2	Diesel	6.55 gal/hr
4-PQU-3	4-PQU	163-W1 Backhoe Assembly Function Test 3	Diesel	6.55 gal/hr
5-PQU-1	5-PQU	163-W1 Backhoe QA Test Module	Diesel	6.55 gal/hr
6-PQU-1	6-PQU	187-W3 H Crawler Assembly Function Test; C-	Diesel	6.3 gal/hr
7-PQU-1	7-PQU	187-W3 H Crawler Assembly Function Test; W-	Diesel	6.3 gal/hr
8-PQU-1	8-PQU	187-W3 H Crawler Assembly Function Test; E-	Diesel	9.07 gal/hr
9-PQU-1	9-PQU	163-W1 Backhoe Assembly Tire & Bucket Mount	Diesel	6.55 gal/hr
10-PQU-1	10-PQU	120 W4 HSD Assembly 1	Diesel	10.0 gal/hr
12-PQU-1	12-PQU	158-W5 Skid Steer Fuel Station	Diesel	1.33 gal/hr
12-PQU-2				
15-PQU-1	15-PQU-1	158-W5 Skid Steer CTL Tracking Test	Diesel	4.48 gal/hr
15-PQU-2	15-PQU-2	158-W5 Skid Steer CTL Tracking Test	Diesel	4.48 gal/hr
	15-PQU-3	158-W5 Skid Steer CTL Tracking Test	Diesel	4.48 gal/hr
16-PQU-1	16-PQU	158-W5 CTL/Skid Steer Repair Station	Diesel	4.53 gal/hr
17-PQU-1	17-PQU	158-W5 CTL/Skid Steer Test Station	Diesel	4.53 gal/hr
18-PQU-1	18-PQU	177 Z Log Loader Indoor Test Cycle	Diesel	8.7 gal/hr
19-PQU-1	19-PQU	177 Z FB/Harvester Indoor Test Cycle	Diesel	10.0 gal/hr
20-PQU-1	20-PQU	177 Z FB/Harvester Indoor Test Cycle	Diesel	14.4 gal/hr
22-PQU-1	22-PQU	BHL Mobile Equipment Test	Diesel	6.55 gal/hr
23-PQU-1	23-PQU	W3 Crawler Mobile Equipment	Diesel	16.9 gal/hr
24-PQU-1	24-PQU	W% HSD, CWL Loader, Production Crawler Assy.	Diesel	20.1 gal/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

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

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

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

Process throughput:

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

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

Reporting & Recordkeeping:

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

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

Authority for Requirement: 567 IAC 22.108(3)

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: Standby Generators

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Standby Generators

Table: Standby Generators

Emission Point Number	Emission Unit Number	Emission Unit Description	Control Equipment and Number	Fuel	Rated Capacity (bhp)	DNR Construction Permits
3-UUE-1	3-UUE	#5 Standby Generator	Diesel Oxidation Catalyst System-3-EBC	Diesel	2000	94-A-042-S1
4-UUE-1	4-UUE	#6 Standby Generator	Diesel Oxidation Catalyst System-4-EBC	Diesel	2000	94-A-043-S1
5-UUE-1	5-UUE	#7 Standby Generator	Diesel Oxidation Catalyst System-5-EBC	Diesel	2000	94-A-044-S1
6-UUE-1	6-UUE	#8 Standby Generator	Diesel Oxidation Catalyst System-6-EBC	Diesel	2000	94-A-045-S1
7-UUE-1	7-UUE	#9 Standby Generator	Diesel Oxidation Catalyst System-7-EBC	Diesel	2000	94-A-046-S1
8-UUE-1	8-UUE	#10 Standby Generator	Diesel Oxidation Catalyst System-8-EBC	Diesel	2000	94-A-047-S1

Applicable Requirements

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

The emissions from each of the emission units above shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % ⁽¹⁾

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

⁽¹⁾ An exceedance 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 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(s): 1.10 lb/hr and 1.11 tons/yr ⁽²⁾

Authority for Requirement: See DNR Construction Permits in Table: Standby Generators

Pollutant: PM-10

Emission Limit(s): 1.15 lb/hr and 0.91 tons/yr ⁽²⁾

Authority for Requirement: See DNR Construction Permits in Table: Standby Generators

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.02 lb/hr, 0.02 tons/yr ⁽²⁾ and 2.5 lb/MMBtu

Authority for Requirement: See DNR Construction Permits in Table: Standby Generators

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 48.0 lb/hr and 38.16 tons/yr ⁽²⁾

Authority for Requirement: See DNR Construction Permits in Table: Standby Generators

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 1.12 tons/yr. ⁽²⁾

Authority for Requirement: See DNR Construction Permits in Table: Standby Generators

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 3.30 lb/hr and 2.62 tons/yr ⁽²⁾

Authority for Requirement: See DNR Construction Permits in Table: Standby Generators

⁽²⁾ Emission limit for generators #5- #10 combined

Operational Limits & Requirements

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

NESHAP Requirements

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

Compliance Date:

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

Emission Standards:

According to 40 CFR 63.6600(d) and Table 2c, you must comply with the following emission standards:

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

Operating Limits:

According to 40 CFR 63.6600(d) and Table 2b, you must comply with the following operating limits if you use an oxidation catalyst system:

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

Fuel Requirements:

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

Testing and Compliance Requirements:

1. According to 40 CFR 63.6610(a), you must conduct the initial performance tests or other applicable initial compliance demonstrations in Table 4 to subpart ZZZZ no later than 180 days after the compliance date (or October 30, 2013).
2. You must demonstrate initial compliance with applicable emission limitations, operating limitations, and other requirements in pursuant to 40 CFR 63.6630(a), (b), and (c).
3. According to 40 CFR 63.6615 and Table 3 to subpart ZZZZ, you must conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
4. You must conduct the performance testing in accordance with 40 CFR 63.6620 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 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.
5. If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of subpart ZZZZ, you must install, operate, and maintain the CPMS according to the requirements in 40 CFR 63.6625(b).
6. If your engine is not equipped with a closed crankcase ventilation system, you must comply with requirements in 40 CFR 63.6625(g) for operating and maintaining the engine's crankcase ventilation system.
7. According to 40 CFR 63.6610(h), you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission standards apply.
8. You must demonstrate continuous compliance with applicable emission limitations, operating limitations, and other requirements in pursuant to 40 CFR 63.6605, 6635, and 6640(a) and (b).

Notification, Reporting, and Recordkeeping Requirements

1. You must comply with the applicable notification requirements in pursuant to 40 CFR 63.6645(a), (b), (g), and (h).

2. You must comply with the applicable reporting requirements in pursuant to 40 CFR 63.6650(a) to (f).
3. You must comply with the applicable recordkeeping requirements in pursuant to 40 CFR 63.6655(a), (b), and (d), and 40 CFR 63.6660, including keeping records for at least 5 years.

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

Additional Operational Limits & Requirements

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

Hours of operation: Operation of these sources shall not exceed the following:

1. The owner or operator shall not operate each generator more than 400 hours per rolling twelve-month period.
2. The permittee shall not operate generators #5 - #10 (3-UUE, 4-UUE, 5-UUE, 6-UUE, 7-UUE, and 8-UUE) more than 1,590 hours per rolling twelve-month period.

Process throughput:

1. The permittee shall combust #1 or #2 diesel fuel with a maximum sulfur content of 0.0015% by weight in the generators.

Control equipment parameters:

1. The owner or operator shall install, operate and maintain the generators and control equipment according to the manufacturer's written instructions.

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

1. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the generators and control equipment.
2. The permittee shall keep records on the types of fuel combusted and the sulfur content of that fuel. This may be by vendor certification or an approved ASTM testing method.
3. The owner or operator shall install an appropriate hour meter on each generator to document hours of operation. Records of the hours of operation shall be available to IDNR inspection personnel upon request and shall be kept for a period of five (5) years from the date of recording.

4. The owner or operator shall maintain the following monthly records:
 - a. The total number of hours that each generator has operated:
 - b. The rolling 12-month total amount of hours that each generator operated:
 - c. The total number of hours that the generators #5 - #10 (3-UUE, 4-UUE, 5-UUE, 6-UUE, 7-UUE, and 8-UUE) operated.
 - d. The rolling 12-month total amount of hours that the generators #5 - #10 (3-UUE, 4-UUE, 5-UUE, 6-UUE, 7-UUE, and 8-UUE) operated.

Authority for Requirement: See DNR Construction Permits in Table: Standby Generators

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (feet): 42

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 7,000

Stack Temperature (°F): 820

Discharge Style: Vertical unobstructed

Authority for Requirement: See DNR Construction Permits in Table: Standby Generators

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Bulk Storage Tanks

Associated Equipment

Associated Emission Unit ID Number: See Table: Bulk Storage Tanks

Table: Bulk Storage Tanks

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Materials	Rated Capacity (gal)	Construction Permit
1-PBT-1	1-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-508
2-PBT-1	2-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-509
3-PBT-1	3-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-510
4-PBT-1	4-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-511
5-PBT-1	5-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-512
6-PBT-1	6-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-513
7-PBT-1	7-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-514
8-PBT-1	8-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-515
9-PBT-1	9-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-516
10-PBT-1	10-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-517
11-PBT-1	11-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-518
12-PBT-1	12-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-519
13-PBT-1	13-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-520
14-PBT-1	14-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-521
15-PBT-1	15-PBT	Bulk Storage Tank	Diesel or Lubricating Oil	10,000 gallons	00-A-522
16-PBT-1	16-PBT	Bulk Storage Tank	Ethylene Glycol	10,000 gallons	00-A-523

Applicable Requirements

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

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

There are no emission limits at this time.

Operational Limits & Requirements

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

Reporting & Recordkeeping:

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

1. Record the throughput of the bulk storage tanks on a monthly basis with a rolling 12-month total.

2. Maintain on site MSDS for material stored in the storage tanks.

Authority for Requirement: DNR Construction Permits Listed in Table: Bulk Storage Tanks

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (feet from the ground): 22.5 feet

Exhaust Flow Rate (scfm): Working Breathing Loss

Exhaust Temperature (°F): Ambient

Stack Opening (inches, dia.): 3 inches

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permits Listed in Table: Bulk Storage Tanks

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: G2-Emergency Generator Diesel Tanks

Associated Equipment

Associated Emission Unit ID Number: See Table: G2-Emergency Generator Diesel Tanks

Table: G2-Emergency Generator Diesel Tanks

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (gallons)	Construction Permit
1-UBT-1	1-UBT	G2-Emergency Generator Diesel Tank	Diesel	1,000	01-A-687
1-UBT-2					01-A-688
2-UBT-1	2-UBT	G2-Emergency Generator Diesel Tank	Diesel	1,000	01-A-689
2-UBT-2					01-A-690

Applicable Requirements

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

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

There are no emission 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 total combined throughput of EU 1-UBT (permits 01-A-687 & 01-A-688) and EU 2-UBT (permits 01-A-689 & 01-A-690) shall not exceed 183,486 gallons per rolling 12-month period.

Reporting & Recordkeeping:

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

1. A copy of the Material Safety Data Sheet (MSDS) for all materials stored in the unit.
2. Determine the combined annual throughput of material for EU 1-UBT (permits 01-A-687 & 01-A-688) and EU 2-UBT (permits 01-A-689 & 01-A-690) on a rolling 12-month basis for each month of operation.

Authority for Requirement: DNR Construction Permits Listed in Table: G2- Emergency Generator Diesel Tanks

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point Number	Stack Height (feet)	Stack Diameter (inches)	Exhaust Flow Rate (scfm)	Stack Temperature (°F)	Discharge Style	Authority for Requirement
1-UBT-1	12	2	Displacement	70	Horizontal	01-A-687
1-UBT-2	12	6	Displacement	70	Horizontal	01-A-688
2-UBT-1	12	2	Displacement	70	Horizontal	01-A-689
2-UBT-2	12	6	Displacement	70	Horizontal	01-A-690

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 1-PWA-1

Associated Equipment

Associated Emission Unit ID Number: 1-PWA
Emissions Control Equipment ID Number: 6-EFC
Emissions Control Equipment Description: Cartridge Filter

Emission Unit vented through this Emission Point: 1-PWA
Emission Unit Description: 942-W2 Reclaim Weld Booth
Raw Material/Fuel: Welding Electrode
Rated Capacity: 0.01 ton/hr

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 20%
Authority for Requirement: DNR Construction Permit 98-A-595
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 98-A-595
567 IAC 23.3(2)"a"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 52.1
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (scfm): 2,000
Stack Temperature (°F): Ambient
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 98-A-595

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 2-PWA-1

Associated Equipment

Associated Emission Unit ID Numbers: 2-PWA
Emissions Control Equipment ID Number: 25-EFC
Emissions Control Equipment Description: Cartridge Filter Baghouse

Emission Unit vented through this Emission Point: 2-PWA
Emission Unit Description: 155-W5 Reclaim Weld Booth
Raw Material/Fuel: Welding Electrode
Rated Capacity: 5.03 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(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permit 03-A-163
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 03-A-163
567 IAC 23.3(2)"a"

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 inspected and maintained according to manufacturer's specifications.

Reporting & Recordkeeping:

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

1. The owner or operator shall maintain a record of control equipment maintenance and inspection results.

Authority for Requirement: DNR Construction Permit 03-A-163

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 41

Stack Diameter (inches): 10

Stack Exhaust Flow Rate (scfm): 2,000

Stack Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 03-A-163

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 3-PXP-1F

Associated Equipment

Associated Emission Unit ID Numbers: 3-PXP
Emissions Control Equipment ID Number: 26-ESW
Emissions Control Equipment Description: Water Table

Emission Unit vented through this Emission Point: 3-PXP
Emission Unit Description: Plasma Arc 25683 (two torches)
Raw Material/Fuel: Steel
Rated Capacity: 65 in/min per torch

Applicable Requirements

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

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

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

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

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: 5-DWA-1

Associated Equipment

Associated Emission Unit ID Numbers: 5-DWA
Emissions Control Equipment ID Number: 7-EFC
Emissions Control Equipment Description: Cartridge Filter Baghouse

Emission Unit vented through this Emission Point: 5-DWA
Emission Unit Description: 314-X1E Rework Weld Booth
Raw Material/Fuel: Welding Rod
Rated Capacity: 5.03 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(s): 20 %
Authority for Requirement: DNR Construction Permit 98-A-931
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 98-A-931
567 IAC 23.3(2)"a"

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (feet): 40.3
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (scfm): 1000
Stack Temperature (°F): 70
Authority for Requirement: DNR Construction Permits 98-A-931

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 18-UVM-1F (Internally Vented)

Associated Equipment

Associated Emission Unit ID Number: 18-UVM

Emission Unit vented through this Emission Point: 18-UVM
Emission Unit Description: Air Make-Up X-21, All Weather Test Site
Raw Material/Fuel: Propane
Rated Capacity: 7.0 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(s): 40 % ⁽¹⁾

Authority for Requirement: DNR Construction Permit 00-A-817
567 IAC 23.3(2)"d"

⁽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(s): 0.1 gr /dscf

Authority for Requirement: DNR Construction Permit 00-A-817
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Production Welding

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Production Welding

Table: Production Welding

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Materials	Rated Capacity (lb/hr)	DNR Construction Permit
1-GWA-1	1-GWA	BHL Mainframe Welding	Welding wire	110	N/A
2-GWA-1	2-GWA	BHL Component Welding	Welding wire	110	N/A
3-GWA-1	3-GWA	Crawler Fabrication Welding	Welding wire	110	N/A
4-GWA-1	4-GWA	SSL Boom Welding	Welding wire	110	N/A
5-GWA-1	5-GWA	SSL Mainframe Welding	Welding wire	110	N/A
6-GWA-1	6-GWA	Service Parts Welding	Welding wire	110	N/A
7-GWA-1	7-GWA	Crawler Construction Frame Welding	Welding wire	110	N/A
8-GWA-1	8-GWA	Crawler and Forestry Large Frame Welding	Welding wire	110	N/A

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: 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)

Emission Point ID Numbers: See Table: Paint Pretreatment Washers

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Paint Pretreatment Washers

Table: Paint Pretreatment Washers

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (gal/hr)	DNR Construction Permits
7-PCW-1	7-PCW	BHL Paint Pretreatment Washer 1&2	Wash Water (Iron Phosphate)	3,360	N/A
7-PCW-2					N/A
8-PCW-1	8-PCW	CWL Paint Pretreatment Washer 1&2	Wash Water (Iron Phosphate)	3,360	N/A
8-PCW-2					N/A
9-PCW-IF	9-PCW	Forestry Pre-paint Wash Bay	Wash Water (Including a Phosphate Wash)	240	N/A

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Operational Limits & Requirements

NESHAP Requirements

These sources are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

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: Paint Wash Heaters

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Paint Wash Heaters

Table: Paint Wash Heaters

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (MMBtu/hr)	DNR Construction Permits
1-PUG-1	1-PUG	Crawler Paint Wash Heater	Natural Gas	5.3	N/A
2-PUG-1	2-PUG	Crawler Paint Wash Heater	Natural Gas	5.3	N/A
3-PUG-1	3-PUG	BHL Paint Wash Heater	Natural Gas	5.3	N/A
4-PUG-1	4-PUG	BHL Paint Wash Heater	Natural Gas	5.3	N/A

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

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

Operational Limits & Requirements

NESHAP Requirements

These heaters are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

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: 5-PUG-1, 6-PUG-1 and 6-PUG-2

Associated Equipment

Associated Emission Unit ID Number: 6-PUG

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (MMBtu/hr)	DNR Construction Permits
5-PUG-1	5-PUG	Forestry Pre-paint Wash Bay Heater	Diesel Fuel, Non-VOC Cleaner, Phosphate Paint Conversion Coating	0.786	N/A
6-PUG-1 6-PUG-2	6-PUG	Forestry Pre-paint Wash Booth Heaters		0.3864	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 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.

NESHAP Requirements

These sources are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – Surface Coating of Miscellaneous Metal Parts and Products (40 CFR §63.3880 through 40 CFR §63.3981) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15).

Authority for Requirement: 40 CFR Subpart M
567 IAC 23.1(4)"cm"

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: 5-UUS-1

Associated Equipment

Associated Emission Unit ID Number: 1-UUS

Emission Unit vented through these Emission Points: 1-UUS

Emission Unit Description: Tank Farm Boiler

Raw Material/Fuel: Natural Gas

Rated Capacity: 0.84 MMBtu/hr

Applicable Requirements

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

The emissions from the emission units above shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb/MMBtu

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500ppmv

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

Operational Limits & Requirements

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

NESHAP Requirements

These boilers are subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR Part 63, Subpart DDDDD

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

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: Pre-Existing Emergency Generators

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Pre-Existing Emergency Generators

Table: Pre-Existing Emergency Generators

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (bhp/hr)	DNR Construction Permits
1-UUE-1	1-UUE	Powerhouse Emergency Generator	Diesel Fuel	66	N/A
2-UUE-1	2-UUE	Telephone Emergency Generator	Diesel Fuel	66	N/A
2-UUW-1	2-UUW	#8 Fire Well	Diesel Fuel	274	N/A

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

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

Operational Limits & Requirements

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

NESHAP Requirements

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

Compliance Date

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

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

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

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing, emergency demand response and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing, emergency demand response and periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of

maintenance and testing and emergency demand response. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

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

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

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

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 1-UUW-1

Associated Equipment

Associated Emission Unit ID Numbers: 1-UUW

Emission Unit vented through this Emission Point: 1-UUW
Emission Unit Description: #6 Fire Well
Raw Material/Fuel: Diesel Fuel
Rated Capacity: 242 bhp/hr

Applicable Requirements

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

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

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

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

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

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

NESHAP Requirements

This emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(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 III Requirements

According to 40 CFR 60.4205(c) and Table 1 to Subpart III, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

Maximum Engine Power	Model Year(s)	NMHC + NO _x	CO	PM
130 ≤ kW ≤ 560 (175 ≤ HP ≤ 750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)

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 according to one of the following methods. 40 CFR 60.4211(b).
 - a) Purchasing an engine certified according to 40 CFR 89 or 40 CFR 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
 - b) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in Subpart III and these methods must have been followed correctly.
 - c) Keeping records of engine manufacturer data indicating compliance with the standards.
 - d) Keeping records of control device vendor data indicating compliance with the standards.
 - e) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR 60.4212, as applicable.
3. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct the following performance testing in accordance with 40 CFR 60.4212 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 30 days

prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4211(g) for additional information.

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

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

Operating and Recordkeeping Requirements

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)). There is no time limit on use for emergency situations. 40 CFR 60.4211(f)(1).
2. 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.
3. 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.

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: 9-UUE-1

Associated Equipment

Associated Emission Unit ID Numbers: 9-UUE

Emission Unit vented through this Emission Point: 9-UUE
Emission Unit Description: Computer Room Backup Generator
Raw Material/Fuel: Diesel Fuel
Rated Capacity: 347 bhp/hr

Applicable Requirements

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

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

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

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

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Requirements

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

NESHAP Requirements

This emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(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

This compression ignition engine is a pre-2007 model year CI engine with a displacement < 30l/cyl constructed after 7/11/2005 but manufactured **before** 4/1/2006. As such, it currently has no requirements under 40 CFR 60 Subpart IIII.

Process throughput:

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

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

Reporting & Recordkeeping:

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

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

Authority for Requirement: 567 IAC 22.108(3)

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: 10-UUE-1

Associated Equipment

Associated Emission Unit ID Numbers: 10-UUE

Emission Unit vented through this Emission Point: 10-UUE

Emission Unit Description: Sanitary Wastewater Treatment Back-up Generator

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 197 bhp/hr, 10 gal/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40 %

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

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

Operational Limits & Requirements

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

NESHAP Requirements

This emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(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

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

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

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

Engine Displacement (l/cyl)	Maximum Engine Power	Model Year(s)	NMHC + NO _x	CO	PM	Opacity	Rule Ref
Disp. < 10	130 ≤ kW < 225 (175 ≤ HP < 302)	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 (if using diesel):

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

Compliance Requirements:

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

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

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

Operating and Recordkeeping Requirements

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, starting with the model years in the following table, you must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 40 CFR 40.4214(b).

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

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

Authority for Requirement: 567 IAC 22.108(3)

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, 11201 Renner Blvd., Lenexa, KS 66219. 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) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process

equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. 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.

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), Recordkeeping, 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)"h"; 567 IAC 23.2(3)"h" - 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 June 25, 1993.

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 June 25, 1993, 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 an applicable requirement. 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
DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 725-9545

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

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

G31. Prevention of Air Pollution Emergency Episodes

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

567 IAC 26.1(1)

G32. Contacts List

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

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

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

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Windsor Heights, IA 50324
(515) 725-9500

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

Appendix A:

NESHAPS:

40 CFR Part 63, Subpart MMMM

Web Link to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart MMMM – Surface Coating of Miscellaneous Metal Parts and Products

<http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.13.63.mmmm>

40 CFR Part 63, Subpart P PPPP

Web Link to the National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands.

<http://www.epa.gov/ttnatw01/engtest/engtestpg.html>

40 CFR Part 63, Subpart ZZZZ

Web Link to the National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines

<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;rgn=div6;view=text;node=40%3A14.0.1.1.1.1;idno=40;sid=e94dcfde4a04b27290c445a56e635e58;cc=ecfr>

40 CFR Part 63, Subpart D D D D D

Web Link to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters.

<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=547e5a5a43a490ef2545903ef0a2729b;rgn=div6;view=text;node=40%3A14.0.1.1.1.5;idno=40;cc=ecfr>