

**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-021R1-M001**

**Expiration Date: June 1, 2013**

**Permit Renewal Application Deadline: December 1, 2012**

**EIQ Number: 92-1315**

**Facility File Number: 31-01-009**

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**Responsible Official**

**John C. May**

**Factory Manager**

**18600 South John Deere Road, Dubuque, IA 52004**

**(563) 589-6213**

**Permit Contact Person for the Facility**

**Dan Mai**

**Environmental Engineer**

**18600 South John Deere Road, Dubuque, IA 52004**

**(563) 589-6133**

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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**

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Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

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## Abbreviations

|                 |   |
|-----------------|---|
| acfm.....       | actual cubic feet per minute                  |
| CFR.....        | Code of Federal Regulation                    |
| CE .....        | control equipment                             |
| CEM.....        | continuous emission monitor                   |
| °F.....         | degrees Fahrenheit                            |
| EIQ.....        | emissions inventory questionnaire             |
| EP .....        | emission point                                |
| EU .....        | emission unit                                 |
| g/HP-hr.....    | grams per horsepower hour                     |
| 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 <sub>10</sub> ..... | particulate matter ten microns or less in diameter |
| SO <sub>2</sub> .....  | sulfur dioxide                                     |
| NO <sub>x</sub> .....  | 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-021R1-M001

Facility Description: Manufacture of Construction Machinery (SIC 3531)

| <b>Equipment List</b>        |                             |  |  |
|------------------------------|-----------------------------|--|--|
| <b>Emission Point Number</b> | <b>Emission Unit Number</b> | <b>Emission Unit Description</b>       | <b>IDNR Construction Permit Number</b> |
| 1-DSP-1                      | 1-DSP                       | Parts and Vehicle Touchup Paint Booth  | Grandfathered                          |
| C2-DSP-1                     | 2-DSP                       | Parts and Vehicle Touchup Paint Booth  | 88-A-197-S                             |
| C2-DSP-2                     |                             |  |  |
| 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                               |
| 8-PBD-1                      | 8-PBD                       | Crawler Paint Kitchen                  | 05-A-769                               |
| 17-PSP-1                     | 17-PSP                      | Crawler Base Coat Paint Booth          | 97-A-990-S1                            |
| 17-PSP-2                     | 17-PSP                      | Crawler Base Coat Paint Booth          | 97-A-991-S1                            |
| 18-PSP-1                     | 18-PSP                      | Crawler Top Coat Paint Booth           | 97-A-992-S1                            |
| 18-PSP-2                     | 18-PSP                      | Crawler Top Coat Paint Booth           | 97-A-993-S1                            |
| 19-PSP-1                     | 19-PSP                      | 163-W1 Backhoe Prime Coat Paint Booth  | 98-A-081-S1                            |
| 19-PSP-2                     | 19-PSP                      | 163-W1 Backhoe Prime Coat Paint Booth  | 98-A-082-S1                            |
| 20-PSP-1                     | 20-PSP                      | 163-W1 Backhoe Top Coat Paint Booth    | 98-A-083                               |
| 20-PSP-2                     | 20-PSP                      | 163-W1 Backhoe Top Coat Paint Booth    | 98-A-084                               |
| 21-PSP-1                     | 21-PSP                      | Forestry Touch Up Paint Booth          | 06-A-621                               |
| 21-PSP-2                     |                             |  | 06-A-622                               |
| 10-PDF-1                     | 10-PDF                      | 186-W3 Crawler Paint Curing Oven       | 97-A-994                               |
| 10-PDF-2                     | 10-PDF                      | 186-W3 Crawler Paint Curing Oven       | 97-A-995                               |
| 11-PDF-1                     | 11-PDF                      | Backhoe Curing Oven                    | 98-A-079-S1                            |
| 11-PDF-2                     | 11-PDF                      | Backhoe Curing Oven                    | 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                          |
| 1-GNA-1F                     | 1-GNA                       | Aerosol Can Usage                      | Fugitive                               |
| 1-WNA-1                      | 1-WNA                       | Aerosol Can Puncture Cabinet           | 81-A-039                               |
| 6-DQE-1                      | 6-DQE                       | X2-6 Engine Test Cell                  | 01-A-913                               |
| 7-DQE-1                      | 7-DQE                       | X2 Bay 7 Dyno Engine Exhaust (325 bhp) | Exempt <sup>(1)</sup>                  |
| 8-DQE-1                      | 8-DQE                       | X2 Bay 8 Dyno Engine Exhaust (325 bhp) | Exempt <sup>(1)</sup>                  |
| 33-DQE-1                     | 33-DQE                      | X2 Bay 9 Dyno 1 Exhaust (300 bhp)      | Exempt <sup>(1)</sup>                  |

|          |          |   |                       |
|----------|----------|---|-----------------------|
| 34-DQE-1 | 34-DQE   | Electrification Lab Engines                 | 09-A-319              |
| 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         |
| C1-UUS-2 | 1-UUS(1) | #1 Boiler (Coal)                            | 71-A-089 & 77-A-363   |
| C1-UUS-2 | 1-UUS(2) | #1 Boiler (Natural Gas)                     | 71-A-089 & 77-A-363   |
| C1-UUS-2 | 2-UUS(1) | #2 Boiler (Coal)                            | 71-A-090 & 77-A-363   |
| C1-UUS-2 | 2-UUS(2) | #2 Boiler (Natural Gas)                     | 71-A-090 & 77-A-363   |
| C1-UUS-2 | 3-UUS(1) | #3 Boiler (Coal)                            | 71-A-089 & 77-A-363   |
| C1-UUS-2 | 3-UUS(2) | #3 Boiler (Natural Gas)                     | 71-A-089 & 77-A-363   |
| C1-UUS-2 | 4-UUS    | #4 Boiler (Coal)                            | 71-A-091 & 77-A-363   |
| 1-UUS-1B | 1-UUS(1) | #1 Boiler (Coal)-Bypass Stack               | 71-A-089              |
| 1-UUS-1B | 1-UUS(2) | #1 Boiler (Natural Gas) – Bypass Stack      | 71-A-089              |
| 2-UUS-1B | 2-UUS(1) | #2 Boiler (Coal) – Bypass Stack             | 71-A-090              |
| 2-UUS-1B | 2-UUS(2) | #2 Boiler (Natural Gas) – Bypass Stack      | 71-A-090              |
| 3-UUS-1B | 3-UUS(1) | #3 Boiler (Coal) – Bypass Stack             | 71-A-089              |
| 3-UUS-1B | 3-UUS(2) | #3 Boiler (Natural Gas) – Bypass Stack      | 71-A-089              |
| 4-UUS-1B | 4-UUS    | #4 Boiler (Coal)- Bypass Stack              | 71-A-090              |
| 1-UBC-1S | 1-UBC    | Ash Draw System (Standby Exhaust)           | Grandfathered         |
| 1-UBC-2  | 1-UBC    | Ash Draw System                             | Grandfathered         |
| 1-WBB-1  | 1-WBB    | Ash Silo Vent                               | Grandfathered         |
| 2-WBB-1  | 2-WBB    | C-26 Bulk Lime Delivery                     | 91-A-175              |
| 1-UBP-1F | 1-UBP    | Coal Pile (fugitive)                        | Grandfathered         |
| 1-WBV-1F | 1-WBV    | Landfill Haul Road (fugitive)               | Fugitive              |
| 1-PQU-1  | 1-PQU    | 165-W1 Backhoe Assembly Function Test       | Exempt <sup>(1)</sup> |
| 3-PQU-1  | 3-PQU    | 163-W1 Backhoe Assembly PT Check 1          | Exempt <sup>(1)</sup> |
| 3-PQU-2  | 3-PQU    | 163-W1 Backhoe Assembly PT Check 2          | Exempt <sup>(1)</sup> |
| 3-PQU-3  | 3-PQU    | 163-W1 Backhoe Assembly PT Check 3          | Exempt <sup>(1)</sup> |
| 3-PQU-4  | 3-PQU    | 163-W1 Backhoe Assembly PT Check 4          | Exempt <sup>(1)</sup> |
| 4-PQU-1  | 4-PQU    | 163-W1 Backhoe Assembly Function Test 1     | Exempt <sup>(1)</sup> |
| 4-PQU-2  | 4-PQU    | 163-W1 Backhoe Assembly Function Test 2     | Exempt <sup>(1)</sup> |
| 4-PQU-3  | 4-PQU    | 163-W1 Backhoe Assembly Function Test 3     | Exempt <sup>(1)</sup> |
| 5-PQU-1  | 5-PQU    | 163-W1 Backhoe QA Test Module               | Exempt <sup>(1)</sup> |
| 6-PQU-1  | 6-PQU    | 187-W3 H Crawler Assembly Function Test; C- | Exempt <sup>(1)</sup> |
| 7-PQU-1  | 7-PQU    | 187-W4 H Crawler Assembly Function Test; W- | Exempt <sup>(1)</sup> |
| 8-PQU-1  | 8-PQU    | 187-W3 H Crawler Assembly Function Test; E- | Exempt <sup>(1)</sup> |
| 9-PQU-1  | 9-PQU    | 163-W1 Backhoe Assembly Tire & Bucket Mount | Exempt <sup>(1)</sup> |
| 10-PQU-1 | 10-PQU   | 120-W4 HSD Assembly 1                       | Exempt <sup>(1)</sup> |
| 11-PQU-1 | 11-PQU   | 120-W4 HSD Assembly 2                       | Exempt <sup>(1)</sup> |
| 12-PQU-1 | 12-PQU   | 158-W5 Skid Steer Fuel Station              | Exempt <sup>(1)</sup> |
| 13-PQU-1 | 13-PQU   | 158-W5 Skid Steer Assembly Function Test    | Exempt <sup>(1)</sup> |
| 14-PQU-1 | 14-PQU   | 158-W5 Skid Steer Tracking Station          | Exempt <sup>(1)</sup> |

|           |        |   |                       |
|-----------|--------|---|-----------------------|
| 15-PQU-1  | 15-PQU | 158-W5 Skid Steer CTL Tracking Test         | Exempt <sup>(1)</sup> |
| 16-PQU-1  | 16-PQU | 158-W5 CTL/Skid Steer Repair Station        | Exempt <sup>(1)</sup> |
| 17-PQU-1  | 17-PQU | 158-W5 CTL/Skid Steer Test Station          | Exempt <sup>(1)</sup> |
| 18-PQU-1  | 18-PQU | 177 Z Log Loader Indoor Test Cycle          | Exempt <sup>(1)</sup> |
| 19-PQU-1  | 19-PQU | 177 Z FB/Harvester Indoor Test Cycle        | Exempt <sup>(1)</sup> |
| 21-PQU-1  | 21-PQU | 143 W4 Exp Crawler Assembly Engine Exhaust  | Exempt <sup>(1)</sup> |
| 3-UUE-1   | 3-UUE  | #5 Standby Generator                        | 94-A-042              |
| 4-UUE-1   | 4-UUE  | #6 Standby Generator                        | 94-A-043              |
| 5-UUE-1   | 5-UUE  | #7 Standby Generator                        | 94-A-044              |
| 6-UUE-1   | 6-UUE  | #8 Standby Generator                        | 94-A-045              |
| 7-UUE-1   | 7-UUE  | #9 Standby Generator                        | 94-A-046              |
| 8-UUE-1   | 8-UUE  | #10 Standby Generator                       | 94-A-047              |
| 9-UUE-1   | 9-UUE  | Computer Room Back-Up Generator (347 hp)    | Exempt <sup>(1)</sup> |
| 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              |
| 1-PXP-1F  | 1-PXP  | Plasma Arc 15578                            | Grandfathered         |
| 2-PXP-1F  | 2-PXP  | Plasma Arc 15579 (2 Torches)                | Fugitive              |
| 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-MJS-1F  | 1-MJS  | Janitorial & Facility Maint. Supplies       | Grandfathered         |
| 1-GSN-1F  | 1-GSN  | Fugitive Surface Coating (non-maintenance)  | Exempt                |

|         |       |              |                       |
|---------|-------|--------------|-----------------------|
| 1-UUW-1 | 1-UUW | #6 Fire Well | Exempt <sup>(1)</sup> |
|---------|-------|--------------|-----------------------|

<sup>(1)</sup> 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.

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Insignificant Activities Equipment List

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| 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-DXP                              | Plasma Arc - 16293  |
| 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-WBC                              | Ash Silo Unloader   |
| 4-PCW                              | Z Forestry Power Wash Heater  |
| 1-PXL                              | Laser Cut-17053   |
| 2-PXL                              | Laser Cut-17033   |
| 3-PXL                              | Laser Cut-16405   |
| 4-PXL                              | Laser Cut-16410   |
| 5-PXL                              | Laser Cut-16493   |
| 6-PXL                              | Laser Cut-16541   |
| 7-PXL                              | Laser Cut-16590   |
| 8-PXL                              | Laser Cut-16591   |
| 17-PXL                             | Laser Cut – 17024   |
| 18-PXL                             | Laser Cut – 17026   |
| 19-PXL                             | Laser Cut - 17104   |
| 2-GCS                              | Maintenance Solvent Parts Washers (14 Units)  |
| 20-PQU                             | 177 Z Forestry Repair Bay   |
| 2-WBC                              | C-26 Bulk Lime Feed   |
| 6-PDF                              | Brake Bonding Oven Combustion   |
| 1-MCW                              | Bldg. F Maintenance Wash Booth  |
| 1-PCW                              | W4 Crawler Wash Booth   |
| 2-PCW                              | W5 Skid Steer Wash Booth  |
| 1-UUE                              | Powerhouse Emergency Generator (66 bhp) <sup>(3)</sup>                                  |
| 2-UUE                              | Telephone Service Backup Generator (66 bhp) <sup>(3)</sup>                              |
| 6-PXF                              | Flame Cut – 17032 (6 Torches)   |

<sup>(3)</sup> This engine is an affected unit under 40 CFR 63 Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines. However, according to 40 CFR 63.6590(b)(3), this type of engine is not required to meet the requirements of 40 CFR 63 Subparts A or ZZZZ.

## Insignificant Activities Equipment List (Small Unit Exemption) <sup>(2)</sup>

| Insignificant Emission Unit Number | Insignificant Emission Unit Description |
|------------------------------------|---|
| 1-GWA                              | Production Welding                      |
| 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          |
| 9-PXL                              | Laser Cut-16592 small unit exemption    |
| 10-PXL                             | Laser Cut-16593 small unit exemption    |
| 11-PXL                             | Laser Cut 16757 small unit exemption    |
| 12-PXL                             | Laser Cut – 16759 small unit exemption  |
| 13-PXL                             | Laser Cut – 16761 small unit exemption  |
| 14-PXL                             | Laser Cut – 16763 small unit exemption  |
| 15-PXL                             | Laser Cut – 16764 small unit exemption  |
| 16-PXL                             | Laser Cut – 16910 small unit exemption  |
| 1-PCS                              | 164 W P Mix Repair Booth                |
| 2-MSP                              | 955 K Test Paint Booth                  |
| 1-PSR                              | 58-F3 Anti-Rust Spray Booth             |
| 2-DQU                              | X1E Mobile Unit Test 1                  |
| 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 1                  |
| 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 Unit Test 1                |
| 20-DQU                             | X18EE Mobile Unit Test 2                |

<sup>(2)</sup> 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).

| <b>Insignificant Emission Unit Number</b> | <b>Insignificant Emission Unit Description</b> |
|---|--|
| 21-DQU                                    | B2 Mobile Unit Test 1                          |
| 22-DQU                                    | B2 Mobile Unit Test 2                          |
| 23-DQU                                    | B2 Mobile Unit Test 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                                    | X Mobile Unit Test 1                           |
| 2-UUW                                     | #8 Fire Well <sup>(3)</sup>                    |

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<sup>(3)</sup> This engine is an affected unit under 40 CFR 63 Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines. However, according to 40 CFR 63.6590(b)(3), this type of engine is not required to meet the requirements of 40 CFR 63 Subparts A or ZZZZ.

## II. Plant-Wide Conditions

Facility Name: John Deere Dubuque Works  
Permit Number: 01-TV-021R1-M001

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

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### Permit Duration

The term of this permit is: Five (5) years  
Commencing on: June 2, 2008  
Ending on: June 1, 2013

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.

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### Emission Limits

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

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

Sulfur Dioxide (SO<sub>2</sub>): 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"

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### **Compliance Plan**

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

Unless otherwise noted in the Emission Point-Specific Conditions, John Deere Dubuque Works is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, John Deere Dubuque Works shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

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## **Title IV (Acid Rain)**

The fossil-fuel fired devices at the facility are not affected units subject to the requirements of the Acid Rain program promulgated under 40 CFR 72 through 76. This determination was made based on the information submitted by the applicant showing that all of the units did not serve a generator that produced electricity for sale during 1985 and that did not, as of November 15, 1990, and does not currently, serve as a generator that produces electricity for sale.

Authority for Requirement: 40 CFR 72.6(b)(2)

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## **Applicable and Vacated NESHAPS**

### 40 CFR Part 63, Subpart MMMM

Several emission units at this facility are affected sources under Subparts A (General Provisions, 40 CFR §63.1 – 40 CFR §63.15) and MMMM [National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR §63.3880 – 40 CFR §63.3981] of the National Emission Standard for Hazardous Air Pollutants (NESHAP).

The affected sources are the collection of all the items listed in paragraphs (b)(1) through (4) of section 63.3882 that are used for surface coating of miscellaneous metal parts and products within each subcategory.

- (1) All coating operations as defined in 63.3981
- (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed.
- (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials.
- (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

Per the applicability criteria in Sec. 63.3881 and the definition of new Sec 63.3882, the sources at this facility are considered existing sources subject to 40 CFR Subpart MMMM.

The permittee shall comply with all applicable requirements of Subpart MMMM. This existing facility was required to demonstrate compliance with the standards on January 2, 2007. The initial notification was received on December 16, 2004.

### **Emission Limits**

There are five source categories potentially subject to Subpart MMMM if they meet the definition of affected source and use 250 gal. or more per year of coatings that contain HAPs. Below is a table of the five source categories and the organic HAP limit for existing sources. See section 63.3981 for a complete definition of each source category.

| <b>Organic HAP Emission Limits</b> | <b>Existing Source</b>            |
|------------------------------------|-----------------------------------|
| General                            | 2.6 lb HAP/gal of coating solids  |
| High Performance Source            | 27.5 lb HAP/gal of coating solids |
| Magnet Wire                        | 1.0 lb HAP/gal of coating solids  |
| Rubber to Metal                    | 37.7 lb HAP/gal of coating solids |
| Extreme Performance                | 12.4 lb HAP/gal of coating solids |

### **Compliance Options**

You must include all coatings (as defined in Section 63.3981), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in Section 63.3890. To make this determination, you must use at least one of the three compliance options summarized below.

- A) Compliant material option – coatings are less than or equal to the limit. Thinners, additives and cleaning materials do NOT contain any HAPs.
- B) Emission rate without add-on control – Taking all materials into account, the organic HAP emission rate is less than or equal to the applicable limit determined on a monthly basis.
- C) Emission rate with add-on control – Taking all materials into account, the organic HAP emission rate is less than or equal to the applicable limit determined on a monthly basis, but with the use of control equipment.

\* If the facility selects compliance option A or B, they are not required to meet any operating limits or work practice standards.

### **Notifications, Reports and Records**

- A. Notifications
  1. Initial notification for existing facility – Submitted December 16, 2004.
  2. Initial compliance status – The facility must submit a Notification of Compliance Status within 30 days after the end of the initial 12-month compliance period. The initial compliance period begins January 2, 2007 and ends the last day of the 12<sup>th</sup> month following January 2, 2007. The deadline to submit the notification of compliance status was March 1, 2008. John Deere Dubuque submitted their notification on February 28, 2008.
- B. Reports
  1. Semi-annual compliance reports
  2. Performance test reports (if using add-on control)

3. Start-up, shutdown, malfunction report (if using add-on control)
- C. Records (See Section 63.3930 for a complete list of requirements)
1. Copy of each notification and report
  2. Information from materials suppliers
  3. Record of each type of operation
  4. Record of HAP content

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

40 CFR Part 63, Subpart ZZZZ

Standby Generators # 5 through # 10, # 8 fire well, powerhouse emergency generator, telephone service backup generator, # 6 fire well and the computer room backup generator are affected sources under Subparts A (General Provisions, 40 CFR §63.1 – 40 CFR §63.15) and ZZZZ [National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR §63.6580 – 40 CFR §63.6675] of the National Emission Standard for Hazardous Air Pollutants (NESHAP).

According to 63.6590(a) an affected source is any existing, new or reconstructed stationary RICE located at a major source or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. Section 63.6590(b)(3) states a stationary RICE which is an existing compression ignition stationary RICE or an existing emergency stationary RICE, do not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary for the standby generators, # 8 fire well, the powerhouse emergency generator or the telephone backup service generator. According to 63.6590(c), # 6 fire well and the computer room back-up generator must meet the requirements of this part by meeting the requirements of 40 CFR 60, Subpart III.

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

Vacated 40 CFR Part 63, Subpart DDDDD

**Section 112(j) of the Clean Air Act (MACT Hammer) Compliance Plan**

These emissions units are of the source type regulated by the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters (567 IAC 23.1(4)"dd", 40 CFR Part 63, Subpart DDDDD):

| EP       | EU       | Source Description      | Construction Permit |
|----------|----------|-------------------------|---------------------|
| C1-UUS-2 | 1-UUS(1) | #1 Boiler (Coal)        | 71-A-089 & 77-A-363 |
| C1-UUS-2 | 1-UUS(2) | #1 Boiler (Natural Gas) | 71-A-089 & 77-A-363 |
| C1-UUS-2 | 2-UUS(1) | #2 Boiler (Coal)        | 71-A-090 & 77-A-363 |
| C1-UUS-2 | 2-UUS(2) | #2 Boiler (Natural Gas) | 71-A-090 & 77-A-363 |
| C1-UUS-2 | 3-UUS(1) | #3 Boiler (Coal)        | 71-A-089 & 77-A-363 |
| C1-UUS-2 | 3-UUS(2) | #3 Boiler (Natural Gas) | 71-A-089 & 77-A-363 |
| C1-UUS-2 | 4-UUS    | #4 Boiler (Coal)        | 71-A-091 & 77-A-363 |

On July 30, 2007, the DC Circuit Court vacated this entire standard. Since the standard has been vacated, the units may be subject to the requirements of section 112(j) of the Clean Air Act. Section 112(j) requires the facility to submit an application addressing the control of HAP emissions from these units and also requires that the MACT (Maximum Achievable Control Technology) be incorporated into the facility's Title V operating permit. The DNR is not requiring affected facilities to submit 112(j) applications at this time. However, the DNR recommends that affected facilities submit the minimum information to satisfy 112(j) application requirements. The DNR is suggesting submittal of this information by January 31, 2009, because this date is 18 months from the date the D.C. Court issued its mandate. (Refer to the Air Quality Bureau letter dated December 31, 2008 for additional detail.)

John Deere Dubuque Works submitted the minimum information via email to satisfy 112(j) requirements on January 29, 2009.

Authority for Requirement: 40 CFR 63.52; 567 IAC 23.1(4)"b"(2)

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

Facility Name: John Deere Dubuque Works  
Permit Number: 01-TV-021R1-M001

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#### **Emission Point ID Numbers: 1-DSP-1**

##### Associated Equipment

Associated Emission Unit ID Number: 1-DSP  
Emissions Control Equipment ID Numbers: 9-EFM  
Emissions Control Equipment Description: Dry Filters

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Emission Unit vented through these Emission Points: 1-DSP  
Emission Unit Description: Parts and Vehicle Touchup Paint 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 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/scf  
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:**

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit 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**

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

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Numbers: 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

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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/scf  
Authority for Requirement: 567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 1.83 TPY  
Authority for Requirement: Iowa 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.*

Process throughput:

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

Reporting & Record keeping:

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: Iowa DNR Construction Permit 88-A-197-S

NESHAP:

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit 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**

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

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 1-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

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Emission Unit vented through this Emission Point: 1-MSP  
Emission Unit Description: 131-W2 Carpenter/Touch-up 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 %<sup>(1)</sup>

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

<sup>(1)</sup> 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/scf

Authority for Requirement: Iowa 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.*

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 & Record keeping:

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: Iowa DNR Construction Permit 80-A-093-S1

NESHAP:

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**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: Iowa DNR Construction Permit 80-A-093-S1

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

**Monitoring Requirements**

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

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

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

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

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

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 5-PBD-1**

### Associated Equipment

Associated Emission Unit ID Numbers: 5-PBD

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Emission Unit vented through this Emission Point: 5-PBD  
Emission Unit Description: 186-W3 Crawler Paint Kitchen  
Raw Material/Fuel: Paint  
Rated Capacity: See EP-17-PSP and 18-PSP

### **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: Volatile Organic Compounds (VOC)

Emission Limit(s): <sup>(1)</sup>

Authority for Requirement: 567 IAC 22.108(14)

<sup>(1)</sup> VOC emissions accounted for in the respective spray booths.

#### **Operational Limits & Requirements**

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

#### NESHAP:

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**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: Iowa DNR Construction Permit 03-A-714

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 6-PBD-1**

### Associated Equipment

Associated Emission Unit ID Numbers: 6-PBD

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Emission Unit vented through this Emission Point: 6-PBD

Emission Unit Description: 163-W1 Paint Kitchen 1

Raw Material/Fuel: Paint

Rated Capacity: See EP-19-PSP and 20-PSP

### **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: Volatile Organic Compounds (VOC)

Emission Limit(s): <sup>(1)</sup>

Authority for Requirement: 567 IAC 22.108(14)

<sup>(1)</sup> VOC emissions accounted for in the respective spray booths.

#### **Operational Limits & Requirements**

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

Process throughput:

The following operating limits apply to emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.

1. The maximum throughput of paint for these units shall not exceed 63,444 gallons per twelve (12) month rolling period, rolled monthly,
2. No more than 4000 gallons of paint per twelve (12) month rolling period, rolled monthly shall have a VOC content greater than 3.6 pounds per gallon.
3. The VOC content of all paints used in these units shall not exceed 6.0 pounds per gallon.

Reporting & Record keeping:

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. At the end of each month, record the total number of gallons of paint used over the previous month in emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.
2. At the end of each month, record the total number of gallons of paint used of the previous twelve (12) months in emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.
3. At the end of each month, record the number of gallons of paint with a VOC content of greater than 3.6 pounds per gallon used over the previous month in emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.
4. At the end of each month, record the total number of gallons of paint with a VOC content of greater than 3.6 pounds per gallon used over the previous twelve (12) months in emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.
5. Maintain MSDS or other documentation of the VOC content of all paints used in emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.

Authority for Requirement: Iowa DNR Construction Permit 05-A-250

NESHAP:

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**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: Iowa DNR Construction Permit 03-A-715

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 7-PBD-1**

### Associated Equipment

Associated Emission Unit ID Numbers: 7-PBD

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Emission Unit vented through this Emission Point: 7-PBD

Emission Unit Description: 163-W1 Paint Kitchen 2

Raw Material/Fuel: Paint

Rated Capacity: See EP-19-PSP and 20-PSP

### **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 %<sup>(1)</sup>

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

<sup>(1)</sup> 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: Iowa DNR Construction Permit 05-A-250  
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): <sup>(1)</sup>

Authority for Requirement: 567 IAC 22.108(14)

<sup>(1)</sup> VOC emissions accounted for in the respective spray booths.

#### **Operational Limits & Requirements**

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

Process throughput:

The following operating limits apply to emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.

1. The maximum throughput of paint for these units shall not exceed 63,444 gallons per twelve (12) month rolling period, rolled monthly,

2. No more than 4000 gallons of paint per twelve (12) month rolling period, rolled monthly shall have a VOC content greater than 3.6 pounds per gallon.
3. The VOC content of all paints used in these units shall not exceed 6.0 pounds per gallon.

**Reporting & Record keeping:**

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. At the end of each month, record the total number of gallons of paint used over the previous month in emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.
2. At the end of each month, record the total number of gallons of paint used of the previous twelve (12) months in emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.
3. At the end of each month, record the number of gallons of paint with a VOC content of greater than 3.6 pounds per gallon used over the previous month in emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.
4. At the end of each month, record the total number of gallons of paint with a VOC content of greater than 3.6 pounds per gallon used over the previous twelve (12) months in emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.
5. Maintain MSDS or other documentation of the VOC content of all paints used in emission units 6-PBD, 7-PBD, 19-PSP, 20-PSP, and 11-PDF.

Authority for Requirement: Iowa DNR Construction Permit 05-A-250

**NESHAP:**

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**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: Iowa DNR Construction Permit 05-A-250

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 8-PBD-1**

### Associated Equipment

Associated Emission Unit ID Numbers: 8-PBD

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Emission Unit vented through this Emission Point: 8-PBD

Emission Unit Description: Crawler Paint Kitchen

Raw Material/Fuel: Paint

Rated Capacity: See EP-17-PSP and 18-PSP

### **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/scf

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

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): <sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 05-A-769

<sup>(1)</sup> VOC emissions from this emission unit are assumed to be emitted from the Crawler paint spray booths and are accounted for under their permits (permits 97-A-990-S1 through 97-A-993-S1).

#### **Operational Limits & Requirements**

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

#### **NESHAP:**

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**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: Iowa DNR Construction Permit 05-A-769

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Numbers: 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     | Control Equipment & ID     | Raw Material & Rated Capacity (gal/hr) | Construction Permits |
|-----------------------|----------------------|-------------------------------|----------------------------|--|----------------------|
| 17-PSP-1              | 17-PSP               | Crawler Base Coat Paint Booth | Water Wall Scrubber 21-ESW | Paint 10.26                            | 97-A-990-S1          |
| 17-PSP-2              |                      |                               |                            |  | 97-A-991-S1          |
| 18-PSP-1              | 18-PSP               | Crawler Top Coat Paint Booth  | Water Wall Scrubber 22-ESW | Paint 10.26                            | 97-A-992-S1          |
| 18-PSP-2              |                      |                               |                            |  | 97-A-993-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 %<sup>(1)</sup>

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

See construction permits in Table: Crawler Paint Booths

<sup>(1)</sup> 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, 1.96 lb/hr and 6.05 TPY<sup>(2)</sup>

Authority for Requirement: 567 IAC 23.4(13)

See construction permits in Table: Crawler Paint Booths

Pollutant: PM-10

Emission Limit(s): 1.15 lb/hr and 3.55 TPY<sup>(2)</sup>

Authority for Requirement: See construction permits in Table: Crawler Paint Booths

<sup>(2)</sup>Limit for *each* stack

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 72.5 TPY<sup>(3)</sup>

Authority for Requirement: See construction permits in Table: Crawler Paint Booths

<sup>(3)</sup> Limit for booths 17-PSP and 18-PSP combined.

Pollutant: Total HAP

Emission Limit(s): 0.31 kg/l<sup>(4)</sup>

Authority for Requirement: 567 IAC 23.1(4)"cm"

See construction permits in Table: Crawler Paint Booths

<sup>(4)</sup> 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.*

Hours of operation:

1. The owner or operator shall operate each spray booth (EU 17-PSP) and (EU 18-PSP) a maximum of 6183 hours per 12-month rolling period.
2. Each spray booth (EU 17-PSP and EU 18-PSP) shall be limited to the use of a maximum of two spray guns at any one time.
3. These emission units are subject to all applicable operating limits set forth in NESHAP Subparts A (40 CFR 63.1 – 40 CFR 63.15) and MMMM (40 CFR 63.3880 – 40 CFR 63.3981)

Reporting & Record keeping:

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 VOC content of all spray materials (e.g., base coat, spray coat, primer, and solvent) used in each booth (EU 17-PSP and EU 18-PSP), in pounds per gallon.
2. The amount of spray materials used in each booth (EU 17-PSP and EU 18-PSP), in gallons per day. Calculate and record monthly and 12-month totals, rolled monthly.
3. Calculate and record the VOC emissions from emission units 17-PSP and 18-PSP each month. Calculate and record a rolling 12-month total for VOC emissions each month. If the VOC emissions from emission units 17-PSP and 18-PSP exceed 58.0 tons, then the owner or operator shall calculate and record VOC emissions on a daily basis and maintain a 365-day rolling total amount of VOC emissions. Calculating and

recordkeeping requirements will revert back to a monthly basis if the 365-day rolling total is returned below 58.0 tons of VOC.

4. The number of hours these emission units are operated. Calculate and record monthly and 12-month totals, rolled monthly.
5. All applicable recordkeeping and monitoring set forth in NESHAP Subparts A (40 CFR 63.1 – 40 CFR 63.15) and MMMM (40 CFR 63.3880 – 40 CFR 63.3981).

Authority for Requirement: See construction permits in Table: Crawler Paint Booths

**NESHAP:**

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart MMMM please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**Emission Point Characteristics**

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

| <b>Emission Point #</b> | <b>Stack Height (feet)</b> | <b>Stack Opening (inches)</b> | <b>Stack Exhaust Flow Rate (acfm)</b> | <b>Stack Temperature (°F)</b> | <b>Discharge Style</b> | <b>Authority For Requirement</b> |
|-------------------------|----------------------------|-------------------------------|---------------------------------------|-------------------------------|------------------------|----------------------------------|
| 17-PSP-1                | 56.5                       | 48                            | 26,775                                | Ambient                       | Vertical unobstructed  | 97-A-990-S1                      |
| 17-PSP-2                | 56.5                       | 48                            | 26,775                                | Ambient                       | Vertical unobstructed  | 97-A-991-S1                      |
| 18-PSP-1                | 56.5                       | 48                            | 26,775                                | Ambient                       | Vertical unobstructed  | 97-A-992-S1                      |
| 18-PSP-2                | 56.5                       | 48                            | 26,775                                | Ambient                       | Vertical unobstructed  | 97-A-993-S1                      |

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

**Monitoring Requirements**

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

**Stack Testing:**

**Emission Point to be Tested – EP 17-PSP-1 or EP 17-PSP-2**

Pollutant – Particulate Matter

Stack Test to be Completed by June 2, 2010

Test Method – Iowa Compliance Sampling Method 5

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10

Stack Test to be Completed by June 2, 2010

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

Authority for Requirement – 567 IAC 22.108(3)

*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**

The water wall scrubber CAM plan begins on page 37 of this permit.

Authority for Requirement: 567 IAC 22.108(3)

# **Compliance Assurance Monitoring (CAM) Plan**

## **21-ESW, 22-ESW, 23-ESW, 24-ESW**

### **Water Wall Scrubbers**

#### **Water Wall Scrubber Parameters**

- Associated Emission Units: 17-PSP, 18-PSP, 19-PSP, 20-PSP (Crawler and Backhoe Paint Systems)
- Associated Emission Points: 17-PSP-1, 17-PSP-2, 18-PSP-1, 18-PSP-2, 19-PSP-1, 19-PSP-2, 20-PSP-1, 20-PSP-2,
- Pollutants Controlled: PM, PM<sub>10</sub>

#### **Applicable Requirements**

##### **17-PSP**

PM emission limits: 0.01 gr/scf, 1.96 lb/hr & 6.05 TPY (per stack)

Authority for Requirement: 567 IAC 23.4(13), Iowa DNR Construction Permits 97-A-990-S1 and 97-A-991-S1

PM<sub>10</sub> emission limits: 1.15 lb/hr & 3.55 TPY (per stack)

Authority for Requirement: Iowa DNR Construction Permits 97-A-990-S1 and 97-A-991-S1

##### **18-PSP**

PM emission limits: 0.01 gr/scf, 1.96 lb/hr & 6.05 TPY (per stack)

Authority for Requirement: 567 IAC 23.4(13), Iowa DNR Construction Permits 97-A-992-S1 and 97-A-993-S1

PM<sub>10</sub> emission limits: 1.15 lb/hr & 3.55 TPY (per stack)

Authority for Requirements: Iowa DNR Construction Permits 97-A-992-S1 and 97-A-993-S1

##### **19-PSP**

PM emission limits: 0.01 gr/scf, 1.38 lb/hr & 6.04 TPY (per stack)

Authority for Requirement: 567 IAC 23.4(13), Iowa DNR Construction Permits 98-A-081-S1 and 98-A-082-S1

PM<sub>10</sub> emission limits: 1.122 lb/hr & 3.55 TPY (per stack)

Authority for Requirement: Iowa DNR Construction Permits 98-A-081-S1 and 98-A-082-S1

##### **20-PSP**

PM emission limits: 0.01 gr/scf, 1.38 lb/hr & 6.04 TPY (per stack)

Authority for Requirement: 567 IAC 23.4(13), Iowa DNR Construction Permits 98-A-083 and 98-A-084

PM<sub>10</sub> emission limits: 1.122 lb/hr & 3.55 TPY (per stack)

Authority for Requirement: Iowa DNR Construction Permits 98-A-083 and 98-A-084

### ***Monitoring Approach***

#### **General Monitoring Guidelines**

- CAM involves the observation of control equipment compliance indicators: observation of visible emissions and pressure drops over water wall scrubbers. This plan defines acceptable ranges for these indicators. CAM also includes control equipment maintenance and inspections. Maintenance and inspections that will facilitate control equipment operations are identified in this plan.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.
- If weather prevents visible emissions monitoring, the observer will note the weather conditions on the form used to record monitoring. If an observation is necessary to meet the required daily monitoring, at least three attempts will be made to retake the observation throughout the day. If unsuccessful that day due to weather, an observation will be made the next day the weather permits.

#### **Excursion from Compliance Indicators**

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.

- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion. (Abnormal conditions discovered through equipment inspection and maintenance require implementation of remediation within a reasonable timeframe. Paint systems will not operate until the water wall scrubbers are operational.)
- If corrective actions do not return the compliance indicator to its defined acceptable indicator range, JDDW will demonstrate compliance with the PM and PM-10 limit by conducting
  - source testing approved by the Department within 90 days of the excursion.
    - If the test demonstrates compliance with emission limits, JDDW will determine new indicator ranges for monitoring based on the testing results.
    - If the test demonstrates noncompliance with emission limits, JDDW will, within 60 days, propose a schedule to implement corrective action to bring the source into compliance and conduct source testing to demonstrate compliance.
  - Report monitoring or other deviations (operating conditions, emission limits, or reporting requirements) in IDNR semi-annual monitoring and annual compliance certification reports.

### **Compliance Indicator Ranges**

- No visible emissions.
- Critical Gauge Readings
  - Acceptable indicator ranges:
    - Crawler Prime Booth elimination system pressure drop 5.0" to 6.0"
    - Crawler Finish Booth elimination system pressure drop 5.0" to 6.0"
    - Backhoe Prime Booth elimination system pressure drop 7.0" to 8.0"
    - Backhoe Finish Booth elimination system pressure drop 5.0" to 6.0"

### **Monitoring Methods**

- Daily
  - Complete critical gauge readings of paint elimination system pressure drops. Complete and follow “Paint Booth Meter Reading Chart”, which includes a description of each reading point, normal operating ranges, and required action when out of range. Each reading point has an ID letter that cross-references with actual locations on the “Elemental Paint Booth Schematic”. Note: critical readings are noted above. Non-critical readings are documented as additional process control on the “Paint Booth Meter Reading Chart” but do not directly impact the emission control equipment.
- Weekly
  - Assess paint booth stack for visible emissions.
- Annually
  - Inspect pressure monitoring equipment and adjust or replace as needed.
- Preventive Maintenance – conducted according to John Deere Preventive Maintenance (PM) schedules.
  - Backhoe Paint System PMs applicable to emission control system:
    - Clean flood sheets in robot booth and tank in pit
    - Blast lower baffles
    - Blast exhaust fan blades and clean exhaust stack housing
  - Crawler Paint System PMs applicable to emission control system:
    - Clean flood sheets and tank in pit
    - Blast lower baffles
    - Blast exhaust fan blades and clean exhaust stack housing

## ***Performance Criteria***

### **Data Representativeness**

An observation in exceedance of NVE could reveal a decrease in the performance of the water wall scrubbers and potentially an increase in particulate emissions. Gauge readings not within the acceptable indicator range may signify reduced water wall scrubber performance leading to an increase in particulate emissions if corrective actions are not initiated.

### **Record Keeping and Reporting (Verification of Operational Status)**

- JDDW will maintain written or electronic records of the following:
  - Daily critical elimination system pressure drop gauge readings.
  - Weekly visible emissions evaluations.
  - Annual inspection of pressure monitoring equipment.
  - Preventive maintenance activities as scheduled.
  - Record any excursions and corrective actions resulting from compliance indicator readings and/or inspections/preventive maintenance listed under "Monitoring Methods".
- Records will be kept for at least five years and be available upon request.

### **Quality Control**

- The water wall scrubbers will be operated and maintained as outlined in the above monitoring requirements which are based on manufacturer recommendations and JDDW guidelines.
- JDDW will maintain a basic inventory of spare parts.

### **Data Collection Procedures**

- Manual entries are made based on gauge readings. Data collection formats include the "Paint Booth Meter Reading Chart".
- Maintenance personnel record all preventive maintenance/inspections performed on the water wall scrubber and actions resulting from the inspections outlined in this plan.

## **Emission Point ID Numbers: 19-PSP-1, 19-PSP-2**

### Associated Equipment

Associated Emission Unit ID Number: 19-PSP  
Emissions Control Equipment ID Number: 23-ESW  
Emissions Control Equipment Description: Water Wall Scrubber

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Emission Unit vented through these Emission Points: 19-PSP  
Emission Unit Description: 163-W1 Backhoe Prime Coat Paint Booth  
Raw Material/Fuel: Paint  
Rated Capacity: 10.03 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 %<sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 98-A-081-S1  
Iowa DNR Construction Permit 98-A-082-S1  
567 IAC 23.3(2)"d"

<sup>(1)</sup> 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, 1.38 lb./hr and 6.04 TPY<sup>(2)</sup>

Authority for Requirement: Iowa DNR Construction Permit 98-A-081-S1  
Iowa DNR Construction Permit 98-A-082-S1  
567 IAC 23.4(13)

Pollutant: PM-10

Emission Limit(s): 1.122 lb/hr and 3.55 TPY<sup>(2)</sup>

Authority for Requirement: Iowa DNR Construction Permit 98-A-081-S1  
Iowa DNR Construction Permit 98-A-082-S1

<sup>(2)</sup> Limit for *each* stack.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 119 TPY<sup>(3)</sup>

Authority for Requirement: Iowa DNR Construction Permit 98-A-081-S1

Iowa DNR Construction Permit 98-A-082-S1

<sup>(3)</sup> Limit for booths 19 and 20 combined.

### **Operational Limits & Requirements**

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

Hours of operation:

1. This booth shall be operated no more than 6,323 hours per 12-month rolling period.

Process throughput:

1. The amount of paint used in booths 19-PSP and 20-PSP shall not exceed 63,444 gallons per 12-month rolling period.
2. No more than 4,000 gallons per 12-month rolling period shall have a VOC content greater than 3.6 pounds per gallon.
3. The VOC content of any paint shall not exceed 6.0 pounds per gallon.

Reporting & Record keeping:

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 VOC content of any paint used in this booth, in pounds per gallon.
2. Calculate the amount of paint used in this booth and booth 20-PSP combined, in gallons per day. Calculate and record monthly and 12-month rolling totals.
3. Record the number of hours this booth is operated. Calculate and record monthly hours and 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 98-A-081-S1

Iowa DNR Construction Permit 98-A-082-S1

### **NESHAP:**

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

Stacks 19-PSP-1 and 19-PSP-2

Stack Height (ft., from the ground): 56 feet

Stack Opening (inches, dia.): 48 inches

Exhaust Flow Rate (acfm): 26,775

Exhaust Temperature (° F): Ambient

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 98-A-081-S1 (Stack 19-PSP-1)

Iowa DNR Construction Permit 98-A-082-S1 (Stack 19-PSP-2)

**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 2, 2010

Test Method – Iowa Compliance Sampling Method 5

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10

Stack Test to be Completed by June 2, 2010

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

Authority for Requirement – 567 IAC 22.108(3)

*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**

The water wall scrubber CAM plan begins on page 37 of this permit.

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Numbers: 20-PSP-1, 20-PSP-2**

### Associated Equipment

Associated Emission Unit ID Number: 20-PSP  
Emissions Control Equipment ID Number: 24-ESW  
Emissions Control Equipment Description: Water Wall Scrubber

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Emission Unit vented through these Emission Points: 20-PSP  
Emission Unit Description: 163-W1 Backhoe Top Coat Paint Booth  
Raw Material/Fuel: Paint  
Rated Capacity: 10.03 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 %<sup>(1)</sup>  
Authority for Requirement: Iowa DNR Construction Permit 98-A-083  
Iowa DNR Construction Permit 98-A-084  
567 IAC 23.3(2)"d"

<sup>(1)</sup> 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, 1.38 lb./hr and 6.04 TPY<sup>(2)</sup>  
Authority for Requirement: Iowa DNR Construction Permit 98-A-083  
Iowa DNR Construction Permit 98-A-084  
567 IAC 23.4(13)

Pollutant: PM-10  
Emission Limit(s): 1.122 lb/hr and 3.55 TPY<sup>(2)</sup>  
Authority for Requirement: Iowa DNR Construction Permit 98-A-083  
Iowa DNR Construction Permit 98-A-084

(2) Limit for *each* stack.

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 119 TPY<sup>(3)</sup>  
Authority for Requirement: Iowa DNR Construction Permit 98-A-083  
Iowa DNR Construction Permit 98-A-084

<sup>(3)</sup> Limit for booths 19 and 20 combined.

### **Operational Limits & Requirements**

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

Hours of operation:

1. This source shall operate a maximum of 6,323 hours per 12-month rolling period, rolled monthly.

Process throughput:

1. The maximum allowable paint consumption is 63,444 gallons per 12-month rolling period, rolled monthly.
2. No more than 4,000 gallons per 12-month rolling period, rolled monthly, shall have a VOC content greater than 3.6 pounds per gallon.
3. The VOC content of any paint shall not exceed 6.0 pounds per gallon.

Reporting & Record keeping:

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 VOC content of all paints used in this booth, in pounds per gallon.
2. Calculate the amount of paint used in this booth, in gallons per day. Calculate and record monthly and 12-month total rolled monthly.
3. Record the number of hours this source is operated. Calculate and record monthly hours and 12-month totals rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 98-A-083  
Iowa DNR Construction Permit 98-A-084

These operational limits apply to emissions units 6-PBD, 7-PBD, 19-PSP, 20-PSP and 11-PDF.

### **NESHAP:**

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**Emission Point Characteristics**

*The emission points shall conform to the specifications listed below.*

| Emission Point Number | Stack Height (feet) | Stack Diameter (inches) | Exhaust Flow Rate (acfm) | Stack Temperature (°F) | Discharge Style        | Authority for Requirement |
|-----------------------|---------------------|-------------------------|--------------------------|------------------------|------------------------|---------------------------|
| 20-PSP-1              | 56                  | 48                      | 26,775                   | 72                     | Vertical, unobstructed | 98-A-083                  |
| 20-PSP-2              | 56                  | 48                      | 26,775                   | 72                     | Vertical, unobstructed | 98-A-084                  |

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

**Monitoring Requirements**

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

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

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

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

The water wall scrubber CAM plan begins on page 37 of this permit.

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Numbers: Forestry Touch Up Paint Booth

### Associated Equipment

Associated Emission Unit ID Number: See Table Forestry Touch Up 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              | 9.37                        | 06-A-621            |
| 21-PSP-2              |                      |                               |                    |                             | 06-A-622            |

### 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 %<sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permits 06-A-621 & 06-A-622  
567 IAC 23.3(2)"d"

<sup>(1)</sup> 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: Iowa DNR Construction Permits 06-A-621 & 06-A-622  
567 IAC 23.4(13)

Pollutant: PM-10

Emission Limit(s): 0.86 lb/hr

Authority for Requirement: Iowa DNR Construction Permits 06-A-621 & 06-A-622

**Operational Limits & Requirements**

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

Process throughput:

1. The amount of spray material used in the paint booth (EU 21-PSP) shall not exceed 2,000 gallons per twelve month rolling period. The VOC content of any spray material used shall not exceed 7.5 lbs per gallon.
2. The spray booth shall be limited to the use of one spray gun at any one time.
3. The filters shall be maintained and replaced per the manufacturer’s instructions and specifications.

Reporting & Record keeping:

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. Maintain a record of the amount of spray material used in the paint booth (EU 21-PSP) in gallons per twelve-month rolling period.
2. Maintain the MSDS for all spray materials used.
3. Maintain a record of maintenance and replacement of the filters.
4. Maintain manufacturer documentation on the spray gun and filter specifications.

Authority for Requirement: Iowa DNR Construction Permits 06-A-621 & 06-A-622

**NESHAP:**

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**Emission Point Characteristics**

*The 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 |
|-----------------------|---------------------|-------------------------|--------------------------|------------------------|-----------------|---------------------------|
| 21-PSP-1              | 41                  | 42                      | 20,000                   | Ambient                | Vertical        | 06-A-621                  |
| 21-PSP-2              | 41                  | 42                      | 20,000                   | Ambient                | Vertical        | 06-A-622                  |

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

**Monitoring Requirements**

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

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

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

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

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

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: Crawler Curing Ovens**

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Crawler Curing Ovens

**Table: Crawler Curing Ovens**

| Emission Point Number | Emission Unit Number | Emission Unit Description        | Raw Material           | Rated Capacity | 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: Iowa DNR Construction Permit 97-A-994 & 97-A-995  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 97-A-994 & 97-A-995  
567 IAC 23.3(2)"a"

Pollutant: PM-10

Emission Limit(s): 0.21 TPY

Authority for Requirement: Iowa DNR Construction Permit 97-A-994 & 97-A-995

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

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.*

Process throughput:

- 1. These sources are limited to the firing of natural gas and propane only.

Reporting & Record keeping:

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 these ovens

Authority for Requirement: Iowa DNR Construction Permit 97-A-994 & 97-A-995

**Emission Point Characteristics**

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

| <b>Emission Point #</b> | <b>Stack Height (feet)</b> | <b>Stack Opening (inches)</b> | <b>Stack Exhaust Flow Rate (acfm)</b> | <b>Stack Temperature (°F)</b> | <b>Authority For Requirement</b> |
|-------------------------|----------------------------|-------------------------------|---------------------------------------|-------------------------------|----------------------------------|
| 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 flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: See Table: Backhoe Curing Ovens**

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Backhoe Curing Ovens

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**Table: Backhoe Curing Ovens**

| <b>Emission Point Number</b> | <b>Emission Unit Number</b> | <b>Emission Unit Description</b> | <b>Raw Material</b>    | <b>Rated Capacity</b> | <b>Construction Permits</b> |
|------------------------------|-----------------------------|----------------------------------|------------------------|-----------------------|-----------------------------|
| 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 this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

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

<sup>(1)</sup> 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 (SO<sub>2</sub>)

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.*

Process throughput:

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

Reporting & Record keeping:

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: Iowa 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.*

| <b>Emission Point #</b> | <b>Stack Height (feet)</b> | <b>Stack Opening (inches)</b> | <b>Stack Exhaust Flow Rate (acfm)</b> | <b>Stack Temperature (°F)</b> | <b>Discharge Style</b> | <b>Authority For Requirement</b> |
|-------------------------|----------------------------|-------------------------------|---------------------------------------|-------------------------------|------------------------|----------------------------------|
| 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 flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 1-GAA-1F**

Associated Equipment

Associated Emission Unit ID Number: 1-GAA

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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: Particulate Matter

Emission Limit(s): 0.01 gr/scf

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:

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 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:**

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

#### **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<sup>(1)</sup>

Stack Temperature (°F): Ambient

Discharge Style: Vertical

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

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

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 1-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:

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 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:

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 1-GNA-1F**

Associated Equipment

Associated Emission Unit ID Number: 1-GNA

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Emission Unit vented through this Emission Point: 1-GNA

Emission Unit Description: Aerosol Can Usage

Raw Material/Fuel: Aerosol Material

Rated Capacity: 3.3 cans/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.

**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-WNA-1**

Associated Equipment

Associated Emission Unit ID Number: 1-WNA  
Emissions Control Equipment ID Number: 11-EFM  
Emissions Control Equipment Description: Filter Mat-Wood Fiber

---

Emission Unit vented through this Emission Point: 1-WNA  
Emission Unit Description: Aerosol Can Puncture Cabinet  
Raw Material/Fuel: Aerosol Cans  
Rated Capacity: 3.3 cans/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/scf  
Authority for Requirement: Iowa DNR Construction Permit 81-A-039  
567 IAC 23.4(13)

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 6-DQE-1**

### Associated Equipment

Associated Emission Unit ID Number: 6-DQE

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### 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 %<sup>(1)</sup>

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

567 IAC 23.3(2)"d"

<sup>(1)</sup> 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 the exceedance continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10

Emission Limit(s): 1.66 lb/hr

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

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 2.5 lb/MMBtu

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

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 24.2 lb/hr

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

### **Operational Limits & Requirements**

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

Process throughput:

1. The quantity of fuel shall not exceed 30,940 gallons per twelve-month rolling total.
2. The fuel shall be limited to #2 only.
3. The sulfur content of the fuel shall not exceed 0.05% by weight.
4. Only one engine may be tested at any one time.

Reporting & Record keeping:

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. Maintain records as to the quantity of fuel used per twelve-month rolling total.
2. Maintain records as to the fuel type and sulfur content of the fuel.

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

### **NESHAP:**

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

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

### **Emission Point Characteristics**

*This emission point shall conform to the specifications listed below.*

Stack Height (feet): 29

Stack Diameter (inches): 10

Stack Exhaust Flow Rate (scfm): 1600

Stack Temperature (°F): 1000

Discharge Style: Vertical w/o Rain Cap or w/ Unobstructing Rain Cap

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

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: See Table: Dyno Engine Exhaust I**

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Dyno Engine Exhaust I

**Table: Dyno Engine Exhaust I**

| Emission Point Number | Emission Unit Number | Emission Unit Description    | Fuel   | Rated Capacity (gal./hr) |
|-----------------------|----------------------|------------------------------|--------|--------------------------|
| 7-DQE-1               | 7-DQE                | X2 Bay 7 Dyno Engine Exhaust | Diesel | 20 gal/hr                |
| 8-DQE-1               | 8-DQE                | X2 Bay 8 Dyno Engine Exhaust | Diesel | 20 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 (SO<sub>2</sub>)

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 & Record keeping:

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)

- 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)

NESHAP:

These test cells are affected sources 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), these existing affected sources do 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"

**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: Dyno Engine Exhaust II**

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Dyno Engine Exhaust II

**Table: Dyno Engine Exhaust II**

| 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 (300 bhp) | Diesel | 15 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 (SO<sub>2</sub>)

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 & Record keeping:

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)

NESHAP:

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(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 P P P P P and A of 40 CFR 63 at this time.

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

**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

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### 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 %<sup>(1)</sup>

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

<sup>(1)</sup> 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: PM-10

Emission Limit(s): 1.27 lb/hr

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

Pollutant: Particulate Matter

Emission Limit(s): 1.27 lb/hr<sup>(2)</sup>

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

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): See footnote<sup>(2)</sup>

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

Pollutant: VOC

Emission Limit(s): See footnote<sup>(2)</sup>

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

Pollutant: CO

Emission Limit(s): See footnote <sup>(2)</sup>

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

<sup>(2)</sup> 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.*

Process throughput:

1. The rated power of engine 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.
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 & Record keeping:

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: Iowa DNR Construction Permit 09-A-319

### **NSPS:**

Any engine used in this lab will be subject to the requirements of the New Source Performance Standard for Compression Ignition, Stationary Internal Combustion Engines, 40 CFR, Part 60, Subpart IIII. Therefore, this source must comply with the emission standards and all other applicable requirements of that Subpart.

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

NESHAP:

Any engine used in this lab will be subject to the requirements of the National Emission Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE), 40 CFR, Part 63, Subpart ZZZZ.

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

**Emission Point Characteristics**

*This emission point shall conform to the specifications listed below.*

Stack Height (feet): 39  
Stack Diameter (inches): 10  
Stack Exhaust Flow Rate (scfm): 1500  
Stack Temperature (°F): 820  
Discharge Style: Vertical unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 09-A-319

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 1-PSA-1**

Associated Equipment

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

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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/scf  
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:

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit 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**

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

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 1-PCA-1**

Associated Equipment

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

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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.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 1-PDA-1**

Associated Equipment

Associated Emission Unit ID Number: 1-PDA

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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.

Emissions are accounted for in 1-PSA.

**Operational Limits & Requirements**

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

NESHAP:

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: C1-UUS-2**

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  
 Continuous Emissions Monitor ID Number: C1-COM-1

**Table: Boilers**

| EU ID                | EU Description                               | Primary Control Equipment       | Secondary Control Equipment               | Rate Capacity (MMBtu/hr) | Construction Permits <sup>(1)</sup> |
|----------------------|--|---------------------------------|---|--------------------------|-------------------------------------|
| 1-UUS(1)<br>1-UUS(2) | #1 Boiler (Coal )<br>#1 Boiler (Natural Gas) | CE 1-EMC<br>Multiple<br>Cyclone | CE 1-EEP<br>Electrostatic<br>Precipitator | 94                       | 71-A-89<br>77-A-363                 |
| 2-UUS(1)<br>2-UUS(2) | #2 Boiler (Coal )<br>#2 Boiler (Natural Gas) | CE 2-EMC<br>Multiple<br>Cyclone |   | 94                       | 71-A-90<br>77-A-363                 |
| 3-UUS(1)<br>3-UUS(2) | #3 Boiler (Coal)<br>#3 Boiler (Natural Gas)  | CE 3-EMC<br>Multiple<br>Cyclone |   | 94                       | 71-A-89<br>77-A-363                 |
| 4-UUS                | #4 Boiler (Coal)                             | CE 4-EMC<br>Multiple<br>Cyclone |   | 216                      | 71-A-91<br>77-A-363                 |

<sup>(1)</sup> Iowa DNR Construction Permits 71-A-89, 71-A-90, and 71-A-91 were issued to allow for the multiclones to be changed.

<sup>(2)</sup> Iowa DNR Construction Permit 77-A-363 was issued to allow for the addition of the electrostatic precipitator.

**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"

See Construction Permits in Table: Boilers

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 6 lb/MMBtu (when combusting coal)

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

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500ppmv (when combusting natural gas)

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.*

Reporting & Record keeping:

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 maintain the documentation of all fuels received listing the heat content and sulfur content (in %) of the coal to demonstrate compliance with the Sulfur Dioxide emission limit.

Authority for Requirement: 567 IAC 22.108(3)"b"

### **Monitoring Requirements**

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

**Stack Testing:** Tests shall be conducted at the main stack for the combined boiler output for the following:

Pollutant - Particulate Matter

Stack Test to be Completed by June 2, 2010

Test Method - Iowa Compliance Sampling Manual

Authority for Requirement - 567 IAC 22.108(3)

### **Continuous Emissions Monitoring:**

Pollutant - Opacity

Operational Specifications – 40 CFR 60, Appendix B, PS-1

Date of Initial System Calibration and Quality Assurance – Completed November 14, 2008.

Ongoing System Calibration/Quality Assurance – 40 CFR 60, Appendix B, PS-1

Reporting & Record keeping – 40 CFR 60, Appendix B, PS-1

Authority for Requirement – 567 IAC 25, 567 IAC 108(3) and 40 CFR 64

*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**

The electrostatic precipitator and multiclone CAM plans begin on page 78 of this permit.

Authority for Requirement: 567 IAC 22.108(3)

# Compliance Assurance Monitoring (CAM) Plan

## 1-EEP, Electrostatic Precipitator

### Electrostatic Precipitator Parameters

- Associated Emission Units: 1-UUS, 2-UUS, 3-UUS, 4-UUS (Boilers #1, #2, #3, #4)
- Associated Emission Point: C1-UUS-2
- Pollutants Controlled: PM

### Applicable Requirements

PM emission limit, 0.6 lb/mmBtu

Authority for Requirement: 567 IAC 23.3(2)"b", Iowa DNR Construction Permits 71-A-89, 71-A-90, 71-A-91 and 77-A-363.

### *Monitoring Approach*

#### General Monitoring Guidelines

- CAM involves the observation of control equipment compliance indicators: opacity readings and power to the precipitator. This plan defines acceptable ranges for these indicators. CAM also includes monitoring and control equipment maintenance and inspections. Maintenance and inspections that will facilitate consistent monitoring and control equipment operations are identified in this plan.
- Voltage, and amperage monitoring is not required during periods of time greater than one day in which the source does not operate.

#### Excursion from Compliance Indicators

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.
- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion. (Abnormal conditions discovered through equipment inspection and maintenance require implementation of remediation within a reasonable timeframe. Boilers will not burn coal until the ESP is fully operational.)
- If corrective actions do not return the compliance indicator to its defined acceptable indicator range, JDDW will demonstrate compliance with the PM limit by conducting..
  - Source testing approved by the Department within 90 days of the excursion
    - If the test demonstrates compliance with emission limits, JDDW will determine new indicator ranges for monitoring based on the testing results.
    - If the test demonstrates noncompliance with emission limits, JDDW will, within 60 days, propose a schedule to implement corrective action to bring the source into compliance and conduct source testing to demonstrate compliance.
  - Report monitoring or other deviations (operating conditions, emission limits, or reporting requirements) in IDNR semi-annual monitoring and annual compliance certification reports.

#### Compliance Indicator Ranges

- Opacity
  - Acceptable indicator range: Below indicator opacity, 25% (hourly average), with the exception of start-up, shutdown, and cleaning.
- Power to ESP
  - 11 kW is the minimum power. If the initial reading is less than 11kW, 4 more readings in the next hour can be taken for a total of 5 readings to establish an average power reading.

## **Monitoring Methods**

- Continuously
  - COMS monitors indicator opacity. The COMS will be installed, operated, and maintained according to Performance Specification 1 of 40 CFR Part 60 Appendix B. In the event of a COMS malfunction, visible emissions will be recorded daily and power applied to the ESP will be monitored and recorded 4 times per hour until the COMS returns to service.
  
- Daily
  - Check voltage.
  - Check amperage.
  - Calculate power applied to ESP.
  
- Annually
  - Internal Inspection
    - Clean dust from collecting plates.
    - Check for dust buildup and corona tufts on wires.
    - Check for interior corrosion.
    - Check plate alignment.
    - Check discharge wire spacers and hanger weights.
  
  - Hopper
    - Check dust buildup in corners.
    - Check high tension weights and isolation insulators.
    - Check for hopper cracks.
    - Check hopper valve for debris.
  
  - Penthouse
    - Check for corrosion and/or leakage of gas into housing.
    - Visual check for adequate air sealing pressure.
    - Clean high tension insulators.
    - Check that all electrical connections are secure.
  
  - Transformer Rectifier
    - Check liquid level and fill if necessary.
    - Clean lines, bushings, and terminals.
  
  - Rappers
    - Clean, lubricate, and, if necessary, replace distributor switch contacts.
    - Check rapper assembly for free movement and make necessary adjustments.
  
  - Control
    - Clean and dress control cabinet relay contacts.
    - Check and calibrate all instruments and controls.
    - Check for excessive moisture.

## ***Performance Criteria***

### **Data Representativeness**

An observation in exceedance of the indicator opacity could reveal a decrease in the performance of the ESP and potentially an increase in particulate emissions. An hourly average indicator opacity value is selected to prevent momentary process perturbations from causing an excursion. Power to the ESP outside the acceptable indicator range may signify reduced performance leading to an increase in particulate emissions.

### **Record Keeping and Reporting (Verification of Operational Status)**

- JDDW will maintain written or electronic records of the following:
  - Opacity in accord with Performance Specification 1 of 40 CFR Part 60 Appendix B.
  - ESP voltage, amperage and calculated power applied to ESP.
  - All annually required inspections and maintenance.
  - Record any excursion and corrective actions resulting from compliance indicator readings and/or inspections/preventive maintenance listed under "Monitoring Methods".
- Records will be kept for at least five years and be available upon request.

### **Quality Control**

- The COMS is evaluated according to Performance Specification 1 of 40 CFR Part 60 Appendix B. Zero span and drift is checked.
- The ESP and its monitoring equipment will be operated and maintained according to manufacturer recommendations and/or as outlined in the above monitoring requirements.

### **Data Collection Procedures**

- The COMS collects opacity data in accord with Performance Specification 1 of 40 CFR Part 60 Appendix B.
- Manual log entries are made based on control panel and gauge readings of ESP voltage and amperage.
- Maintenance personnel record all preventive maintenance/inspections performed on the electrostatic precipitator and actions resulting from the inspections outlined in this plan.

# Compliance Assurance Monitoring (CAM) Plan

## 1-EMC, 2-EMC, 3-EMC, 4-EMC

### Multiclones

#### Multiclone Parameters

- Associated Emission Units: 1-UUS, 2-UUS, 3-UUS, 4-UUS (Boilers #1, #2, #3, #4)
- Associated Emission Point: C1-UUS-2
- Pollutants Controlled: PM

#### Applicable Requirements

PM emission limit, 0.6 lb/mmBtu

Authority for Requirement: 567 IAC 23.3(2)b, Iowa DNR Construction Permits 71-A-89, 71-A-90, 71-A-91 and 77-A-363.

#### *Monitoring Approach*

##### General Monitoring Guidelines

- CAM involves the observation of control equipment compliance indicators: opacity readings and and pressure drops in the multiclones. This plan defines acceptable ranges for these indicators. CAM also includes monitoring and control equipment maintenance and inspections. Maintenance and inspections that will facilitate consistent monitoring and control equipment operations are identified in this plan.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.

##### Excursion from Compliance Indicators

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.
- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion. (Abnormal conditions discovered through equipment inspection and maintenance require implementation of remediation within a reasonable timeframe. Boilers will not burn coal until the multiclones are operational.)
- If corrective actions do not return the compliance indicator to its defined acceptable indicator range, JDDW will demonstrate compliance with the PM limit by conducting
  - Source testing approved by the Department within 90 days of the excursion
    - If the test demonstrates compliance with emission limits, JDDW will determine new indicator ranges for monitoring based on the testing results.
    - If the test demonstrates noncompliance with emission limits, JDDW will, within 60 days, propose a schedule to implement corrective action to bring the source into compliance and conduct source testing to demonstrate compliance.
  - Report monitoring or other deviations (operating conditions, emission limits, or reporting requirements) in IDNR semi-annual monitoring and annual compliance certification reports.

##### Compliance Indicator Ranges

- Opacity
  - Acceptable indicator range: Below indicator opacity, 25% (hourly average), with the exception of start-up, shutdown, and cleaning.
- Differential Pressure
  - Acceptable indicator range: 0.5-10.0 " W.C.

##### Monitoring Methods

- Continuously
  - COMS monitors indicator opacity. The COMS will be installed, operated, and maintained according to Performance Specification 1 of 40 CFR Part 60 Appendix B. In the event of a COMS malfunction, visible

emissions will be recorded daily and differential pressure will be monitored and recorded 4 times per hour until the COMS returns to service.

- Daily
  - Check differential pressure.
  
- Annually
  - Check hopper unloading components.
  - Check tube sheets for leaks.
  - Check inlet and outlet ductwork.
  - Check barrel and collecting tubes.
  - Check cyclone inlet vanes.
  - Check spirocones.
  - Inspect the pressure monitoring equipment and calibrate as needed.

### ***Performance Criteria***

#### **Data Representativeness**

An observation in exceedance of the indicator opacity could reveal a decrease in the performance of the multiclones and potentially an increase in particulate emissions. An hourly average indicator opacity value is selected to prevent momentary process perturbations from causing an excursion. A differential pressure not within the acceptable indicator range may signify reduced multicone performance, structural stress or failure, or a partially clogged system that may lead to an increase in particulate emissions.

#### **Record Keeping and Reporting (Verification of Operational Status)**

- JDDW will maintain written or electronic records of the following:
  - Opacity in accord with Performance Specification 1 of 40 CFR Part 60 Appendix B.
  - Daily differential pressure.
  - All annually required inspections and maintenance.
  - Record any excursions and corrective actions resulting from compliance indicator readings and/or inspection/preventive maintenance listed under "Monitoring Methods."
- Records will be kept for at least five years and be available upon request.

#### **Quality Control**

- The COMS is evaluated according to Performance Specification 1 of 40 CFR Part 60 Appendix B. Zero span and drift is checked.
- The multiclones will be operated and maintained according to manufacturer recommendations and/or as outlined in the above monitoring requirements.

#### **Data Collection Procedures**

- The COMS collects opacity data in accord with Performance Specification 1 of 40 CFR Part 60 Appendix B.
- Manual log entries are made based on control panel and gauge readings of differential pressure and boiler operations.
- Maintenance personnel record all preventive maintenance/inspections performed on the multiclones and actions resulting from the inspections outlined in this plan.

## Emission Point ID Numbers: See Table: Boiler Bypass Stacks

Associated Emission Unit ID Numbers: See Table: Boiler Bypass Stacks

**Table: Boiler Bypass Stacks**

| Emission Point Number | Emission Unit Number | Emission Unit Description and Fuels                  | Rated Capacity (MMBtu/hr) | Construction Permits |
|-----------------------|----------------------|--|---------------------------|----------------------|
| 1-UUS-1B              | 1-UUS(1) and (2)     | #1 Boiler (Coal Fired (1) and Natural Gas Fired (2)) | 94 MMBtu/hr               | 71-A-89              |
| 2-UUS-1B              | 2-UUS(1) and (2)     | #2 Boiler (Coal Fired (1) and Natural Gas Fired (2)) | 94 MMBtu/hr               | 71-A-90              |
| 3-UUS-1B              | 3-UUS(1) and (2)     | #3 Boiler (Coal Fired (1) and Natural Gas Fired (2)) | 94 MMBtu/hr               | 71-A-89              |
| 4-UUS-1B              | 4-UUS                | #4 Boiler (Coal Fired)                               | 216 MMBtu/hr              | 71-A-91              |

### Applicable Requirements

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

*The emissions from these emission units 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 (SO<sub>2</sub>)

Emission Limit(s): 6 lb/MMBtu (when combusting coal)

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

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv (when combusting natural gas)

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.*

Process Throughput:

The bypass stacks can be used only during start-up, shut down, or cleaning of control equipment. For more information see General Condition 14 on page: **Error! Bookmark not defined.**

Authority for Requirement: 567 IAC 22.108(14)

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 1-UBC-1S**

Associated Equipment

Associated Emission Unit ID Number: 1-UBC  
Emissions Control Equipment ID Number: CE 1-ESW  
Emissions Control Equipment Description: Scrubber

---

Emission Unit vented through this Emission Point: 1-UBC  
Emission Unit Description: Ash Draw System (Standby Exhaust)  
Raw Material/Fuel: Ash  
Rated Capacity: 10 TPH

**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**

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 1-UBC-2**

Associated Equipment

Associated Emission Unit ID Number: 1-UBC  
Emissions Control Equipment ID Number: 12-EFF  
Emissions Control Equipment Description: Baghouse

---

Emission Unit vented through this Emission Point: 1-UBC  
Emission Unit Description: Ash Draw System  
Raw Material/Fuel: Ash  
Rated Capacity: 10 TPH

**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**

The ash draw baghouse CAM plan begins on page 87 of this permit.

Authority for Requirement: 567 IAC 22.108(3)

# Compliance Assurance Monitoring (CAM) Plan 12-EFF, Ash Draw System Baghouse

## Dust collector Parameters

- Associated Emission Unit: 1-UBC, Ash Draw System
- Associated Emission Point: 1-UBC-2
- Pollutants Controlled: PM

## Applicable Requirements

PM emission limit: 0.1 gr/dscf

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

## *Monitoring Approach*

### General Monitoring Guidelines

- CAM involves the observation of control equipment compliance indicators, such as visible emissions and pressure drop. This plan defines acceptable ranges for these indicators. CAM also includes control equipment maintenance and inspections. Maintenance and inspections that will facilitate consistent control equipment operations are identified in this plan.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.
- If weather prevents visible emissions monitoring, the observer will note the weather conditions on the form used to record monitoring. If an observation is necessary to meet the required daily monitoring, at least three attempts will be made to retake the observation throughout the day. If unsuccessful that day due to weather, an observation will be made the next day the weather permits.

### Excursion from Compliance Indicators

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion is a deviation that must be reported in the Semi-Annual Monitoring Report and Annual Compliance Certification Report.
- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion. (Abnormal conditions discovered through equipment inspection and maintenance also require implementation of remediation within eight hours.)
- If corrective actions do not return the compliance indicator to its defined acceptable indicator range, JDDW will demonstrate compliance with the PM limit by conducting
  - Source testing approved by the Department within 90 days of the excursion.
    - If the test demonstrates compliance with emission limits, JDDW will determine new indicator ranges for monitoring based on the testing results.
    - If the test demonstrates noncompliance with emission limits, JDDW will, within 60 days, propose a schedule to implement corrective action to bring the source into compliance and conduct source testing to demonstrate compliance.
  - Report monitoring or other deviations (operating conditions, emission limits, or reporting requirements) in IDNR semi-annual monitoring and annual compliance certification reports.

### Compliance Indicator Ranges

- No visible emissions
- Dollinger Final Filter Differential Pressure
  - Acceptable indicator range: 2" to 15" W.C.

### Monitoring Methods

- Daily
  - Check dust collector differential pressure.

- Weekly
  - Observe for visible emissions during material handling of unit.
- Quarterly
  - Inspect Dollinger filters for leaks and wear.
- Annually
  - Inspect piping and vessel system, including structural components, housing, ducts, and hoods, for structural integrity.
  - Inspect the pressure monitoring equipment and calibrate as needed.

### ***Performance Criteria***

#### **Data Representativeness**

An observation of visible emissions could indicate a decrease in the performance of the dust collector and potentially an increase in particulate emissions. A differential pressure not within the acceptable indicator range could indicate reduced performance by the dust collector and potentially an increase in particulate emissions.

#### **Record Keeping and Reporting (Verification of Operational Status)**

- JDDW will maintain records of the following:
  - Daily logs of differential pressure.
  - Weekly visible emissions evaluations
  - All quarterly and annually required inspections and maintenance. The date, time, location of the bag in relationship to the other bags and bag replacement shall be documented.
  - Record any excursions and corrective actions resulting from compliance indicator readings and/or inspection/preventive maintenance listed under "Monitoring Methods".
- Records will be kept for at least five years and be available upon request.

#### **Quality Control**

- The dust collector and its monitoring equipment will be operated and maintained according to manufacturer recommendations and/or as outlined in the above monitoring requirements.
- JDDW will maintain an adequate inventory of spare parts.

#### **Data Collection Procedures**

- Manual log entries are made based on gauge readings and the observation (or not) of visible emissions.
- Maintenance personnel record all preventive maintenance/inspections performed on the dust collector and actions resulting from the inspections outlined in this plan.

**Emission Point ID Number: 1-WBB-1V**

Associated Equipment

Associated Emission Unit ID Number: 1-WBB  
Emissions Control Equipment ID Number: 18-EFF  
Emissions Control Equipment Description: Fabric Filter-Non-Powered Vent

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Emission Unit vented through this Emission Point: 1-WBB  
Emission Unit Description: Ash Silo Vent  
Raw Material/Fuel: Ash  
Rated Capacity: 10 TPH

**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.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 2-WBB-1**

Associated Equipment

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

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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 TPH

**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 TPY  
Authority for Requirement: Iowa 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: 1-UBP-1F**

Associated Equipment

Associated Emission Unit ID Number: 1-UBP1

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Emission Unit vented through this Emission Point: 1-UBP1

Emission Unit Description: Coal Pile (fugitive)

Raw Material/Fuel: Coal

Rated Capacity: 24.9 TPH

**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.*

*See Fugitive Dust in Plant-Wide Conditions.*

**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-WBV-1F**

Associated Equipment

Associated Emission Unit ID Number: 1-WBV

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Emission Unit vented through this Emission Point: 1-WBV  
Emission Unit Description: Landfill Haul Road (fugitive)  
Raw Material/Fuel: Unpaved Road  
Rated Capacity: 0.53 VMT/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.*

*See Fugitive Emissions in Plant-Wide Conditions.*

**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**

| <b>Emission Point Number</b> | <b>Emission Unit Number</b> | <b>Emission Unit Description</b>                    | <b>Fuel</b> | <b>Rated Capacity (gal./hr)</b> |
|------------------------------|-----------------------------|---|-------------|---------------------------------|
| 1-PQU-1                      | 1-PQU                       | 165-W2 Backhoe Assembly Function Test               | Diesel      | 10.0 gal/hr                     |
| 3-PQU-1                      | 3-PQU                       | 163-W1 Backhoe Assembly PT Check 1                  | Diesel      | 10.0 gal/hr                     |
| 3-PQU-2                      | 3-PQU                       | 163-W1 Backhoe Assembly PT Check 2                  | Diesel      | 10.0 gal/hr                     |
| 3-PQU-3                      | 3-PQU                       | 163-W1 Backhoe Assembly PT Check 3                  | Diesel      | 20 gal/hr                       |
| 3-PQU-4                      | 3-PQU                       | 163-W1 Backhoe Assembly PT Check 4                  | Diesel      | 20 gal/hr                       |
| 4-PQU-1                      | 4-PQU                       | 163-W1 Backhoe Assembly Function Test 1             | Diesel      | 10.0 gal./hr                    |
| 4-PQU-2                      | 4-PQU                       | 163-W1 Backhoe Assembly Function Test 2             | Diesel      | 10.0 gal/hr                     |
| 4-PQU-3                      | 4-PQU                       | 163-W1 Backhoe Assembly Function Test 3             | Diesel      | 10.0 gal/hr                     |
| 5-PQU-1                      | 5-PQU                       | 163-W1 Backhoe QA Test Module                       | Diesel      | 6.05 gal/hr                     |
| 6-PQU-1                      | 6-PQU                       | 187-W3 H Crawler Assembly Function Test; C-         | Diesel      | 9.07 gal/hr                     |
| 7-PQU-1                      | 7-PQU                       | 187-W3 H Crawler Assembly Function Test; W-         | Diesel      | 9.07 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      | 2.0 gal/hr                      |
| 10-PQU-1                     | 10-PQU                      | 120-W4 HSD Assembly 1                               | Diesel      | 10.0 gal/hr                     |
| 11-PQU-1                     | 11-PQU                      | 120-W4 HSD Assembly 2                               | Diesel      | 10.0 gal/hr                     |
| 12-PQU-1                     | 12-PQU                      | 158-W5 Skid Steer Fuel Station                      | Diesel      | 1.33 gal/hr                     |
| 13-PQU-1                     | 13-PQU                      | 158-W5 Skid Steer Assembly Function Test            | Diesel      | 1.33 gal./hr                    |
| 14-PQU-1                     | 14-PQU                      | 158-W5 Skid Steer Tracking Station                  | Diesel      | 1.33 gal/hr                     |
| 15-PQU-1                     | 15-PQU                      | 158-W5 Skid Steer CTL Tracking Test                 | Diesel      | 4.53 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      | 10.0 gal/hr                     |
| 19-PQU-1                     | 19-PQU                      | 177 Z FB/Harvester Indoor Test Cycle                | Diesel      | 10.0 gal/hr                     |
| 21-PQU-1                     | 21-PQU                      | 143 W4 Experimental Crawler Assembly Engine Exhaust | Diesel      | 12.55 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 (SO<sub>2</sub>)  
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 & Record keeping:

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

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**Table: Standby Generators**

| Emission Point Number | Emission Unit Number | Emission Unit Description | Fuel   | Rated Capacity | Construction Permits |
|-----------------------|----------------------|---------------------------|--------|----------------|----------------------|
| 3-UUE-1               | 3-UUE                | #5 Standby Generator      | Diesel | 115.4 gal./hr  | 94-A-042             |
| 4-UUE-1               | 4-UUE                | #6 Standby Generator      | Diesel | 115.4 gal./hr  | 94-A-043             |
| 5-UUE-1               | 5-UUE                | #7 Standby Generator      | Diesel | 115.4 gal./hr  | 94-A-044             |
| 6-UUE-1               | 6-UUE                | #8 Standby Generator      | Diesel | 115.4 gal./hr  | 94-A-045             |
| 7-UUE-1               | 7-UUE                | #9 Standby Generator      | Diesel | 115.4 gal./hr  | 94-A-046             |
| 8-UUE-1               | 8-UUE                | #10 Standby Generator     | Diesel | 115.4 gal./hr  | 94-A-047             |

### Applicable Requirements

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

*Emissions at 92% of maximum full load from each of 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: PM-10

Emission Limit(s): 1.11 lb/hr and 0.88 TPY

Authority for Requirement: Iowa DNR Construction Permits 94-A-042 through 94-A-047

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 0.81 lb/hr and 0.65 TPY

Authority for Requirement: Iowa DNR Construction Permits 94-A-042 through 94-A-047

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 48.94 lb/hr and 38.91 TPY

Authority for Requirement: Iowa DNR Construction Permits 94-A-042 through 94-A-047

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.66 lb/hr and 0.53 TPY

Authority for Requirement: Iowa DNR Construction Permits 94-A-042 through 94-A-047

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 32.85 lb/hr and 26.11 TPY

Authority for Requirement: Iowa DNR Construction Permits 94-A-042 through 94-A-047

**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. 400 hours per twelve-month period for each of these sources.
2. 1590 hours per twelve-month period total for standby generators #5, #6, #7, #8, #9, and #10.

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)

2. These units shall not operate at over 92% of maximum full load.

Authority for Requirement: Iowa DNR Construction Permits 94-A-042 to 94-A-047

Reporting & Record keeping:

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. An approved hour meter shall be installed 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.

Authority for Requirement: Iowa DNR Construction Permits 94-A-042 to 94-A-047

NESHAP:

These emission units are affected reciprocating internal combustion engines that are subject to 40 CFR Part 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. According to 63.6590(a) an affected source is any existing, new or reconstructed stationary RICE with a site-rating of more than 500 brake horsepower located at a major source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. Section 63.6590(b)(3) states a stationary RICE which is an existing compression ignition stationary RICE, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

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

**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

Stacks 3-UUE-1 through 8-UUE-1

Stack Height (feet): 42

Stack Diameter (inches): 16

Stack Exhaust Flow Rate (scfm): 6021 at full load

Stack Temperature (°F): 870 at full load

Authority for Requirement: Iowa DNR Construction Permits 94-A-042 through 94-A-047

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 9-UUE-1**

### Associated Equipment

Associated Emission Unit ID Number: 9-UUE

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Emission Unit vented through this Emission Point: 9-UUE

Emission Unit Description: Computer Room Back-Up Generator (347 hp)

Raw Material/Fuel: Diesel

Rated Capacity: 8.1 L/cylinder displacement, 13.21 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: HC

Emission Limit(s): 1.0 g /HP-hr

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

Pollutant: NOx

Emission Limit(s): 6.9 g /HP-hr

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

Pollutant: CO

Emission Limit(s): 8.5 g /HP-hr

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

Pollutant: Particulate Matter

Emission Limit(s): 0.40 g /HP-hr

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

### **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 & Record keeping:

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)

### **NSPS:**

This emission unit is regulated by the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR, Part 60, Subpart IIII. This source meets the definition of an emergency engine that is not a fire pump with a displacement of less than 30 liters/cylinder. Therefore, this source must comply with the emission standards in Table 1 of Subpart IIII and all other applicable requirements of that Subpart.

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

### **NESHAP:**

This emission unit is an affected reciprocating internal combustion engines that is subject to 40 CFR Part 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 63.6590(a) this is a new stationary RICE because the site rating is equal to or less than 500 brake HP and is located at a major source of HAP emissions. This source meets the definition of emergency as defined in 63.6675 and therefore according to 63.6590(c), an emergency stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 Subpart IIII as described above. No further requirements apply for this engine under this Subpart ZZZZ.

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Numbers: See Table: Bulk Storage Tanks

### Associated Equipment

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

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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 & Record keeping:

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: Iowa DNR Construction Permits 00-A-508 through 00-A-523

**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

Stacks 1-PBT-1 through 16-PBT-1

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: Iowa DNR Construction Permits 00-A-508 through 00-A-523

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Numbers: G2-Emergency Generator Diesel Tanks

### Associated Equipment

Associated Emission Unit ID Number: See Table 1

Table 1

| 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       | 1000                     | 01-A-687            |
| 1-UBT-2               |                      |                                    |              |                          | 01-A-688            |
| 2-UBT-1               | 2-UBT                | G2-Emergency Generator Diesel Tank | Diesel       | 1000                     | 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 & Record keeping:

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: Iowa DNR Construction Permits in Table 1

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: 1-PWA-1**

Associated Equipment

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

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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: Iowa 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: Iowa 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: Iowa DNR Construction Permit 98-A-595

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

**Monitoring Requirements**

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

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

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

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

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

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 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

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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 %<sup>(1)</sup>

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

<sup>(1)</sup> 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: Iowa 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 & Record keeping:

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: Iowa 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: Iowa DNR Construction Permit 03-A-163

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

**Monitoring Requirements**

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

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

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

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

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

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

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

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: See Table: Plasma Arc**

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Plasma Arc

**Table: Plasma Arc**

| Emission Point Number | Emission Unit Number | Control Equipment Number | Control Equipment Description | Emission Unit Description        | Raw Material | Rated Capacity      |
|-----------------------|----------------------|--------------------------|-------------------------------|----------------------------------|--------------|---------------------|
| 1-PXP-1F              | 1-PXP                | 25-ESW                   | Water Table                   | Plasma Arc – 15578 (two torches) | Steel        | 75 in/min per torch |
| 2-PXP-1F              | 2-PXP                | 16-ESW                   | Water Table                   | Plasma Arc – 15579 (two torches) | Steel        | 75 in/min per torch |
| 3-PXP-1F              | 3-PXP                | 26-ESW                   | Water Table                   | Plasma Arc-15683 (two torches)   | Steel        | 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.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 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

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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: Iowa 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: Iowa 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: Iowa DNR Construction Permits 98-A-931

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

**Monitoring Requirements**

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

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

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

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

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

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 18-UVM-1F**

### Associated Equipment

Associated Emission Unit ID Number: 18-UVM

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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: 0.01 mmcf/hr

### **Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40 %<sup>(1)</sup>

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

<sup>(1)</sup> 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: Iowa DNR Construction Permit 00-A-817  
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

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

#### **Emission Point Characteristics**

*This emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): NA

Stack Opening (inches, dia.): NA

Exhaust Flow Rate (scfm): NA

Exhaust Temperature (°F): NA

Discharge Style: Fugitive inside the building

Authority for Requirement: Iowa DNR Construction Permit 00-A-817

**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-MJS-1F**

Associated Equipment

Associated Emission Unit ID Number: 1-MJS

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Emission Unit vented through this Emission Point: 1-MJS  
Emission Unit Description: Janitorial & Facility Maintenance Supplies  
Raw Material/Fuel: Various  
Rated Capacity: 8.2 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): 0.1 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**

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Numbers: 1-GSN-1F**

Associated Equipment

Associated Emission Unit ID Number: 1-GSN

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Emission Unit vented through these Emission Points: 1-GSN  
Emission Unit Description: Fugitive Surface Coating (non-maintenance)  
Raw Material/Fuel: Coatings  
Rated Capacity: 0.19 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/scf  
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:

This emission unit is regulated by the National Emission Standards for Hazardous Air Pollutant: Surface Coating of Miscellaneous Metal Parts and Product, 40 CFR, Part 63, Subpart Mmmm please refer to p. 12 of the Plant-Wide Conditions of this permit for more information.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: 1-UUW-1**

### Associated Equipment

Associated Emission Unit ID Number: 1-UUW

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Emission Unit vented through this Emission Point: 1-UUW

Emission Unit Description: #6 Fire Well

Raw Material/Fuel: Diesel

Rated Capacity: 8.1 liters/cylinder, 252-hp-hr/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: NMHC + NOx

Emission Limit(s): 7.8 g /HP-hr

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

Pollutant: CO

Emission Limit(s): 2.6 g /HP-hr

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

Pollutant: Particulate Matter

Emission Limit(s): 0.40 g /HP-hr

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

#### **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 & Record keeping:**

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)

**NSPS:**

This emission unit is regulated by the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR, Part 60, Subpart IIII. This source meets the definition of an emergency fire pump with a displacement of less than 30 liters/cylinder. Therefore, this source must comply with the emission standards in Table 4 of Subpart IIII and all other applicable requirements of that Subpart.

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

**NESHAP:**

This emission unit is an affected reciprocating internal combustion engines that is subject to 40 CFR Part 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 63.6590(a) this is a new stationary RICE because the site rating is equal to or less than 500 brake HP and is located at a major source of HAP emissions. This source meets the definition of emergency as defined in 63.6675 and therefore according to 63.6590(c), an emergency stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 Subpart IIII as described above. No further requirements apply for this engine under this Subpart ZZZZ.

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **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, Urbandale, Iowa 50322, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

### **G3. Certification Requirement for Title V Related Documents**

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

### **G4. Annual Compliance Certification**

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the

compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

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

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with *567 IAC 22.107(4)*. The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

#### **G6. Annual Fee**

1. The permittee is required under subrule *567 IAC 22.106* to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
  - a. Form 1.0 "Facility Identification";
  - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
  - c. Form 5.0 "Title V annual emissions summary/fee"; and
  - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
  - a. Form 1.0 "Facility Identification";
  - b. Form 5.0 "Title V annual emissions summary/fee";
  - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in *567 IAC 22.115(1)"d"*.

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

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

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

### **G8. Duty to Provide Information**

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

### **G9. General Maintenance and Repair Duties**

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

### **G10. Recordkeeping Requirements for Compliance Monitoring**

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
  - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
  - b. Maintain a log at the permitted facility of the scenario under which it is operating.
  - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

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

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

*1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:*

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
  - b. Compliance test methods specified in 567 Chapter 25; or
  - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a. Any monitoring or testing methods provided in these rules; or
  - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

**G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

**G13. Hazardous Release**

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

**G14. Excess Emissions and Excess Emissions Reporting Requirements**

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a

violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

## 2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1) ) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the

incident of excess emission.

vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

#### **G15. Permit Deviation Reporting Requirements**

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

#### **G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations**

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

#### **G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification**

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under

- section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
  - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
  - d. The changes are not subject to any requirement under Title IV of the Act.
  - e. The changes comply with all applicable requirements.
  - f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
    - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
    - vii. Any permit term or condition no longer applicable as a result of the change.

*567 IAC 22.110(1)*

- 2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
- 3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
- 4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
- 5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

#### **G18. Duty to Modify a Title V Permit**

##### **1. Administrative Amendment.**

- a. An administrative permit amendment is a permit revision that is required to do any of the following:
  - i. Correct typographical errors
  - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the

source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

## 2. Minor Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

i. Do not violate any applicable requirements

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.

iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification.

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.

ii. The permittee's suggested draft permit

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee

need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit 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"(8)*

#### **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 May 15, 2001.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

#### **G25. Permit Shield**

*1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:*

a. Such applicable requirements are included and are specifically identified in the permit;  
or

b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

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

**G26. Severability**

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

**G27. Property Rights**

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

**G28. Transferability**

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

**G29. Disclaimer**

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

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

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity

cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator  
Iowa DNR, Air Quality Bureau  
7900 Hickman Road, Suite #1  
Urbandale, IA 50322  
(515) 242-6001

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

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

**G31. Prevention of Air Pollution Emergency Episodes**

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

567 IAC 26.1(1)

**G32. Contacts List**

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

Chief of Air Permits  
EPA Region 7  
Air Permits and Compliance Branch  
901 N. 5<sup>th</sup> Street  
Kansas City, KS 66101  
(913) 551-7020

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

Chief, Air Quality Bureau  
Iowa Department of Natural Resources  
7900 Hickman Road, Suite #1  
Urbandale, IA 50322  
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

**Field Office 1**  
909 West Main – Suite 4  
Manchester, IA 52057  
(563) 927-2640

**Field Office 2**  
2300-15th St., SW  
Mason City, IA 50401  
(641) 424-4073

**Field Office 3**  
1900 N. Grand Ave.  
Spencer, IA 51301  
(712) 262-4177

**Field Office 4**  
1401 Sunnyside Lane  
Atlantic, IA 50022  
(712) 243-1934

**Field Office 5**  
401 SW 7<sup>th</sup> 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