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

Name of Permitted Facility: Woodharbor Custom Cabinetry Facility Location: 3277 9<sup>th</sup> Street SW, Mason City, Iowa 50401 Air Quality Operating Permit Number: 00-TV-027R3-M002

**Expiration Date: November 24, 2024** Permit Renewal Application Deadline: May 24, 2024

**EIQ Number: 92-6876** 

Facility File Number: 17-01-068

#### **Responsible Official**

Name: Curtis Lewerke

**Title: President** 

Mailing Address: 3277 9th St SW, Mason City, Iowa 50401

Phone #: 641-423-0444

# **Permit Contact Person for the Facility**

Name: Jeff Stokes Title: Plant Manager

Mailing Address: 3277 9th St SW, Mason City, Iowa 50401

Phone #: 641-423-0444

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

Mainie Stein

01/05/2023

Marnie Stein, Supervisor of Air Operating Permits Section

Date

# **Table of Contents**

| I.   | Facility Description and Equipment List4   |
|------|--|
| II.  | Plant - Wide Conditions6   |
| III. | Emission Point Specific Conditions   |
| IV.  | General Conditions   |
|      | G1. Duty to Comply   |
|      | G2. Permit Expiration  |
|      | G3. Certification Requirement for Title V Related Documents  |
|      | G4. Annual Compliance Certification  |
|      | G5. Semi-Annual Monitoring Report  |
|      | G6. Annual Fee   |
|      | G7. Inspection of Premises, Records, Equipment, Methods and Discharges                                   |
|      | G8. Duty to Provide Information  |
|      | G9. General Maintenance and Repair Duties  |
|      | G10. Recordkeeping Requirements for Compliance Monitoring  |
|      | G11. Evidence used in establishing that a violation has or is occurring.                                 |
|      | G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification    |
|      | G13. Hazardous Release   |
|      | G14. Excess Emissions and Excess Emissions Reporting Requirements  |
|      | G15. Permit Deviation Reporting Requirements   |
|      | G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP                        |
|      | Regulations  |
|      | G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification |
|      | G18. Duty to Modify a Title V Permit   |
|      | G19. Duty to Obtain Construction Permits   |
|      | G20. Asbestos  |
|      | G21. Open Burning  |
|      | G22. Acid Rain (Title IV) Emissions Allowances   |
|      | G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements                                  |
|      | G24. Permit Reopenings   |
|      | G25. Permit Shield   |
|      | G26. Severability  |
|      | G27. Property Rights   |
|      | G28. Transferability   |
|      | G29. Disclaimer  |
|      | G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification                    |
|      | G31. Prevention of Air Pollution Emergency Episodes  |
|      | G32. Contacts List   |

| V. Appendices: | Appendix A – CAM Plan                          | 61 |
|----------------|--|----|
| 11             | Appendix B – Reference Web Links               |    |
|                | Appendix C – 40 CFR Part 63 Subpart JJ Table 3 | 67 |

# **Abbreviations**

| acfm            | .actual cubic feet per minute                      |
|-----------------|--|
| CFR             | .Code of Federal Regulation                        |
| CE              |  |
|                 | .continuous emission monitor                       |
| °F              | .degrees Fahrenheit                                |
|                 | emissions inventory questionnaire                  |
| EP              |  |
| EU              |  |
| gr/dscf         | grains per dry standard cubic foot                 |
| IAC             | .Iowa Administrative Code                          |
| DNR             | .Iowa Department of Natural Resources              |
| MVAC            | .motor vehicle air conditioner                     |
| NAICS           | .North American Industry Classification System     |
| NSPS            | .new source performance standard                   |
| ppmv            | parts per million by volume                        |
| lb/hr           |  |
| lb/MMBtu        | pounds per million British thermal units           |
| SCC             | .Source Classification Codes                       |
| scfm            | standard cubic feet per minute                     |
| SIC             | .Standard Industrial Classification                |
| TPY             |  |
| USEPA           | .United States Environmental Protection Agency     |
|                 |  |
| Pollutants      |  |
| PM              |  |
|                 | particulate matter ten microns or less in diameter |
| SO <sub>2</sub> |  |
| $NO_x$          | .nitrogen oxides                                   |
|                 | volatile organic compound                          |
| CO              | .carbon monoxide                                   |
| HAP             | .hazardous air pollutant                           |
|                 |  |

# I. Facility Description and Equipment List

Facility Name: Woodharbor Custom Cabinetry

Permit Number: 00-TV-027R3-M002

Facility Description: Wood Cabinetry Manufacturer (SIC 2434)

# **Equipment List**

# A. Various Woodworking Processes

| Emission<br>Point<br>Number | Emission<br>Unit<br>Number | Emission Unit Description     | DNR Construction Permit Number |
|-----------------------------|----------------------------|-------------------------------|--------------------------------|
| EP-5                        | EU-5                       | Various Woodworking Processes | 95-A-793-S2                    |
| EP-6                        | EO-3                       | Various Woodworking Processes | 95-A-794-S2                    |
| EP-7                        | EU-7                       | Various Woodworking Processes | 98-A-063-S2                    |
| EP-37                       | EU-7                       |                               | 16-A-328                       |
| EP-25                       | EU-25                      | Various Woodworking Processes | 01-A-1069-S                    |

# **B1.** Spray Booths 1

| Emission<br>Point<br>Number | Emission<br>Unit<br>Number | Emission Unit Description | DNR Construction Permit Number |
|-----------------------------|----------------------------|---------------------------|--------------------------------|
| EP-8                        | EU-8                       | Topcoat Booth             | 98-A-064-S8                    |
| EP-9                        | EU-9                       | Sealer Booth              | 98-A-065-S8                    |
| EP-10                       | EU-10                      | Stain Booth               | 98-A-066-S8                    |
| EP-13                       | EU-13                      | Studio Booth              | 06-A-508-S1                    |
| EP-14                       | EU-14                      | Custom Booth              | 99-A-415-S7                    |
| EP-28                       | EU-28                      | Spray Booth 28            | 03-A-402-S4                    |
| EP-29                       | EU-29                      | Spray Booth 29            | 03-A-403-S4                    |
| EP-32                       | EU-32                      | Spray Booth 32            | 06-A-509-S1                    |

# **B2.** Spray Booths 2

| Emission<br>Point<br>Number | Emission<br>Unit<br>Number | Emission Unit Description | DNR Construction Permit Number |
|-----------------------------|----------------------------|---------------------------|--------------------------------|
| EP-3                        | EU-3                       | Stain Booth               | 94-A-482-S10                   |
| EP-30                       | EU-30                      | Flat Line Spray Booth     | 03-A-1354-S6                   |
| EP-33                       | EU-33                      | UV Mist Coater            | 07-A-1074-S1                   |
| EP-38                       | EU-38                      | Flat Line Spray Booth #2  | 16-A-214                       |

# **B3.** Spray Booths 3

| Emission | Emission |                           | DNR           |
|----------|----------|---------------------------|---------------|
| Point    | Unit     | Emission Unit Description | Construction  |
| Number   | Number   |                           | Permit Number |
| EP-19    | EU-19    | Stain Booth               | 00-A-709-S6   |

# **C.** Miscellaneous Sources

| Emission<br>Point<br>Number | Emission<br>Unit<br>Number | Emission Unit Description        | DNR Construction Permit Number |
|-----------------------------|----------------------------|----------------------------------|--------------------------------|
| EP-4                        | EU-4                       | Weld Bench                       | 94-A-483-S3                    |
| EP-16                       | EU-16                      | Adhesive Application             | 03-A-1248                      |
| EP-24A                      | EII 24                     | D D / J                          | 00-A-723-S2                    |
| EP-24B                      | EU-24                      | Pump Room/Inventory Holding Area | 00-A-724-S2                    |
| EP-26                       | EU-26                      | Putty Application                | -                              |
| EP-34                       | EU-34                      | UV Cure Oven                     | 07-A-1075-S1                   |
| EP-36                       | EU-36                      | Cleaning Unit                    | 14-A-630                       |
| EP-39                       | EU-39                      | Flat Line Drying Oven            | -                              |
| EP-40                       | EP-40                      | Linear High Velocity Oven        | -                              |
| EP-43                       | EU-43                      | Drying Oven (Flexi Oven)         | -                              |
| EP-44                       | EU-44                      | Drying Oven (Fast Dry Oven)      | -                              |
| EP-EG                       | EU-EG                      | Emergency Generator              | -                              |

# **Insignificant Activities Equipment List**

| <b>Emission Unit Number</b> | Insignificant Emission Unit Description                           |
|-----------------------------|---|
| EU-OH                       | Overhead Heaters  |
| EU-MH                       | 8 Building Makeup Air Units (natural gas fired < 10MMBtu/hr each) |
| EU-HWFH                     | Hot Water Heater (Floor Heating) – 0.08 MMBTU/hr                  |
| EU-CORAL UV SAND            | Dust Collector Service Automated Flat Line Sanding                |
| EU-41                       | Hot Water Boiler 1  |
| EU-42                       | Hot Water Boiler 2  |
| EU-45                       | Hot Water Boiler 3  |
| EU-46                       | Hot Water Boiler 4  |

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

Facility Name: Woodharbor Custom Cabinetry

Permit Number: 00-TV-027R3-M002

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

#### **Permit Duration**

The term of this permit is: 5 Years Commencing on: November 25, 2019 Ending on: November 24, 2024

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

#### **Emission Limits**

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

Opacity (visible emissions): 40% opacity

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

<u>Sulfur Dioxide (SO<sub>2</sub>):</u> 500 parts per million by volume

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

#### Particulate Matter:

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

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B). Authority for Requirement: 567 IAC 23.3(2)"a"

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

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

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

#### **Emission Limits: Facility-Wide**

The atmospheric emissions from the facility shall not exceed the following:

Pollutant: ......Volatile Organic Compound (VOC) Facility-wide limit

Emission Rate (tons/yr.): .....238

Authority for Requirement: See Emission Point-Specific Conditions for construction permit

citations

#### 40 CFR 63 Subpart JJ

This facility is subject to 40 CFR 63 Subpart JJ-National Emission Standards for Wood Furniture Manufacturing Operations. The affected units are the various spray booths and the adhesive application and specific requirements are listed in the Emission Point Specific section of this permit. Please see Appendix B for the link to Subpart JJ.

Authority for Requirement: 40 CFR 63 Subpart JJ

567 IAC 23.1(4)"aj"

#### 40 CFR 61 Subpart M

This facility is subject only to the Subpart M NESHAP for the demolition and renovation of asbestos containing structures identified in 40 CFR 61.145.

Authority for Requirement: 40 CFR 61.145

567 IAC 23.1(3)"a"

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

Facility Name: Woodharbor Molding and Millworks, Inc.

Permit Number: 00-TV-027R3

# **Emission Point ID Number: See Table: Various Woodworking Processes**

**Associated Equipment** 

**Table: Various Woodworking Processes** 

| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Emission Unit<br>Description        | Control<br>Equipment<br>Number | Control<br>Equipment<br>Description | Raw<br>Material | Rated<br>Capacity<br>(Parts/hr) |     |
|-----------------------------|--|-------------------------------------|--------------------------------|-------------------------------------|-----------------|---------------------------------|-----|
| EP-5                        | EU-5                                     | Various<br>Woodworking              | CE-5A/ CE-                     | Cyclone/                            | Wood            | 1900                            |     |
| EP-6                        | 26 5                                     | Processes                           | ~   1B                         | Baghouse                            | ,, 556          | 1900                            |     |
| EP-7                        | EU-7                                     | Various<br>Woodworking              |                                | Daghayaa                            | Paghousa W      | Wood                            | 700 |
| EP-37                       | EU-7                                     | Processes                           | CE-7                           | Dagilouse                           | wood            | 700                             |     |
| EP-25                       | EU-25                                    | Various<br>Woodworking<br>Processes | CE-25                          | Baghouse                            | Wood            | 900                             |     |

# **Applicable Requirements**

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

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

Table: Various Woodworking Processes

| Emission<br>Point<br>Number | Associated<br>Emission Unit<br>Number | Opacity<br>Limit<br>567 IAC<br>23.3(2)"d" | PM<br>Limit<br>(lb/hr) | PM10<br>Limit<br>(lb/hr) | PM<br>Limit<br>(gr/dscf)<br>567 IAC<br>23.3(2)"a" | Authority for<br>Requirement |
|-----------------------------|---------------------------------------|---|------------------------|--------------------------|---|------------------------------|
| EP-5                        | EU-5                                  | 40%(1)                                    | 1.02                   | N/A                      | 0.1   | 95-A-793-S2                  |
| EP-6                        | EU-3                                  | 40%(1)                                    | 1.02                   | N/A                      | 0.1   | 95-A-794-S2                  |
| EP-7                        | EU-7                                  | 40%(2)                                    | 1.29                   | N/A                      | 0.1   | 98-A-063-S2                  |
| EP-37                       | EU-7                                  | 40%(2)                                    | 1.29                   | N/A                      | 0.1   | 16-A-328                     |
| EP-25                       | EU-25                                 | 40% <sup>(2)</sup>                        | 3.53                   | 3.53                     | 0.1   | 01-A-1069-S2                 |

<sup>(1)</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with

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

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

#### Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The owner or operator shall operate, inspect and maintain the Cyclone (CE-5A) and Baghouses (CE-5B, CE-7, CE-25) in accordance with good air pollution control practices.
  - i. The owner or operator shall maintain a record of all inspections, maintenance activities, and any actions resulting from the inspection or maintenance of the Cyclone (CE-5A) and Baghouses (CE-5B, CE-7, CE-25).

Authority for Requirement: DNR Construction Permits specified in Table: Various Woodworking Processes – Emission Limits

#### **Emission Point Characteristics**

These emission points shall conform to the specifications listed below.

Table: Various Woodworking Processes

|                             |  |                                  | Stack Characteristics |  |                               |                          |                           |
|-----------------------------|--|----------------------------------|-----------------------|--|-------------------------------|--------------------------|---------------------------|
| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Construction<br>Permit<br>Number | Height<br>(feet)      | Stack Outlet<br>Dimensions<br>(inches) | Exhaust<br>Flowrate<br>(scfm) | Exhaust<br>Temp.<br>(°F) | Discharge<br>Style        |
| EP-5                        | EU-5                                     | 95-A-793-S2                      | 33.5                  | 33                                     | 23,850                        | 68                       | Vertical,<br>Unobstructed |
| EP-6                        |  | 95-A-794-S2                      | 33.5                  | 33                                     | 23,850                        | 68                       | Vertical,<br>Unobstructed |
| EP-7                        | EU-7                                     | 98-A-063-S2                      | 28                    | 40x33                                  | 11,200-<br>15,00              | 68                       | Downward                  |
| EP-37                       | EU-7                                     | 16-A-328                         | 28                    | 40x33                                  | 11,200-<br>15,000             | 68                       | Downward                  |
| EP-25                       | EU-25                                    | 01-A-1069-S2                     | 24.5                  | 48x46                                  | 41,200                        | 68                       | Vertical<br>Unobstructed  |

Authority for Requirement: DNR Construction Permits specified in Table: Various Woodworking Processes – Emission Point Characteristics

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

#### **Monitoring Requirements**

| The owner. | operator o | of this | equipment | shall cor | nply 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?<br>CAM Plans are required for EU5, EU7, and EU25.<br>See Appendix A. | Yes 🛛 No 🗌 |

# **Emission Point ID Number: See Table: Spray Booths 1**

# **Associated Equipment**

Table: Spray Booths 1

| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Emission Unit<br>Description  | Control<br>Equipment<br>Number | Control<br>Equipment<br>Description              | Raw<br>Material  | Rated<br>Capacity<br>(oz/hr) |
|-----------------------------|--|-------------------------------|--------------------------------|--|------------------|------------------------------|
| EP-8                        | EU-8                                     | Topcoat Booth (3 spray guns)  | CE-8A/CE-<br>8B                | (2) High Efficiency<br>Collectors (in<br>series) | Topcoat          | 1,800                        |
| EP-9                        | EU-9                                     | Sealer Booth (3 spray guns)   | CE-9A/CE-<br>9B                | (2) High Efficiency<br>Collectors (in<br>series) | Sealer           | 1,800                        |
| EP-10                       | EU-10                                    | Stain Booth<br>(3 spray guns) | CE-10A/CE-<br>10B              | (2) High Efficiency<br>Collectors (in<br>series) | Wood<br>Stain    | 1,800                        |
| EP-13                       | EU-13                                    | Studio Spray<br>Booth         | CE-13A/CE-<br>13B              | (2) High Efficiency<br>Collectors (in<br>series) | Wood<br>Coatings | 720                          |
| EP-14                       | EU-14                                    | Custom Booth (3 spray guns)   | CE-14A/CE-<br>14B              | (2) High Efficiency<br>Collectors (in<br>series) | Wood<br>Coatings | 1,800                        |
| EP-28                       | EU-28                                    | Spray Booth                   | CE-28A/CE-<br>28B              | (2) High Efficiency<br>Collectors (in<br>series) | Wood<br>Coatings | 1,800                        |
| EP-29                       | EU-29                                    | Spray Booth                   | CE-29A/CE-<br>29B              | (2) High Efficiency<br>Collectors (in<br>series) | Wood<br>Coatings | 1,800                        |
| EP-32                       | EU-32                                    | Spray Booth                   | CE-32A/CE-<br>32B              | (2) High Efficiency<br>Collectors (in<br>series) | Wood<br>Coatings | 720                          |

# **Applicable Requirements**

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

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

Table: Spray Booths 1

| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Opacity     Limit     567 IAC     23.3(2)"d" | PM Limit<br>(gr/dscf)<br>567 IAC<br>23.4(13) | PM <sub>10</sub> Limit<br>(lb/hr) | VOC<br>Limit<br>(ton/yr) | Authority for<br>Requirement |
|-----------------------------|--|--|--|-----------------------------------|--------------------------|------------------------------|
| EP-8                        | EU-8                                     | 40%(1)                                       | 0.01   | N/A                               | $238^{(2)}$              | 98-A-064-S8                  |
| EP-9                        | EU-9                                     | 40%(1)                                       | 0.01   | N/A                               | 238(2)                   | 98-A-065-S8                  |
| EP-10                       | EU-10                                    | 40%(1)                                       | 0.01   | N/A                               | $238^{(2)}$              | 98-A-066-S8                  |
| EP-13                       | EU-13                                    | 40%(1)                                       | 0.01   | N/A                               | $238^{(2)}$              | 06-A-508-S1                  |
| EP-14                       | EU-14                                    | 40%(1)                                       | 0.01   | N/A                               | $238^{(2)}$              | 99-A-415-S7                  |
| EP-28                       | EU-28                                    | 40%(1)                                       | 0.01   | N/A                               | $238^{(2)}$              | 03-A-402-S4                  |
| EP-29                       | EU-29                                    | 40%(1)                                       | 0.01   | N/A                               | 238(2)                   | 03-A-403-S4                  |
| EP-32                       | EU-32                                    | 40%(1)                                       | 0.01   | N/A                               | 238(2)                   | 06-A-509-S1                  |

<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).

Authority for Requirement: DNR Construction Permits specified in Table

#### **NESHAP Applicability**

These emission units are subject to the National Emission Standards for Hazardous Air Pollutant: 40 CFR 63 Subpart JJ-National Emission Standards for Wood Furniture Manufacturing Operations. Please see Appendix B.

#### Operating Requirements with Associated Monitoring and Recordkeeping

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

#### **Operating Limits:**

- A. The control equipment shall be inspected and maintained according to manufacturer's recommendations.
- B. All spray materials shall meet the requirements of 40 CFR 63.802 which includes, but is not limited to, limiting the VHAP emissions from finishing operations, contact adhesives and strippable spray booth coatings.
- C. The owner or operator shall comply with the work practice standards outlined in 40 CFR 63.803.
- D. The owner or operator shall comply with the compliance standards of 40 CFR 63.804 and the performance test methods of 63.805.

<sup>(2)</sup> This is a facility-wide VOC bubble limit for the solvent and coating material VOC emissions at Woodharbor Custom Cabinetry.

- E. **For EU-8, EU-9, EU-10, EU-14, EU-28, EU-29 only**: The owner or operator shall not use more than one spray gun at a time in the booth, with a maximum capacity of 30 fluid ounces per minute. Additional guns may be installed to facilitate color changes.
- F. **For EU-13 and EU-32 only:** The owner or operator shall not use more than one spray gun at a time in the booth. Additional guns maybe installed to facilitate color changes.

#### Reporting & Recordkeeping:

- A. The owner or operator shall maintain a record of control equipment inspections and maintenance.
- B. The owner or operator shall follow the recordkeeping and reporting requirements of 40 CFR 63.806 and 63.807.
- C. The owner or operator shall maintain a copy of the manufacturer's specifications for any spray gun used in this booth.
- D. The facility shall maintain a log of all VOC-containing materials used at the facility (plant number 17-01-068). The log shall contain each material's respective VOC, single HAP and total HAP content (in lb/gal).
- E. The facility shall record the monthly material usage (in gal/month) for each VOC-containing material used at the facility, until the VOC emissions of the coatings and solvents used in the spray booths exceed 200 tpy. At this point, the owner or operator shall immediately begin keeping daily records of material use (in gal/day) and also a 365-day rolling total amount of VOC tpy emitted. Recordkeeping requirements may revert back to a monthly basis if the 365-day rolling total of VOC emissions is returned to less than 200 tpy for 30 days.
- F. The owner or operator may take credit for any waste VOC shipped off-site. The owner or operator shall record the amount of waste shipped off-site, and also analyze the VOC content, of the waste once every calendar quarter. The sample analyzed shall be taken as a representative sample (defined in 40 CFR 260.10) of the waste sent off-site for that quarter and shall be taken as representative until the subsequent quarter's analysis is received. The credit (calculated from the most current quarterly analysis and the amount shipped off-site) may be subtracted from the VOC rolling totals as of the date the waste was shipped off-site.
- G. The owner or operator shall keep Material Safety Data Sheets (MSDS) for all reagents, surface coating materials, solvents and other HAP and VOC-containing material used at the facility.

Authority for Requirement: DNR Construction Permits specified in Table

#### **Emission Point Characteristics**

These emission points shall conform to the specifications listed below.

Table: Spray Booths 1

|                             |  |                            | Stack Characteristics |                      |                               |                  |                          |  |
|-----------------------------|--|----------------------------|-----------------------|----------------------|-------------------------------|------------------|--------------------------|--|
| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Construction<br>Permit No. | Height<br>(feet)      | Diameter<br>(inches) | Exhaust<br>Flowrate<br>(scfm) | Exhaust<br>Temp. | Discharge Style          |  |
| EP-8                        | EU-8                                     | 98-A-064-S8                | 32                    | 34                   | 14,800                        | Ambient          | Vertical<br>Unobstructed |  |
| EP-9                        | EU-9                                     | 98-A-065-S8                | 32                    | 34                   | 14,800                        | Ambient          | Vertical<br>Unobstructed |  |
| EP-10                       | EU-10                                    | 98-A-066-S8                | 32                    | 34                   | 12,100                        | Ambient          | Vertical<br>Unobstructed |  |
| EP-13                       | EU-13                                    | 06-A-508-S1                | 30                    | 24                   | 8,000                         | Ambient          | Vertical<br>Unobstructed |  |
| EP-14                       | EU-14                                    | 99-A-415-S7                | 30                    | 36                   | 25,000                        | Ambient          | Vertical<br>Unobstructed |  |
| EP-28                       | EU-28                                    | 03-A-402-S4                | 30                    | 42                   | 14,500                        | Ambient          | Vertical<br>Unobstructed |  |
| EP-29                       | EU-29                                    | 03-A-403-S4                | 30                    | 42                   | 14,500                        | Ambient          | Vertical<br>Unobstructed |  |
| EP-32                       | EU-32                                    | 06-A-509-S1                | 30                    | 24                   | 8,000                         | Ambient          | Vertical<br>Unobstructed |  |

Authority for Requirement: DNR Construction Permits specified in Table

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

#### **Monitoring Requirements**

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

| <b>Agency Approved Operation &amp; Maintenance Plan Required?</b> Relevant requirements of O & M plan for this equipment: Particulate Mat | Yes No later |
|---|--------------|
| Facility Maintained Operation & Maintenance Plan Required?  | Yes 🗌 No 🖂   |
| Compliance Assurance Monitoring (CAM) Plan Required?  | Yes 🗌 No 🖂   |
| Authority for Requirement: 567 IAC 22.108(3)  |              |

# **Spray Coating Booth Filter Agency Operation & Maintenance Plan**

#### Weekly

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

#### **Record Keeping and Reporting**

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

#### **Quality Control**

• The filter equipment will be operated and maintained according to the manufacturers' recommendations.

# **Emission Point ID Number: See Table: Spray Booths 2**

# **Associated Equipment**

Table: Spray Booths 2

| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Emission<br>Unit<br>Description | Control<br>Equipment<br>Number   | Control<br>Equipment<br>Description   | Raw<br>Material     | Rated Capacity   |
|-----------------------------|--|---------------------------------|----------------------------------|---|---------------------|--|
| EP-3                        | EU-3                                     | Stain Booth                     | CE-3A/CE-<br>3B                  | (2) High Efficiency Collectors (in series)                                    | Wood<br>Stain       | 1 Spray Gun @ 30 fl.<br>oz/min                                     |
| EP-30                       | EU-30                                    | Flat Line<br>Spray Booth        | CE-<br>30A/CE-<br>30B            | Accordion Style Dry Filters (CE- 30A) in series with HE Dry Filters (CE- 30B) | Surface<br>Coatings | 4 Guns @ 56 fl. oz/min<br>each                                     |
| EP-33                       | EU-33                                    | UV Mist<br>Coater               | CE-<br>33A/CE-<br>33B/CE-<br>33C | Mat filter (CE-33A), bag filter (CE-33B) in series with HEPA filter (CE-33C)  | Surface<br>Coatings | 3 Guns @ 45 fl. oz/hr  |
| EP-38                       | EU-38                                    | Flat Line<br>Spray Booth<br>#2  | CE-38A/<br>CE-38B                | Accordion Style Dry Filters (CE- 38A) in series with HE Dry Filters (CE- 38B) | Surface<br>Coatings | 12 spray guns, total application rate of 168 oz/min (78.75 gal/hr) |

# **Applicable Requirements**

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

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

Table: Spray Booths 2

| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Opacity<br>Limit<br>567 IAC<br>23.3(2)"d" | PM<br>Limit<br>(gr/dscf)<br>567 IAC<br>23.4(13) | PM<br>Limit<br>(lb/hr) | PM <sub>10</sub><br>Limit<br>(lb/hr) | VOC<br>Limit<br>(ton/yr) | <b>Total HAP</b> (567 IAC 23.1(4)"aj" | Authority for<br>Requirement |
|-----------------------------|--|---|---|------------------------|--------------------------------------|--------------------------|---------------------------------------|------------------------------|
| EP-3                        | EU-3                                     | 40%(1)                                    | 0.01  | N/A                    | 1.543                                | 238(2)                   | See Note 3                            | 94-A-482-S10                 |
| EP-30                       | EU-30                                    | 40%(1)                                    | 0.01  | N/A                    | N/A                                  | 238(2)                   | See Note 3                            | 03-A-1354-S6                 |
| EP-33                       | EU-33                                    | 40%(1)                                    | 0.01  | N/A                    | N/A                                  | 238(2)                   | See Note 3                            | 07-A-1074-S1                 |
| EP-38                       | EU-38                                    | 40%(1)                                    | 0.01  | 0.91                   | 0.91                                 | 238(2)                   | See Note 3                            | 16-A-214                     |

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

#### Operating Requirements with Associated Monitoring and Recordkeeping

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

#### I. Recordkeeping Requirements for the Facility-wide VOC limit

- A. The owner or operator shall keep records on the identification and the VOC content (pounds per gallon) of each coating material and solvent used in each booth.
- B. The owner or operator shall maintain the following monthly records on the facility's surface coating operations (including putty, adhesive, and cleaning/thinning solvent usage):
  - i. The identification of each VOC-containing material used at the facility.
  - ii. The amount, in gallons, of each VOC-containing material used at the facility. For the purposes of calculating emissions, all VOC may be considered emitted on the day the materials are delivered to the facility or to the production line.
  - iii. The amount of VOC emissions, in tons.
  - iv. The 12-month rolling total of the amount of VOC emissions, in tons.
- C. If the 12-month rolling total of the VOC emissions from the facility's surface coating

<sup>(2)</sup> Facility-wide VOC limit for all surface coating operations. This limit also applies to emissions from adhesive and putty applications and solvents used for cleaning and thinning.

<sup>(3)</sup> The Volatile HAP content of the finishing material (i.e. surface coatings) used in this emissions unit and at this facility shall meet the emission limits for an existing source from Table 3 of 40 CFR Part 63, Subpart JJ, *National Emission Standards for Wood Furniture Manufacturing Operations*. See Appendix C for Table 3 of 40 CFR Part 63, Subpart JJ

operation (including putty, adhesive and cleaning/thinning solvent usage) exceeds 200.0 tons, the owner or operator shall immediately begin keeping the following daily records:

- i. The identification of each VOC-containing material used at the facility.
- ii. The amount in gallons, of each VOC-containing material used at the facility. For the purposes of calculating emissions, all VOC may be considered emitted on the day the materials are delivered to the facility or to the production line.
- iii. The amount of VOC emissions, in tons.
- iv. The 365-day rolling total of the amount of VOC emissions, in tons.

Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions drops below 200.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per Condition C. If the emissions once again exceed 200.0 tons, daily recordkeeping will be required per Condition C

D. The owner or operator may take credit for any waste VOC shipped off-site. The owner or operator shall record the amount of the waste shipped off-site, and analyze the VOC content of the waste once every calendar quarter. The sample analyzed shall be taken as a representative sample (as defined in 40 CFR §260.10) of the waste sent off-site for the quarter and shall be used as representative of the VOC content until the subsequent quarter's analysis is received. The credit (calculated from the most current analysis and the amount shipped off-site) may be subtracted from the VOC rolling totals as of the date the waste is shipped off-site. Credit shall not be taken for the amount of non-VOC organic solvents (e.g. acetone) shipped off-site. If non-VOC organic solvents are used at the facility, the facility may be required to perform additional analysis on the waste.

# II. Requirements from National Emission Standards for Wood Furniture Manufacturing Operations

- E. All spray materials used in these emissions units shall meet the requirements of §63.802, which includes, but is not limited to, limiting the VHAP (Volatile Hazardous Air Pollutant) emissions from finishing operations, thinners, contact adhesives and strippable spray booth coatings as applicable.
- F. The owner or operator shall comply with all applicable work practice standards in §63.803.
- G. The owner or operator shall comply with all applicable compliance procedures and monitoring requirements in §63.804.
- H. The owner or operator shall comply with the applicable performance test methods in §63.805(a).
- I. The owner or operator shall comply with all applicable recordkeeping requirements in §63.806. This includes keeping as a record a certified product data sheet and the VHAP content (lb VHAP/lb solids) for each finishing material, thinner, contact adhesive and strippable spray booth coating subject to the emission limits in §63.802.
- J. The owner or operator shall comply with all applicable reporting requirements in §63.807.

#### **III.** Requirements on Dry Filters

- K. The owner or operator shall
  - i. Develop an operating and maintenance plan for the dry filters (CE-33, CE-38A and CE-38B), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
  - ii. Develop an operating and maintenance plan for the dry filters (CE-3 and CE-30) that is consistent with good engineering practice.
- L. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the dry filters (CE-3, CE-30, CE-33, CE-38A and CE-38B) used in the emission units. A record shall be maintained on when the filers are changed.

#### **IV.** Operating Limits

- M. The owner or operator shall not
  - i. **EU-30 and EU-38:** Not operate more than 4 automatic spray guns in each spray booth at any one time. The total spray capacity of the 4 guns shall not exceed 56 fluid ounces per minute (26.25 gallons per hour) for each spray booth.
  - ii. **EU-3:** Not operate more than 1 spray gun rated at 30 fluid ounces per minute in spray booth at any one time. Additional guns may be installed to facilitate color changes.
- N. The owner or operator shall
  - i. **EU-38 Only**: Maintain daily records on spray booth that document the number of automatic spray guns that were in operation at any one time.
  - ii. **EU-3** and **EU-30 only:** Maintain a copy of the manufacture's specifications for any spray gun used in spray booth.

Authority for Requirement: DNR Construction Permits specified in Table

#### **NESHAP Applicability**

These emission units are subject to the National Emission Standards for Hazardous Air Pollutant: 40 CFR 63 Subpart JJ-National Emission Standards for Wood Furniture Manufacturing Operations. Please see Appendix B.

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

40 CFR §63.800 - §63.808

#### **Emission Point Characteristics**

These emission points shall conform to the specifications listed below.

Table: Spray Booths 2

|                             |  |                            | Stack Characteristics |                      |                               |                          |                          |  |
|-----------------------------|--|----------------------------|-----------------------|----------------------|-------------------------------|--------------------------|--------------------------|--|
| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Construction<br>Permit No. | Height<br>(feet)      | Diameter<br>(inches) | Exhaust<br>Flowrate<br>(scfm) | Exhaust<br>Temp.<br>(°F) | Discharge<br>Style       |  |
| EP-3                        | EU-3                                     | 94-A-482-S10               | 34                    | 34                   | 18,000                        | 68                       | Vertical<br>Unobstructed |  |
| EP-30                       | EU-30                                    | 03-A-1354-S6               | 33.75                 | 24                   | 7,900                         | 68                       | Vertical<br>Unobstructed |  |
| EP-33                       | EU-33                                    | 07-A-1074-S1               | 34.5                  | 10                   | 1,200                         | 68                       | Vertical<br>Unobstructed |  |
| EP-38                       | EU-38                                    | 16-A-214                   | 34                    | 24                   | 10,600                        | 68                       | Vertical<br>Unobstructed |  |

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

#### **Monitoring Requirements**

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

| Agency Approved Operation & Maintenance Plan Required? Relevant requirements of O & M plan for this equipment: Particulate Mat | Yes ⊠ No □ |
|--|------------|
| Facility Maintained Operation & Maintenance Plan Required?   | Yes 🗌 No 🖂 |
| Compliance Assurance Monitoring (CAM) Plan Required?   | Yes 🗌 No 🖂 |
| Authority for Requirement: 567 IAC 22.108(3)   |            |

# **Spray Coating Booth Filter Agency Operation & Maintenance Plan**

#### Weekly

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

#### **Record Keeping and Reporting**

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

#### **Quality Control**

• The filter equipment will be operated and maintained according to the manufacturers' recommendations.

# **Emission Point ID Number: See Table: Spray Booths 3**

#### Associated Equipment

Spray Booths 3

| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Emission<br>Unit<br>Description | Control<br>Equipment<br>Number | Control<br>Equipment<br>Description | Raw<br>Material | Rated Capacity |
|-----------------------------|--|---------------------------------|--------------------------------|-------------------------------------|-----------------|----------------|
| EP-19                       | EU-19                                    | Stain Booth                     | CE-19                          | Dry Filters                         | Wood<br>Stain   | 5.53 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: DNR Construction Permit 00-A-709-S6

567 IAC 23.3(2)"d"

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

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.23 lb/hr.

Authority for Requirement: DNR Construction Permit 00-A-709-S6

Pollutant: Particulate Matter Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: DNR Construction Permit 00-A-709-S6

567 IAC 23.4(13)

Pollutant: Volatile Organic Compounds (VOC's)

Emission Limit(s): 238 tons/yr. (2)

Authority for Requirement: DNR Construction Permit 00-A-709-S6 (2) Limit included all VOC emission from non-combustion sources at the facility.

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

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

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The control equipment shall be inspected and maintained according to manufacturer's recommendations.
- B. The owner or operator shall maintain a record of control equipment inspections and maintenance.
- C. All spray materials shall meet the requirements of 40 CFR 63.802 which includes, but is not limited to, limiting the VHAP emissions from finishing operations, contact adhesives and strippable spray booth coatings.
- D. The owner or operator shall comply with the work practice standards outlined in 40 CFR 63.803.
- E. The owner or operator shall comply with the compliance standards of 40 CFR 63.804 and the performance test methods of 63.805.
- F. The owner or operator shall follow the recordkeeping and reporting requirements of 40 CFR 63.806 and 63.807.
- G. The owner or operator shall not use more than one spray gun at a time in the booth. Additional guns may be installed to facilitate color changes.
- H. The owner or operator shall maintain a copy of the manufacturer's specifications for any spray gun used in this booth.
- I. Total VOC emissions from non-combustion sources at this facility shall not exceed 238 tons per daily rolling 365-day period. All VOC-containing materials used at the facility shall be included in the emissions calculations. Compliance with this limit can be demonstrated on a 12-month basis as long as emissions do not exceed the trigger outlined in condition L below.
- J. The permittee (or owner or operator) shall maintain the following daily records:
  - i. The identification of each VOC-containing material used at the facility.
  - ii. The amount, in gallons, of each VOC-containing material used at the facility. For the purposes of calculating emissions, all VOC may be considered emitted on the day the materials are delivered to the facility or to the production line.
- K. The permittee shall maintain the following monthly records:
  - iii. The identification of each VOC-containing material used at the facility.

- iv. The amount, in gallons, of each VOC-containing material used at the facility. For the purposes of calculating emissions, all VOC may be considered emitted on the day the materials are delivered to the facility or to the production line.
- v. The amount of VOC emissions from all non-combustion sources, in tons.
- vi. The 12-month rolling total of the amount of VOC emissions from all non-combustion sources, in tons.
- L. If the 12-month rolling total of the VOC emissions from non-combustion sources at this facility exceeds 200 tons, the permittee shall immediately begin keeping the following daily records:
  - vii. The amount of VOC emissions from all non-combustion sources, in tons.
  - viii. The 365-day rolling total of the amount of VOC emissions from all non-combustion sources at this facility, in tons.

Daily calculations for VOC emissions from all non-combustion sources at this facility shall continue until the 365-day rolling total of the amount of VOC emissions from all non-combustion sources drops below 200 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions from all non-combustion sources at this facility will cease per condition L above. If the emissions once again exceed 200 tons, daily recordkeeping will be required per condition L above.

#### **NESHAP Applicability**

This emission unit is subject to the National Emission Standards for Hazardous Air Pollutant: 40 CFR 63 Subpart JJ-National Emission Standards for Wood Furniture Manufacturing Operations. Please see Appendix B.

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 28 Stack Opening, (inches, dia.): 34 Exhaust Flow Rate (scfm): 13,450

Exhaust Temperature (°F): 70

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 00-A-709-S6

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

#### **Monitoring Requirements**

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

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

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

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

#### Spray Coating Booth Filter Agency Operation & Maintenance Plan

#### Weekly

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

#### **Record Keeping and Reporting**

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

#### **Quality Control**

• The filter equipment will be operated and maintained according to the manufacturers' recommendations.

#### **Emission Point ID Number: EP-4**

#### **Associated Equipment**

Emission Unit vented through this Emission Point: EU-4

Emission Unit Description: Weld Bench

Raw Material/Fuel: Welding Wire

Rated Capacity: 675 IPM Welding Wire

### **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: DNR Construction Permit 94-A-483-S3

567 IAC 23.3(2)"d"

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

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.18 lb/hr

Authority for Requirement: DNR Construction Permit 94-A-483-S3

Pollutant: Particulate Matter (PM) Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 94-A-483-S3

567 IAC 23.3(2)"a"

#### Operating Requirements with Associated Monitoring and Recordkeeping

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

A. Record the type and amount of welding wire used in this unit. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: DNR Construction Permit 94-A-483-S3

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 25.7

Stack Opening, (inches, dia.): 16 Exhaust Flow Rate (scfm): 2,500 Exhaust Temperature (°F): 68

Discharge Style: Vertical Obstructed

Authority for Requirement: DNR Construction Permit 94-A-483-S3

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

### **Monitoring Requirements**

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

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

### **Emission Point ID Number: EP-16 (Internal Venting)**

Emission Unit vented through this Emission Point: EU-16

Emission Unit Description: Adhesive Application

Raw Material/Fuel: Adhesive Rated Capacity: 4.73 gal/hr

#### **Applicable Requirements**

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

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

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 3.18 tons/yr

Authority for Requirement: DNR Construction Permit 03-A-1248

#### Operating Requirements with Associated Monitoring and Recordkeeping

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

#### **Operating Limits:**

- A. The owner or operator shall not use more than 75 gallons of adhesive with a VOC content greater than 6.5 pounds per gallon and with a maximum VOC content of 12.0 pounds per gallon per twelve-month rolling period at EU-16, Adhesive Application.
- B. The owner or operator shall not use more than 245 gallons of adhesive with a VOC content greater than 4.5 pounds per gallon and with a maximum VOC content of 6.5 pounds per gallon per twelve-month rolling period at EU-16, Adhesive Application.
- C. The owner or operator shall not use more than 350 gallons of adhesive with a VOC content greater than 0.075 pounds per gallon and with a maximum VOC content of 4.5 pounds per gallon per twelve-month rolling period at EU-16, Adhesive Application.
- D. The owner or operator shall not use more than 30,500 gallons of adhesive with a VOC content greater than 0.001 pounds per gallon and with a maximum VOC content of 0.075 pounds per gallon per twelve-month rolling period at EU-16, Adhesive Application.

#### Reporting & Recordkeeping:

- A. Record the amount of adhesive used at EU-16, Adhesive Application, in gallons each month for each VOC content range as delineated above. Calculate and record twelvementh rolling totals.
- B. Record the VOC content of all adhesives used at EU-16, Adhesive Application, in pounds per gallon.

29

C. The owner or operator shall maintain MSDS for each adhesive used at EU-16, Adhesive Application.

Authority for Requirement: DNR Construction Permit 03-A-1248

| <b>Emission Point Characteristics</b>  |                            |
|--|----------------------------|
| The emission point shall conform to the specifications listed below.                           |                            |
| Internal Venting   |                            |
| 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  $\square$  No  $\boxtimes$ 

#### **Emission Point ID Numbers: EP-24A and EP-24B**

#### Associated Equipment

Emission Unit vented through these Emission Points: EU-24 Emission Unit Description: Pump Room/ Inventory Storage

Raw Material/Fuel: Coatings and Solvents

Rated Capacity: N/A

### **Applicable Requirements**

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

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

Pollutant: Opacity

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

Authority for Requirement: DNR Construction Permits 00-A-723-S2 (EP24A) and

00-A-724-S2 (EP24B) 567 IAC 23.3(2)"d"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 238 tons/yr<sup>(1)</sup>

Authority for Requirement: DNR Construction Permits 00-A-723-S2 (EP24A) and

00-A-724-S2 (EP24B)

#### **NESHAP Applicability**

This emission unit is subject to the National Emission Standards for Hazardous Air Pollutant: 40 CFR 63 Subpart JJ-National Emission Standards for Wood Furniture Manufacturing Operations. Please see Appendix B.

#### Operating Requirements with Associated Monitoring and Recordkeeping

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

#### **Operating Limits:**

- A. All spray materials shall meet the emission limit requirements of 40 CFR 63.802 which includes, but is not limited to, limiting the VHAP emissions from Finishing operations, contact adhesives and strippable spray booth coatings.
- B. All work practices, as outlined in 40 CFR 63.803 shall be followed.

<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).

<sup>(1)</sup> This is a facility-wide VOC bubble limit for the solvent and coating material VOC emissions at Woodharbor Custom Cabinetry.

C. Compliance procedures and monitoring requirements outlined in 40 CFR 63.804 and the performance test methods outlined in 40 CFR 63.805 shall be followed.

#### Reporting & Recordkeeping:

- A. All records required by 40 CFR 63.806 shall be maintained.
- B. All reporting requirements of 40 CFR 63.807 shall be followed.

Authority for Requirement: DNR Construction Permits 00-A-723-S2 (EP24A) and

00-A-724-S2 (EP24B)

#### **Emission Point Characteristics (EP-24A and EP-24B)**

The emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 24 Stack Opening, (inches, dia.): 30

Exhaust Flow Rate (scfm): 2,275
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 00-A-723-S2 (EP24A) and

00-A-724-S2 (EP24B)

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

#### **Monitoring Requirements**

| $\mathbf{T}$ | 1 /        | 4         | C .1  |         |           | 11   | 1 1     |       | 1 .  | 1        | •, •     | •                | . 1.  | . 1  | 7  | 1       |
|--------------|------------|-----------|-------|---------|-----------|------|---------|-------|------|----------|----------|------------------|-------|------|----|---------|
| 1            | ne owner/o | merator o | t tn  | กร คดนา | nments    | ทสเ  | i combi | v wit | n ti | าค ทากเ  | 11toring | reauirement      | 5 /1  | 5101 | ne | יוסעי   |
| _ ,          | ic Ommen   | peraior o | , ,,, | us cqui | PHILLIU D | verv | COMP    | y     |      | ic iiioi |          | I COULT CITECITI | D 001 | JUCU | -  | , UC IV |

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

# **Emission Point ID Number: EP-26 (Internal Venting)**

#### **Associated Equipment**

Emission Unit vented through this Emission Point: EU-26

Emission Unit Description: Putty Application

Raw Material/Fuel: Putty Rated Capacity: 0.10 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.

See 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 ⋈

#### **Emission Point ID Number: EP-34**

Associated Equipment

Emission Unit vented through this Emission Point: EU-34 Emission Unit Description: UV Cure Oven (electric unit)

Raw Material/Fuel: coating materials

Rated Capacity: N/A

# **Applicable Requirements**

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

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

Pollutant: Opacity

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

Authority for Requirement: DNR Construction Permit 07-A-1075-S1

567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM) Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 07-A-1075-S1

567 IAC 23.3(2)"a"

#### Operating Requirements with Associated Monitoring and Recordkeeping

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

A. The UV Cure Oven (EU-34) shall only use electric energy to heat the process.

Authority for Requirement: DNR Construction Permit 07-A-1075-S1

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30

Stack Opening, (inches, dia.): 12 Exhaust Flow Rate (scfm): 2,000 Exhaust Temperature (°F): 200

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 07-A-1075-S1

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

#### **Monitoring Requirements**

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

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

#### **Emission Point ID Number: EP-36**

#### **Associated Equipment**

Emission Unit vented through this Emission Point: EU-36

Emission Unit Description: Cleaning Unit Raw Material/Fuel: cleaning solvents Rated Capacity: 3 gallons per minute

#### **Applicable Requirements**

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

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

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 238 tons/yr<sup>(1)</sup>

(1) This is a facility-wide VOC bubble limit for the solvent and coating material VOC emissions at

Woodharbor Custom Cabinetry.

Authority for Requirement: DNR Construction Permit 14-A-630

#### Operating Requirements with Associated Monitoring and Recordkeeping

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

#### **Operating Limits:**

- A. Per 40 CFR §63.803(d), the owner or operator shall develop an organic HAP solvent accounting form for this unit to record:
  - i. The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in §63.801 of this subpart;
  - ii. The number of pieces washed off, and the reason for the washoff; and
  - iii. The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite
- B. Per 40 CFR §63.803(e), the owner or operator shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of 40 CFR Part 63 Subpart JJ.
- C. Per 40 CFR §63.803(f), the owner or operator shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.

#### Reporting & Recordkeeping:

- A. The owner or operator shall follow the recordkeeping and reporting requirements of 40 CFR 63.806 and 40 CFR 63.807.
- B. The facility shall maintain a log of all VOC-containing materials used at the facility (plant number 17-01-068). The log shall contain each material's respective VOC, single HAP and total HAP content (in lb/gal).
- C. The facility shall record the monthly material usage (in gal/month) for each VOC-containing material used at the facility, until the VOC emissions of the coatings and solvents used in the spray booths exceed 200 tpy. At this point, the owner or operator shall immediately begin keeping daily records of material use (in gal/day) and also a 365-day rolling total amount of VOC tpy emitted. Recordkeeping requirements may revert back to a monthly basis if the 365-day rolling total of VOC emissions is returned to less than 200 tpy for 30 days.
- D. Calculate the VOC emissions in tons (from all sources that use solvents and coatings) for the facility on a monthly basis and keep a 12-month rolling total. Records for VOC emissions shall be kept on a monthly basis until the VOC emissions of the coatings and solvents used in the spray booths exceed 200 TPY. At this point the owner or operator shall immediately begin keeping a 365-day rolling total amount of VOC emitted at the facility. Calculation requirements will revert back to a monthly basis if the 365-day rolling total of VOC emissions is returned to below 200 TPY for 30 days.
- E. The owner or operator may take credit for any waste VOC shipped off-site. The owner or operator shall record the amount of waste shipped off-site, and also analyze the VOC content, of the waste once every calendar quarter. The sample analyzed shall be taken as a representative sample (defined in 40 CFR 260.10) of the waste sent off-site for that quarter and shall be taken as representative until the subsequent quarter's analysis is received. The credit (calculated from the most current quarterly analysis and the amount shipped off-site) may be subtracted from the VOC rolling totals as of the date the waste was shipped off-site.
- F. The owner or operator shall keep Material Safety Data Sheets (MSDS), or equivalent, for all reagents, surface coating materials, solvents and other HAP and VOC-containing material used at the facility.

Authority for Requirement: DNR Construction Permit 14-A-630

#### **NESHAP Applicability**

This emission unit is subject to the National Emission Standards for Hazardous Air Pollutant: 40 CFR 63 Subpart JJ-National Emission Standards for Wood Furniture Manufacturing Operations. Please see Appendix B.

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 32

Stack Opening, (inches, dia.): 8 Exhaust Flow Rate (scfm): 45

Exhaust Temperature (°F): Ambient Discharge Style: Vertical Obstructed

Authority for Requirement: DNR Construction Permit 14-A-630

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

#### **Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)

# **Emission Point ID Number: EP-39 and EP-40**

**Associated Equipment** 

Table: Ovens

| Emission<br>Point<br>Number | Associated<br>Emission<br>Unit<br>Number | Emission<br>Unit<br>Description | Control<br>Equipment<br>Number | Raw<br>Material      | Rated Capacity |
|-----------------------------|--|---------------------------------|--------------------------------|----------------------|----------------|
| EP-39                       | EU-39                                    | Flat Line<br>Drying Oven        | NA                             | Coating<br>Materials | NA             |
| EP-40                       | EU-40                                    | Linear High<br>Velocity<br>Oven | NA                             | Coating<br>Materials | NA             |

# **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.

None at this time.

#### **NESHAP Applicability**

This emission unit is subject to the National Emission Standards for Hazardous Air Pollutant: 40 CFR 63 Subpart JJ-National Emission Standards for Wood Furniture Manufacturing Operations. Please see Appendix B.

Authority for Requirement: 567 IAC 23.1(4) "aj" 40 CFR §63.800 – §63.808

# **Monitoring Requirements**

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

| Agency Approved Operation & Maintenance Plan Required?     | Yes 🗌 No 🖂 |
|--|------------|
| Facility Maintained Operation & Maintenance Plan Required? | Yes 🗌 No 🖂 |
| Compliance Assurance Monitoring (CAM) Plan Required?       | Yes 🗌 No 🖂 |
| Authority for Requirement: 567 IAC 22.108(3)               |            |

#### **Emission Point ID Number: EP-43**

## **Associated Equipment**

Emission Unit vented through this Emission Point: EU-43 Emission Unit Description: Drying Oven (Flexi Oven)

Raw Material/Fuel: Natural Gas Rated Capacity: 0.635 MMBtu/hr

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.2(4)"d"

Pollutant: PM

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limits: 500 ppm

Authority for Requirement: 567 IAC 23.2(3)"e"

#### **NESHAP Applicability**

These emission units are subject to the National Emission Standards for Hazardous Air Pollutant: 40 CFR 63 Subpart JJ-National Emission Standards for Wood Furniture Manufacturing Operations. Please see Appendix B.

#### **Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)

#### **Emission Point ID Number: EP-44**

# **Associated Equipment**

Emission Unit vented through this Emission Point: EU-44

Emission Unit Description: Fast Dry Oven

Raw Material/Fuel: Natural Gas Rated Capacity: 0.16 MMBTU/hr

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.2(4) "d"

Pollutant: Particulate Matter (PM) Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limits: 500 ppmv

Authority for Requirement: 567 IAC 23.2(3)"e"

#### **NESHAP Applicability**

These emission units are subject to the National Emission Standards for Hazardous Air Pollutant: 40 CFR 63 Subpart JJ-National Emission Standards for Wood Furniture Manufacturing Operations. Please see Appendix B.

#### **Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)

#### **Emission Point ID Number: EP-EG**

**Associated Equipment** 

Associated Emission Unit ID Numbers: EU-EG

\_\_\_\_\_

Emission Unit vented through this Emission Point: EU-EG

Emission Unit Description: Emergency Generator

Raw Material/Fuel: Natural Gas

Rated Capacity: 103 bhp

# **Applicable Requirements**

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

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

Pollutant: Opacity Emission Limit(s): 40%

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

Pollutant: Particulate Matter (PM) Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppmv

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

#### **NSPS and NESHAP Applicability**

The emergency engine is subject to 40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(ii) this spark ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

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

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

40 CFR Part 60 Subpart JJJJ

567 IAC 23.1(4)"cz" 567 IAC 23.1(4)"zzz"

#### Operating Requirements with Associated Monitoring and Recordkeeping

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

#### **Emission Standards:**

- §60.4233 What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?
- (e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE.

Summary excerpt from Table 1 to Subpart JJJJ of Part 60—NO<sub>X</sub>, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP

(40 CFR 60.4233(e) and Table 1 to Subpart JJJJ)

| Maximum             | Manufacture | Emission Standards (1) |          |        |         |                             |     |     |
|---------------------|-------------|------------------------|----------|--------|---------|-----------------------------|-----|-----|
| <b>Engine Power</b> | Date        | g/HP-hr                |          |        |         | ppmvd at 15% O <sub>2</sub> |     |     |
|                     |             | NOx                    | HC + NOx | CO (2) | VOC (3) | NOx                         | CO  | VOC |
| 25 < HP < 130       | 1/1/2009+   | N/A                    | 10       | 387    | N/A     | N/A                         | N/A | N/A |

<sup>(1)</sup> Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O<sub>2</sub>.

- §60.4237 What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?
- (c) If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.
- §60.4243 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?
- (b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

<sup>&</sup>lt;sup>(2)</sup> See rule for alternative CO certification standards for engines  $\geq 100$  hp and manufactured prior to 1/1/2011.

<sup>(3)</sup> Formaldehyde emissions are not included.

- (1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.
- (2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

#### §60.4243 (a)(1)

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

#### §60.4243 (d) and (e) excerpts:

- (d) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (d)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (d)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (d)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (d)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2).
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely

during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233.

§60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

- (a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
- (2) Maintenance conducted on the engine.
- (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
- (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

Excerpt from §60.4245(b)

For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

Authority for Requirement: 40 CFR Part 60 Subpart JJJJ 567 IAC 23.1(4)"zzz"

#### **Monitoring Requirements**

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

| Agency Approved Operation & Maintenance Plan Required?     | Yes 🗌 No 🖂 |
|--|------------|
| Facility Maintained Operation & Maintenance Plan Required? | Yes 🗌 No 🖂 |
| Compliance Assurance Monitoring (CAM) Plan Required?       | Yes 🗌 No 🖂 |
| 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"
- 6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. 567 IAC 22.108(15)"c"

#### **G2. Permit Expiration**

- 1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). 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 submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permitting & Standards Branch, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 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 emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
- 4. The fee shall be submitted annually by July 1 with forms specified by the department.
- 5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
- 6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
- 7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
- 8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

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

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

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

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

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

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

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

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

# G10. Recordkeeping Requirements for Compliance Monitoring

- 1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
  - a. The date, place and time of sampling or measurements
  - b. The date the analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses; and
  - f. The operating conditions as existing at the time of sampling or measurement.
  - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
- 2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
- 3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. 567 IAC 22.108(4), 567 IAC 22.108(12)

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

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

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

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

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

#### G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). 567 IAC Chapter 131-State Only

# G14. Excess Emissions and Excess Emissions Reporting Requirements

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

incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

# 2. Excess Emissions Reporting

- a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:
  - i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
  - ii. The estimated quantity of the excess emission.
  - iii. The time and expected duration of the excess emission.
  - iv. The cause of the excess emission.
  - v. The steps being taken to remedy the excess emission.
  - vi. The steps being taken to limit the excess emission in the interim period.
- b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:
  - i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
  - ii. The estimated quantity of the excess emission.
  - iii. The time and duration of the excess emission.
  - iv. The cause of the excess emission.
  - v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

- vi. The steps that were taken to limit the excess emission. vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 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 situation 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 fulfills the requirement of paragraph 22.108(5)"b." See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. 567 IAC 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(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 (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 22.144(455B));
  - e. The changes comply with all applicable requirements.
  - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
    - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
    - vii. Any permit term or condition no longer applicable as a result of the change. 567 IAC 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 does any of the following:
  - i. Correct typographical errors
  - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source:
  - iii. Require more frequent monitoring or reporting by the permittee; or
  - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

#### 2. Minor Title V Permit Modification.

- a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
  - i. Do not violate any applicable requirement;
  - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
  - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
  - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
  - v. Are not modifications under any provision of Title I of the Act; and vi. Are not required to be processed as significant modification under rule 567 22.113(455B).
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
  - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
  - ii. The permittee's suggested draft permit;
  - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

- iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 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, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

# 3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.111-567 IAC 22.113

#### **G19. Duty to Obtain Construction Permits**

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

#### G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

# **G21. Open Burning**

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 <u>except</u> 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only

# G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

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

- 1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
  - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
- 3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
- 5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. 40 CFR part 82

# **G24. Permit Reopenings**

- 1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 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 <u>not</u> required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is <u>not</u> 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 <u>not</u> 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)
- 5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. 567 IAC 22.114(3)

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

- 1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
  - a. Such applicable requirements are included and are specifically identified in the permit; or
  - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- 2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
- 3. A permit shield shall not alter or affect the following:
  - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
  - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. 567 IAC 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 consistent with the requirements of 567 IAC 22.111(1). 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. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

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

Stack Test Review Coordinator Iowa DNR, Air Quality Bureau Wallace State Office Building 502 E 9<sup>th</sup> St.
Des Moines, IA 50319-0034 (515) 725-9545

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program. 567 IAC 25.1(7)"a", 567 IAC 25.1(9)

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

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. 567 IAC 26.1(1)

#### **G32.** Contacts List

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

Iowa Compliance Officer

Air Branch

Enforcement and Compliance Assurance Division

U.S. EPA Region 7

11201 Renner Blvd.

Lenexa, KS 66219

(913) 551-7020

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

Chief, Air Quality Bureau

Iowa Department of Natural Resources

Wallace State Office Building

502 E 9<sup>th</sup> St.

Des Moines, IA 50319-0034

(515) 725-8200

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

#### Field Office 1

1101 Commercial Court, Suite 10 Manchester, IA 52057 (563) 927-2640

#### Field Office 3

1900 N. Grand Ave. Spencer, IA 51301 (712) 262-4177

#### Field Office 5

Wallace State Office Building 502 E 9<sup>th</sup> St. Des Moines, IA 50319-0034 (515) 725-0268

#### **Polk County Public Works Dept.**

Air Quality Division 5885 NE 14th St. Des Moines, IA 50313 (515) 286-3351

#### Field Office 2

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

#### Field Office 4

1401 Sunnyside Lane Atlantic, IA 50022 (712) 243-1934

#### Field Office 6

1023 West Madison Street Washington, IA 52353-1623 (319) 653-2135

#### **Linn County Public Health**

Air Quality Branch 1020 6<sup>th</sup> Street SE Cedar Rapids, IA 52401 (319) 892-6000

# Appendix A: Woodworking CAM Plans Compliance Assurance Monitoring Plan for Woodharbor Custom Cabinetry Mason City, Iowa

Part One — Various Woodworking Sources EU-5

### I. Background

#### A. Emissions Unit

Description: Equipment for sawing, sanding, etc. of wood Identification: EU-5 is associated with EP-5 and EP-6

Facility: Woodharbor Custom Cabinetry, Mason City, Iowa

#### B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation Reference: 567 IAC 23.3(2)"a" & Construction Permits 95-A-793-S2 and

95-A-794-S2

Particulate emission limit: 0.1 gr/dscf & 1.02 lb/hr per emission point

Monitoring requirements: Fabric Filter Operating Parameters

#### C. Control Technology

Fabric Filter

# II. Monitoring Approach

#### A. Indicators

Visible emissions and pressure drop across the fabric filter.

#### B. Measurement Approach

Parametric monitoring is performed. Visible emissions will be monitored once per week while the process is operating. Pressure drop across the fabric filter will be monitored once per day while the process is operating.

#### C. Indicator Ranges

The emissions from the fabric filter will be observed and determined to be normal or abnormal. Normal is defined as no visible emissions except for water vapor. Abnormal is defined as the presence of visible emissions except for water vapor. A visual emissions excursion is defined as monitored visual emissions other than normal.

A pressure drop excursion is a pressure drop less than 0.5" w.c. or greater than 10" w.c.

Excursions trigger an inspection, corrective action, and a reporting requirement in accordance with the facility's Operation and Maintenance Plan.

#### D. QIP Threshold

The Quality Improvement Plan (QIP) threshold is three (5%) instances of pressure drop readings outside the specified range or 5% of instances of visible emissions during a 12-month period.

#### E. Performance Criteria

Data representativeness:

For this process, abnormal visible emissions are an indicator of poor fabric filter performance. Pressure drop that is below the established range can indicate a broken bag or other problem with the baghouse function. Pressure drop that is above the established range can indicate that the bag cleaning function is not operating properly or that the bags are not functioning properly.

#### Verification of operational status:

Visible emissions are checked once per week while the fabric filter is operating. The pressure drop is checked once per day while the fabric filter is operating. The fabric filter will be maintained in good working condition according to the manufacturer's operating and maintenance (O&M) procedures.

#### QA/QC practices and criteria:

Monitoring the visible emissions and pressure drop will serve to alert the facility in circumstances when the fabric filter experiences operational failures. Any recorded abnormal visible emissions or pressure drop outside the specified range will signify an excursion.

When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required. After any necessary corrective action has been taken, a follow-up check will be performed to insure that the indicator is within the indicator range.

Monitoring frequency and data collection procedure:

Visible emissions readings will be monitored and recorded once per week while the fabric filter is operating. Pressure drop readings will be monitored and recorded once per day while the fabric filter is operating.

# Part Two — Various Woodworking Sources EU-7

#### I. Background

#### A. Emissions Unit

Description: Equipment for sawing, sanding, etc. of wood

Identification: EU-7 is associated with EP-7 & EP-37

Facility: Woodharbor Custom Cabinetry, Mason City, Iowa

#### B. Applicable Regulation, Emission Limit and Monitoring Requirements

Regulation Reference: 567 IAC 23.3(2)"a" & Construction Permit 98-A-063-S2 and 16-

A-328

Particulate emission limit: 0.1 gr/dscf

Monitoring requirements: Fabric Filter Operating Parameters

# Control Technology

Fabric Filter

#### **II. Monitoring Approach**

#### A. Indicators

Visible emissions and pressure drop across the fabric filter.

#### B. Measurement Approach

Parametric monitoring is performed. Visible emissions will be monitored once per week while the process is operating. Pressure drop across the fabric filter will be monitored once per day while the process is operating.

## C. Indicator Ranges

The emissions from the fabric filter will be observed and determined to be normal or abnormal. Normal is defined as no visible emissions except for water vapor. Abnormal is defined as the presence of visible emissions except for water vapor. A visual emissions excursion is defined as monitored visual emissions other than normal.

A pressure drop excursion is a pressure drop less than 0.5" w.c. or greater than 10" w.c.

Excursions trigger an inspection, corrective action, and a reporting requirement in accordance with the facility's Operation and Maintenance Plan.

#### D. QIP Threshold

The Quality Improvement Plan (QIP) threshold is three (5%) instances of pressure drop readings outside the specified range or 5% of instances of visible emissions during a 12-month period.

#### E. Performance Criteria

Data representativeness:

For this process, abnormal visible emissions are an indicator of poor fabric filter performance. Pressure drop that is below the established range can indicate a broken bag or other problem with the baghouse function. Pressure drop that is above the established range can indicate that the bag cleaning function is not operating properly or that the bags are not functioning properly.

#### Verification of operational status:

Visible emissions are checked once per week while the fabric filter is operating. The pressure drop is checked once per day while the fabric filter is operating. The fabric filter will be maintained in good working condition according to the manufacturer's operating and maintenance (O&M) procedures.

QA/QC practices and criteria:

Monitoring the visible emissions and pressure drop will serve to alert the facility in circumstances when the fabric filter experiences operational failures. Any recorded abnormal visible emissions or pressure drop outside the specified range will signify an excursion.

When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required. After any necessary corrective action has been taken, a follow-up check will be performed to insure that the indicator is within the indicator range.

Monitoring frequency and data collection procedure:

Visible emissions readings will be monitored and recorded once per week while the fabric filter is operating. Pressure drop readings will be monitored and recorded once per day while the fabric filter is operating.

#### Part Three — Various Woodworking Sources EU-25

#### I. Background

#### A. Emissions Unit

Description: Equipment for sawing, sanding, etc. of wood

Identification: EU-25

Facility: Woodharbor Custom Cabinetry, Mason City, Iowa

#### B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation Reference: 567 IAC 23.3(2)"a" & Construction Permit 01-A-1069-S2

Particulate emission limit: 0.1 gr/scf & 3.53 lb/hr (PM & PM10)

Monitoring requirements: Fabric Filter Operating Parameters

#### C. Control Technology

Fabric Filter

# II. Monitoring Approach

#### A. Indicators

Visible emissions and pressure drop across the fabric filter.

#### B. Measurement Approach

Parametric monitoring is performed. Visible emissions will be monitored once per week while the process is operating. Pressure drop across the fabric filter will be monitored once per day while the process is operating.

#### C. Indicator Ranges

The emissions from the fabric filter will be observed and determined to be normal or abnormal. Normal is defined as no visible emissions except for water vapor. Abnormal is

defined as the presence of visible emissions except for water vapor. A visual emissions excursion is defined as monitored visual emissions other than normal.

A pressure drop excursion is a pressure drop less than 0.5" w.c. or greater than 10" w.c.

Excursions trigger an inspection, corrective action, and a reporting requirement in accordance with the facility's Operation and Maintenance Plan.

#### D. QIP Threshold

The Quality Improvement Plan (QIP) threshold is three (5%) instances of pressure drop readings outside the specified range or 5% of instances of visible emissions during a 12-month period.

#### E. Performance Criteria

Data representativeness:

For this process, abnormal visible emissions are an indicator of poor fabric filter performance. Pressure drop that is below the established range can indicate a broken bag or other problem with the baghouse function. Pressure drop that is above the established range can indicate that the bag cleaning function is not operating properly or that the bags are not functioning properly.

#### Verification of operational status:

Visible emissions are checked once per week while the fabric filter is operating. The pressure drop is checked once per day while the fabric filter is operating. The fabric filter will be maintained in good working condition according to the manufacturer's operating and maintenance (O&M) procedures.

#### QA/QC practices and criteria:

Monitoring the visible emissions and pressure drop will serve to alert the facility in circumstances when the fabric filter experiences operational failures. Any recorded abnormal visible emissions or pressure drop outside the specified range will signify an excursion.

When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required. After any necessary corrective action has been taken, a follow-up check will be performed to insure that the indicator is within the indicator range.

#### Monitoring frequency and data collection procedure:

Visible emissions readings will be monitored and recorded once per week while the fabric filter is operating. Pressure drop readings will be monitored and recorded once per day while the fabric filter is operating.

# V. Appendix B: Reference Web Links

#### 40 CFR Part 63 Subpart JJ

#### **National Emission Standards for Wood Furniture Manufacturing Operations**

http://www.ecfr.gov/cgi-

bin/retrieveECFR?gp=1&SID=9eaf69e87f63a9474183410019c602cb&h=L&n=40y11.0. 1.1.1.10&r=SUBPART&ty=HTML

#### **40 CFR Part 63 Subpart DDDDD**

National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

http://www.ecfr.gov/cgi-

<u>bin/retrieveECFR?gp=1&SID=9eaf69e87f63a9474183410019c602cb&ty=HTML&h=L</u> &n=40y14.0.1.1.1.5&r=SUBPART

# 40 CFR Part 60 Subpart JJJJ

Standards of Performance for Stationary Spark Ignition Internal Combustion Engines https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.jjjj#ap40.8.60\_14248.1

#### 40 CFR Part 63 Subpart ZZZZ

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

https://www.ecfr.gov/cgi-bin/text-

idx?c=ecfr;rgn=div6;view=text;node=40%3A14.0.1.1.1;idno=40;sid=e94dcfde4a04b27 290c445a56e635e58;cc=ecfr

# Appendix C: 40 CFR Part 63 Subpart JJ Table 3

Table 3 to Subpart JJ of Part 63—Summary of Emission Limits

| Table 5 to Subpart 11 of Part 05—Summary of Emission Limits   |                    |                    |  |  |  |  |  |
|---|--------------------|--------------------|--|--|--|--|--|
| Emission point  | Existing source    | New source         |  |  |  |  |  |
| Finishing Operations:   |                    |                    |  |  |  |  |  |
| (a) Achieve a weighted average VHAP content across all coatings (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied                      | <sup>a</sup> 1.0   | <sup>a</sup> 0.8   |  |  |  |  |  |
| (b) Use compliant finishing materials (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied):  |                    |                    |  |  |  |  |  |
| —stains   | <sup>a</sup> 1.0   | <sup>a</sup> 1.0   |  |  |  |  |  |
| —washcoats  | <sup>a b</sup> 1.0 | <sup>a b</sup> 0.8 |  |  |  |  |  |
| —sealers  | <sup>a</sup> 1.0   | <sup>a</sup> 0.8   |  |  |  |  |  |
| —topcoats   | a1.0               | a0.8               |  |  |  |  |  |
| —basecoats  | <sup>a b</sup> 1.0 | <sup>a b</sup> 0.8 |  |  |  |  |  |
| —enamels  | <sup>a b</sup> 1.0 | <sup>a b</sup> 0.8 |  |  |  |  |  |
| —thinners (maximum percent VHAP allowable); or  | 10.0               | 10.0               |  |  |  |  |  |
| (c) As an alternative, use control device; or   | c1.0               | °0.8               |  |  |  |  |  |
| (d) Use any combination of (a), (b), and (c)  | 1.0                | 0.8                |  |  |  |  |  |
| Cleaning Operations:  |                    |                    |  |  |  |  |  |
| Strippable spray booth material (maximum VOC content, kg VOC/kg solids [lb VOC/lb solids])  | 0.8                | 0.8                |  |  |  |  |  |
| Contact Adhesives:  |                    |                    |  |  |  |  |  |
| (a) Use compliant contact adhesives (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied) based on following criteria:                    |                    |                    |  |  |  |  |  |
| i. For aerosol adhesives, and for contact adhesives applied to nonporous substrates   | <sup>d</sup> NA    | <sup>d</sup> NA    |  |  |  |  |  |
| ii. For foam adhesives used in products that meet flammability requirements   | 1.8                | 0.2                |  |  |  |  |  |
| iii. For all other contact adhesives (including foam adhesives used in products that do not meet flammability requirements); or                 | 1.0                | 0.2                |  |  |  |  |  |
| (b) Use a control device  | e1.0               | e0.2               |  |  |  |  |  |
| All Finishing Operations and Contact Adhesives:   |                    |                    |  |  |  |  |  |
| (a) Achieve total free formaldehyde emissions across all finishing operations and contact adhesives, lb per rolling 12 month period, as applied | 400                | 400                |  |  |  |  |  |
| (b) Use coatings and contact adhesives only if they are low-formaldehyde coatings and contact adhesives   | f1.0               | f1.0               |  |  |  |  |  |

<sup>a</sup> The limits refer to the VHAP content of the coating, as applied.

<sup>b</sup> Washcoats, basecoats, and enamels must comply with the limits presented in this table if they are purchased premade, that is, if they are not formulated onsite by thinning other finishing materials. If they are formulated onsite, they must be formulated using compliant finishing materials, i.e., those that meet the limits specified in this table, and thinners containing no more than 3.0 percent VHAP by weight.

<sup>c</sup> The control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram (or 0.8 kilogram) of VHAP being emitted from the affected emission source per kilogram of solids used.

<sup>d</sup> There is no limit on the VHAP content of these adhesives.

<sup>e</sup> The control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram (or 0.2 kilogram) of VHAP being emitted from the affected emission source per kilogram of solids used.

<sup>f</sup> The limits refer to the formaldehyde content by weight of the coating or contact adhesive, as specified on certified product data sheets.