

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

November 1, 2018

**PERMIT TO INSTALL  
22-18**

**ISSUED TO**  
Ameriwood Industries, Inc.

**LOCATED AT**  
202 Spaulding Street  
Dowagiac, Michigan

**IN THE COUNTY OF**  
Cass

**STATE REGISTRATION NUMBER**  
A0749

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

**March 7, 2018**

DATE PERMIT TO INSTALL APPROVED:

**November 1, 2018**

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

## PERMIT TO INSTALL

### Table of Contents

| <b>Section</b>  | <b>Page</b> |
|---|-------------|
| Alphabetical Listing of Common Abbreviations / Acronyms ..... | 2           |
| General Conditions .....                                      | 3           |
| Special Conditions .....                                      | 5           |
| Emission Unit Summary Table.....                              | 5           |
| Special Conditions for EUWOODWORKING.....                     | 6           |
| Special Conditions for EUSAWDUSTFLTR.....                     | 8           |
| Special Conditions for EUWOODBOILER .....                     | 10          |
| Flexible Group Summary Table .....                            | 15          |
| Special Conditions for FGFACILITY .....                       | 15          |

**Common Abbreviations / Acronyms**

| <b>Common Acronyms</b>    |  | <b>Pollutant / Measurement Abbreviations</b> |   |
|---------------------------|--|--|---|
| AQD                       | Air Quality Division                                       | acfm   | Actual cubic feet per minute  |
| BACT                      | Best Available Control Technology                          | BTU  | British Thermal Unit  |
| CAA                       | Clean Air Act  | °C   | Degrees Celsius   |
| CAM                       | Compliance Assurance Monitoring                            | CO   | Carbon Monoxide   |
| CEM                       | Continuous Emission Monitoring                             | CO <sub>2e</sub>                             | Carbon Dioxide Equivalent   |
| CFR                       | Code of Federal Regulations                                | dscf   | Dry standard cubic foot   |
| COM                       | Continuous Opacity Monitoring                              | dscm   | Dry standard cubic meter  |
| Department/<br>department | Michigan Department of Environmental<br>Quality            | °F   | Degrees Fahrenheit  |
| EU                        | Emission Unit  | gr   | Grains  |
| FG                        | Flexible Group   | HAP  | Hazardous Air Pollutant   |
| GACS                      | Gallons of Applied Coating Solids                          | Hg   | Mercury   |
| GC                        | General Condition  | hr   | Hour  |
| GHGs                      | Greenhouse Gases   | HP   | Horsepower  |
| HVLP                      | High Volume Low Pressure*                                  | H <sub>2</sub> S                             | Hydrogen Sulfide  |
| ID                        | Identification   | kW   | Kilowatt  |
| IRSL                      | Initial Risk Screening Level                               | lb   | Pound   |
| ITSL                      | Initial Threshold Screening Level                          | m  | Meter   |
| LAER                      | Lowest Achievable Emission Rate                            | mg   | Milligram   |
| MACT                      | Maximum Achievable Control Technology                      | mm   | Millimeter  |
| MAERS                     | Michigan Air Emissions Reporting System                    | MM   | Million   |
| MAP                       | Malfunction Abatement Plan                                 | MW   | Megawatts   |
| MDEQ                      | Michigan Department of Environmental<br>Quality            | NMOC   | Non-methane Organic Compounds                                       |
| MSDS                      | Material Safety Data Sheet                                 | NO <sub>x</sub>                              | Oxides of Nitrogen  |
| NA                        | Not Applicable   | ng   | Nanogram  |
| NAAQS                     | National Ambient Air Quality Standards                     | PM   | Particulate Matter  |
| NESHAP                    | National Emission Standard for<br>Hazardous Air Pollutants | PM <sub>10</sub>                             | Particulate Matter equal to or less than 10<br>microns in diameter  |
| NSPS                      | New Source Performance Standards                           | PM <sub>2.5</sub>                            | Particulate Matter equal to or less than 2.5<br>microns in diameter |
| NSR                       | New Source Review  | pph  | Pounds per hour   |
| PS                        | Performance Specification                                  | ppm  | Parts per million   |
| PSD                       | Prevention of Significant Deterioration                    | ppmv   | Parts per million by volume   |
| PTE                       | Permanent Total Enclosure                                  | ppmw   | Parts per million by weight   |
| PTI                       | Permit to Install  | psia   | Pounds per square inch absolute                                     |
| RACT                      | Reasonable Available Control Technology                    | psig   | Pounds per square inch gauge  |
| ROP                       | Renewable Operating Permit                                 | scf  | Standard cubic feet   |
| SC                        | Special Condition  | sec  | Seconds   |
| SCR                       | Selective Catalytic Reduction                              | SO <sub>2</sub>                              | Sulfur Dioxide  |
| SNCR                      | Selective Non-Catalytic Reduction                          | TAC  | Toxic Air Contaminant   |
| SRN                       | State Registration Number                                  | Temp   | Temperature   |
| TEQ                       | Toxicity Equivalence Quotient                              | THC  | Total Hydrocarbons  |
| USEPA/EPA                 | United States Environmental Protection<br>Agency           | tpy  | Tons per year   |
| VE                        | Visible Emissions  | µg   | Microgram   |
|                           |  | µm   | Micrometer or Micron  |
|                           |  | VOC  | Volatile Organic Compounds  |
|                           |  | yr   | Year  |

\*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

### GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
  
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). **(R 336.1370)**
  
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

**SPECIAL CONDITIONS**

**EMISSION UNIT SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

| Emission Unit ID   | Emission Unit Description<br>(Process Equipment & Control Devices)  | Installation Date /<br>Modification Date | Flexible Group ID |
|--|---|--|-------------------|
| EUWOODWORKING  | A woodworking operation that processes engineered wood products into ready-to-assemble furniture kits. This emission unit constitutes a plant with multiple pieces of equipment within it, such as hammermills, saws, and wood hogs. Precleaner dust collectors and a hammermill will exhaust directly to a final dust collector. | 1976,<br>1994                            | NA                |
| EUSAWDUSTFLTR  | Sawdust filtering system associated with the sawdust sent to the boiler fuel holding silo. This silo is filled from a waste stream from the final dust collector of EUWOODWORKING.  | 1992                                     | NA                |
| EUWOODBOILER   | A 600 HP Hurst wood-fired hybrid stoker boiler with a heat input of 28.7 MMBTU/hr and associated wood material handling and storage. Boiler controlled by multicyclones, material handling and storage controlled by bag filters.   | 1997                                     | NA                |
| Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291. |   |  |                   |

**The following conditions apply to:**  
**EUWOODWORKING**

**DESCRIPTION:** A woodworking operation that processes engineered wood products into ready-to-assemble furniture kits. This emission unit constitutes of a plant with multiple pieces of equipment within it, such as hammermills, saws, and wood hoggers. Precleaner dust collectors and a hammermill will exhaust directly to a final dust collector.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** Precleaner dust collectors exhausted to a final dust collector. The final dust collector also directly receives the exhaust from a hammermill.

**I. EMISSION LIMITS**

| <b>Pollutant</b> | <b>Limit</b>                          | <b>Time Period / Operating Scenario</b>                                       | <b>Equipment</b> | <b>Testing / Monitoring Method</b> | <b>Underlying Applicable Requirements</b> |
|------------------|---------------------------------------|---|------------------|------------------------------------|---|
| 1. PM            | 1.9 pph                               | Hourly  | EUWOODWORKING    | SC V.1                             | R 336.1331                                |
| 2. PM            | 8.4 tpy                               | 12-month rolling time period as determined at the end of each calendar month. | EUWOODWORKING    | SC VI.2                            | R 336.1205,<br>R 336.1331                 |
| 3. PM            | 0.01 lb/1,000 lbs of gas <sup>a</sup> | Hourly  | EUWOODWORKING    | SC V.1                             | R 336.1331                                |

<sup>a</sup> Calculated to 50% excess air.

4. Visible emissions from the equipment with control shall not exceed 0% opacity. **(R 336.1301)**

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

NA

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EUWOODWORKING unless the dust collector is installed and operating properly. **(R 336.1910)**
2. The permittee shall not operate the dust collector unless the magnehelic differential pressure gauge is installed and operating properly. **(R 336.1910)**

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request by the AQD District Supervisor, the permittee shall verify PM emission rates from EUWOODWORKING with control by testing at owner's expense, in accordance with Department requirements. Testing shall be based on an average of three 1-hour or longer test runs performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A and Part 10 of the Michigan Air Pollution Control Rules. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office, which at a minimum shall include stack testing procedures and the location of stack testing ports. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1331, R 336.2001, R 336.2003, R 336.2004)**

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205)**
2. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total PM mass emissions for EUWOODWORKING, as required by SC I.2. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed using a method approved by the District Supervisor. **(R 336.1205)**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

| <b>Stack &amp; Vent ID</b> | <b>Maximum Exhaust Diameter/Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|---|---|---|
| 1. SVWOODWORKING           | 58 x 78   | 38.4                                      | 40 CFR 52.21(c) & (d)                     |

**IX. OTHER REQUIREMENTS**

NA

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**The following conditions apply to:**  
**EUSAWDUSTFLTR**

**DESCRIPTION:** Sawdust filtering system associated with the sawdust sent to the boiler fuel holding silo. This silo is filled from a waste stream from the final dust collector of EUWOODWORKING.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** Dust collector.

**I. EMISSION LIMITS**

| <b>Pollutant</b> | <b>Limit</b>                          | <b>Time Period / Operating Scenario</b> | <b>Equipment</b> | <b>Testing / Monitoring Method</b> | <b>Underlying Applicable Requirements</b>     |
|------------------|---------------------------------------|---|------------------|------------------------------------|---|
| 1. PM            | 0.01 lb/1,000 lbs of gas <sup>a</sup> | Hourly                                  | EUSAWDUSTFLTR    | SC V.1                             | R 336.1331,<br>R 336.1205,<br>40 CFR 52.21(c) |

<sup>a</sup> Calculated to 50% excess air.

2. There shall be no visible emissions from EUSAWDUSTFLTR. **(R 336.1301)**

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

NA

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EUSAWDUSTFLTR unless the dust collector is installed and operating properly. **(R 336.1910)**

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request by the AQD District Supervisor, the permittee shall verify PM emission rates from EUSAWDUSTFLTR by testing at owner's expense, in accordance with Department requirements. Testing shall be based on an average of three 1-hour or longer test runs performed using an approved EPA Method listed in 40 CFR Part 51, Appendix M. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office, which at a minimum shall include stack testing procedures and the location of stack testing ports. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1331, R 336.1205, R 336.2001, R 336.2003, R 336.2004)**

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

| <b>Stack &amp; Vent ID</b> | <b>Maximum Exhaust Diameter/Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|---|---|---|
| 1. SVSAWDUSTFLTR           | 33 x 52   | 67  | 40 CFR 52.21(c) & (d)                     |

**IX. OTHER REQUIREMENTS**

NA

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**The following conditions apply to:**  
**EUWOODBOILER**

**DESCRIPTION:** A 600 HP Hurst wood-fired hybrid stoker boiler with a heat input of 28.7 MMBTU/hr and associated wood material handling and storage. Boiler controlled by multicyclones, material handling and storage controlled by bag filters.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** Primary and secondary multicyclones for the wood boiler. Donaldson bag filters for the material handling and storage operations.

**I. EMISSION LIMITS**

| Pollutant                 | Limit                                 | Time Period / Operating Scenario  | Equipment    | Testing / Monitoring Method | Underlying Applicable Requirements |
|---------------------------|---------------------------------------|---|--------------|-----------------------------|------------------------------------|
| 1. PM                     | 0.50 lb/1,000 lbs of gas <sup>a</sup> | Hourly  | EUWOODBOILER | SC V.1                      | R 336.1331                         |
| 2. PM10 (filterable only) | 10 pph                                | Hourly  | EUWOODBOILER | SC V.1                      | R 336.1205, 40 CFR 52.21(c) & (d)  |
| 3. PM10 (filterable only) | 43.8 tpy                              | 12-month rolling time period as determined at the end of each calendar month. | EUWOODBOILER | SC VI.2                     | R 336.1205                         |
| 4. NO <sub>x</sub>        | 0.35 lb/MMBTU                         | 24-hr average   | EUWOODBOILER | SC V.1                      | R 336.1205                         |
| 5. NO <sub>x</sub>        | 10 pph                                | Hourly  | EUWOODBOILER | SC V.1                      | R 336.1205                         |
| 6. NO <sub>x</sub>        | 43.8 tpy                              | 12-month rolling time period as determined at the end of each calendar month. | EUWOODBOILER | SC VI.2                     | R 336.1205                         |
| 7. CO                     | 0.60 lb/MMBTU                         | 8-hr average  | EUWOODBOILER | SC V.1                      | R 336.1205                         |
| 8. CO                     | 17.22 pph                             | Hourly  | EUWOODBOILER | SC V.1                      | R 336.1205                         |
| 9. CO                     | 75.42 tpy                             | 12-month rolling time period as determined at the end of each calendar month. | EUWOODBOILER | SC VI.2                     | R 336.1205                         |

<sup>a</sup> Calculated to 50% excess air.

10. Visible emissions from EUWOODBOILER when firing wood, plywood, chipboard, and particleboard shall not exceed a 6-minute average of 20% opacity, except as specified in Rule 301(1)(a). **(R 336.1301(1)(a))**
11. Visible emissions from the material and ash handling and storage operations shall not exceed a 6-minute average of 20% opacity, except as specified in Rule 301(1)(a). **(R 336.1301(1)(a))**
12. The PM emission rate from the material handling and storage operations shall not exceed 0.10 pound per 1,000 pounds of exhaust gases. **(R 336.1331)**

## **II. MATERIAL LIMITS**

1. The permittee shall only burn materials such as wood, wood residue, sawdust, sander dust, hogged wood, wood skids, plywood, chipboard, waferboard and particleboard covered with paper laminate processed at the Ameriwood facility in EUWOODBOILER, except as restricted in SC II.2. **(R 336.1225, R 336.1205, Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraph 33a)**
2. The permittee shall not burn material that has been painted, coated with hot melt adhesives, treated with wood preservatives, or is methylene diphenyl diisocyanate (MDI) resin woodboards (such as plywood, chipboard, waferboard, and particleboard containing MDI). **(R 336.1225, R 336.1205, Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraph 33a)**

## **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate the material handling and storage operation unless the dust collector filters are installed and operating properly. **(R 336.1910)**
2. The permittee shall operate EUWOODBOILER according to an approved Fuel (Scrap) Management Plan. The permittee shall utilize the Fuel (Scrap) Management Plan at all times to ensure that only fuel, as defined in SC II.1, is being burned in EUWOODBOILER and to prevent unacceptable waste from being burned in EUWOODBOILER. The plan shall, at a minimum, specify the following:
  - a. A description of fuel to be burned, including but not limited to particle board and medium density fiber board.
  - b. Inspection and sorting procedures and protocol used to eliminate prohibited fuels and minimize unacceptable fuel.
  - c. Hogging procedures for processing acceptable fuels.
  - d. Procedures for rejecting and/or removing unacceptable fuel, including determination of whether railroad ties have been treated with pentachlorophenol.
  - e. Supplier qualification, processing and inspection procedures for each supplier of source separated fuel.
  - f. Auditing procedures including records of fuel specification, load identification, quality control of load and fuel pile(s).

The permittee shall submit any amendments to the Fuel (Scrap) Management Plan to the AQD District Supervisor for review and approval. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1225, Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraph 33b)**

3. The permittee shall not operate EUWOODBOILER unless a preventative maintenance/malfunction abatement plan (PM/MAP) as described in Rule 911(2), has been implemented and maintained. A revised PM/MAP shall be submitted within 30 days of receipt of the final test report required in SC V.1. The PM/MAP shall, at a minimum, specify the following:
  - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
  - d. A schedule for regularly cleaning the EUWOODBOILER furnace and the primary and secondary multicyclone fly ash collector systems.
  - e. Operating parameters for the oxygen trim system.

If at any time the PM/MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the PM/MAP within 45 days after such an event occurs. The permittee shall also amend the PM/MAP within 45 days, if new equipment is installed or upon request from

the District Supervisor. The permittee shall submit the PM/MAP and any amendments to the PM/MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the PM/MAP or amended PM/MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) & (d), Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraphs 33c & 35)**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EUWOODBOILER unless the primary and secondary multicyclones are installed and operating properly. **(R 336.1910)**
2. The permittee shall not operate EUWOODBOILER unless the oxygen trim system and variable speed drives on the motors for the combustion fan and induced draft fan are installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d), Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraphs 38 & 39)**

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 60 days after permit issuance, the permittee shall verify VE, PM, PM10 (filterable only), NOx, and CO emission rates from EUWOODBOILER by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed below while EUWOODBOILER is operating under maximum normal operating conditions using fuels expected to produce the highest emissions.

| <b>Pollutant</b>     | <b>Test Method Reference</b>  |
|----------------------|---|
| Visible Emission     | 40 CFR Part 51, Appendix M; 40 CFR Part 60, Appendix A and B;                   |
| PM/PM10 (filterable) | 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules |
| NO <sub>x</sub>      | 40 CFR Part 60, Appendix A  |
| CO                   | 40 CFR Part 60, Appendix A  |

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1331, R 336.2001, R 336.2003, R 336.2004, Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraphs 40 & 42)**

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205)**
2. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total PM10 (filterable only), NO<sub>x</sub>, and CO mass emissions for EUWOODBOILER, as required by SC I.3, SC I.6, and SC I.9. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed using a method approved by the District Supervisor. **(R 336.1205)**

3. Monitoring and recording of emissions and operating information is required to comply with the Federal Standards of Performance for New Stationary Sources as specified in 40 CFR, Part 60, Subparts A and Dc. All source emissions data and operating data shall be kept on file for a period at least two years and made available to the Air Quality Division upon request. **(40 CFR Part 60 Subpart Dc)**
4. The permittee shall complete non-certified emissions readings once per day that EUWOODBOILER operates for more than two hours. The permittee shall keep written records of the results of each observation. **(R 336.1301, Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraph 32a)**
5. In the event that the daily non-certified visible emissions reading indicates VEs are present, a Method 9 reading must be conducted by a certified VE reader within two hours unless the boiler is shut down. The permittee shall keep written records of the results of each observation. **(R 336.1301, Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraph 32b)**

## **VII. REPORTING**

1. If the certified reading indicates noncompliance with Michigan Rule 301, any notifications required under Michigan Rule 912 will be completed. **(Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraph 32c)**
2. Documentation of the certification for one or more employees who become certified shall be provided to EPA in accordance with Paragraph 46 of EPA-5-18-113(a)-MI-01. Paragraph 46 states that by September 1, 2018, Ameriwood shall submit to EPA a report that identifies, for the period from January 22, 2018 through August 31, 2018, the following:
  - a. The date(s) that operators were trained about Method 9;
  - b. Names of the operators trained and certified as Method 9 operators;
  - c. Each daily VE observation from the Exhaust Stack that identified VEs; and
  - d. The results of each Method 9 reading conducted; and
  - e. Any corrective actions taken as a result of VEs being identified during the daily VE observation at the exhaust stack.**(Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraphs 32e & 46)**

## **VIII. STACK/VENT RESTRICTIONS**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

| <b>Stack &amp; Vent ID</b> | <b>Maximum Exhaust Diameter/Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|---|---|---|
| 1. SVWOODBOILER            | 96  | 140                                       | 40 CFR 52.21(c) & (d)                     |

## **IX. OTHER REQUIREMENTS**

1. The permittee will send at least two employees at the facility for Method 9 training, to enable them to read the opacity of emissions from SVWOODBOILER, and will ensure that at least one employee on staff is certified throughout the term of EPA-5-18-113(a)-MI-01. At least one other employee will receive training to observe emissions and document same, but not necessarily off-site Method 9 training. **(Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraph 32d)**
2. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to EUWOODBOILER. **(40 CFR Part 60 Subparts A & Dc)**

3. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and JJJJJJ, as they apply to EUWOODBOILER. **(40 CFR Part 63 Subparts A & JJJJJJ)**

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**FLEXIBLE GROUP SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

| <b>Flexible Group ID</b> | <b>Flexible Group Description</b>  | <b>Associated Emission Unit IDs</b> |
|--------------------------|--|-------------------------------------|
| FGFACILITY               | All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment. |                                     |

**The following conditions apply Source-Wide to:**  
**FGFACILITY**

**DESCRIPTION:** All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

**POLLUTION CONTROL EQUIPMENT:** Particulate control as described in emission unit special conditions and others not specified in this permit.

**I. EMISSION LIMITS**

| <b>Pollutant</b>       | <b>Limit</b> | <b>Time Period / Operating Scenario</b>                                       | <b>Equipment</b> | <b>Testing / Monitoring Method</b> | <b>Underlying Applicable Requirements</b>                           |
|------------------------|--------------|---|------------------|------------------------------------|---|
| 1. Each Individual HAP | 8.9 tpy      | 12-month rolling time period as determined at the end of each calendar month. | FGFACILITY       |                                    | Act 451 324.5503(b), R 336.1205, EPA-5-18-113(a)-MI-01 paragraph 34 |
| 2. Aggregate HAPs      | 22.4 tpy     | 12-month rolling time period as determined at the end of each calendar month. | FGFACILITY       |                                    | Act 451 324.5503(b), R 336.1205, EPA-5-18-113(a)-MI-01 paragraph 34 |

**II. MATERIAL LIMITS**

1. The permittee shall use only water-based adhesives or adhesives with equivalent emissions. **(R 336.1205, Act 451 324.5503(b), EPA-5-18-113(a)-MI-01 paragraph 34)**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

NA

**IV. DESIGN/EQUIPMENT PARAMETERS**

NA

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205)**
2. The permittee shall keep the following information on a monthly basis for FGFACILITY:
  - a. The quantity of each HAP containing material used or emitted.
  - b. The HAP emission factor of each HAP containing material used or emitted. (Emission factors are to be based on testing at the facility or as approved by the AQD District Supervisor.)
  - c. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
  - d. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month. For the first month following permit issuance, the calculations shall include the summation of emissions from the 11-month period immediately preceding the issuance date. For each month thereafter, calculations shall include the summation of emissions for the appropriate number of months prior to permit issuance plus the months following permit issuance for a total of 12 consecutive months.

The permittee shall keep the records on file AT THE FACILITY, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1205)**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

NA

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).