

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

January 4, 2019

PERMIT TO INSTALL
9-18A

ISSUED TO
Herman Miller, Inc.

LOCATED AT
855 East Main Avenue
Holland, Michigan

IN THE COUNTY OF
Ottawa

STATE REGISTRATION NUMBER
B6001

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: November 26, 2018 | |
| DATE PERMIT TO INSTALL APPROVED: January 4, 2019 | SIGNATURE: |
| DATE PERMIT VOIDED: | SIGNATURE: |
| DATE PERMIT REVOKED: | SIGNATURE: |

PERMIT TO INSTALL

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COMMON ACRONYMS

| | |
|-----------------------|---|
| AQD | Air Quality Division |
| BACT | Best Available Control Technology |
| CAA | Clean Air Act |
| CAM | Compliance Assurance Monitoring |
| CEMS | Continuous Emission Monitoring System |
| CFR | Code of Federal Regulations |
| COMS | Continuous Opacity Monitoring System |
| Department/department | Michigan Department of Environmental Quality |
| EU | Emission Unit |
| FG | Flexible Group |
| GACS | Gallons of Applied Coating Solids |
| GC | General Condition |
| GHGs | Greenhouse Gases |
| HVLP | High Volume Low Pressure* |
| ID | Identification |
| IRSL | Initial Risk Screening Level |
| ITSL | Initial Threshold Screening Level |
| LAER | Lowest Achievable Emission Rate |
| MACT | Maximum Achievable Control Technology |
| MAERS | Michigan Air Emissions Reporting System |
| MAP | Malfunction Abatement Plan |
| MDEQ | Michigan Department of Environmental Quality |
| MSDS | Material Safety Data Sheet |
| NA | Not Applicable |
| NAAQS | National Ambient Air Quality Standards |
| NESHAP | National Emission Standard for Hazardous Air Pollutants |
| NSPS | New Source Performance Standards |
| NSR | New Source Review |
| PS | Performance Specification |
| PSD | Prevention of Significant Deterioration |
| PTE | Permanent Total Enclosure |
| PTI | Permit to Install |
| RACT | Reasonable Available Control Technology |
| ROP | Renewable Operating Permit |
| SC | Special Condition |
| SCR | Selective Catalytic Reduction |
| SNCR | Selective Non-Catalytic Reduction |
| SRN | State Registration Number |
| TBD | To Be Determined |
| TEQ | Toxicity Equivalence Quotient |
| USEPA/EPA | United States Environmental Protection Agency |
| VE | Visible Emissions |

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

POLLUTANT / MEASUREMENT ABBREVIATIONS

| | |
|-------------------|--|
| acfm | Actual cubic feet per minute |
| BTU | British Thermal Unit |
| °C | Degrees Celsius |
| CO | Carbon Monoxide |
| CO ₂ e | Carbon Dioxide Equivalent |
| dscf | Dry standard cubic foot |
| dscm | Dry standard cubic meter |
| °F | Degrees Fahrenheit |
| gr | Grains |
| HAP | Hazardous Air Pollutant |
| Hg | Mercury |
| hr | Hour |
| HP | Horsepower |
| H ₂ S | Hydrogen Sulfide |
| kW | Kilowatt |
| lb | Pound |
| m | Meter |
| mg | Milligram |
| mm | Millimeter |
| MM | Million |
| MW | Megawatts |
| NMOC | Non-Methane Organic Compounds |
| NO _x | Oxides of Nitrogen |
| ng | Nanogram |
| PM | Particulate Matter |
| PM10 | Particulate Matter equal to or less than 10 microns in diameter |
| PM2.5 | Particulate Matter equal to or less than 2.5 microns in diameter |
| pph | Pounds per hour |
| ppm | Parts per million |
| ppmv | Parts per million by volume |
| ppmw | Parts per million by weight |
| psia | Pounds per square inch absolute |
| psig | Pounds per square inch gauge |
| scf | Standard cubic feet |
| sec | Seconds |
| SO ₂ | Sulfur Dioxide |
| TAC | Toxic Air Contaminant |
| Temp | Temperature |
| THC | Total Hydrocarbons |
| tpy | Tons per year |
| µg | Microgram |
| µm | Micrometer or Micron |
| VOC | Volatile Organic Compounds |
| yr | Year |

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 Rule 210 (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 Rule 219 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 Rule 219 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 Rule 301, 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 Rule 303 (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 Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT 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 (Including Process Equipment & Control Device(s)) | Installation Date / Modification Date | Flexible Group ID |
|-------------------------|--|--|--------------------------|
| EUBOILER3162 | The boiler is a wood waste fired boiler used to generate steam primarily for on-site space heating and cooling, some process steam heating and the capability to generate electricity via a steam driven turbine generator. The fuel consists of wood and resinated wood waste produced on-site. This unit is subject to rule 40 CFR Part 63, Subpart JJJJJ (Area Source Boiler MACT) as an existing Area Source Boiler. | 12/14/1981 / 11/14/2014 | |
| EUDUSTCOLLECTOR1 | A 60,000 cubic feet per minute (cfm) dust collection system serving primarily wood working machinery. One of five located north of Building D. The system collects waste materials from various types of machines that perform cutting, shaping, sanding, boring, edge profiling, edge banding, etc., operations on office furniture components. | 7/1/1980 / 9/29/1994 | FGDUSTCOLLECTORS |
| EUDUSTCOLLECTOR2 | A 60,000 cfm dust collection system serving primarily wood working machinery. One of five located north of Building D. The system collects waste materials from various types of machines that perform cutting, shaping, sanding, boring, edge profiling, edge banding, etc., operations on office furniture components. | 7/1/1980 / 9/29/1994 | FGDUSTCOLLECTORS |
| EUDUSTCOLLECTOR3 | A 60,000 cfm dust collection system serving primarily wood working machinery. One of five located north of Building D. The system collects waste materials from various types of machines that perform cutting, shaping, sanding, boring, edge profiling, edge banding, etc., operations on office furniture components. | 12/20/1984 / NA | FGDUSTCOLLECTORS |
| EUDUSTCOLLECTOR4 | A 75,000 cfm dust collection system serving primarily wood working machinery. Located north of Building G. The system collects waste materials from various types of machines that perform cutting, shaping, sanding, boring, edge profiling, edge banding, etc., operations on office furniture components. | 1/1/1986 / 8/1/1992 | FGDUSTCOLLECTORS |

| Emission Unit ID | Emission Unit Description (Including Process Equipment & Control Device(s)) | Installation Date / Modification Date | Flexible Group ID |
|-------------------------|---|--|--------------------------|
| EUDUSTCOLLECTOR5 | A 75,000 cfm dust collection system serving primarily wood working machinery. One of five located north of Building D. The system collects waste materials from various types of machines which perform cutting, shaping, sanding, boring, edge profiling, edge banding, etc., operations on office furniture components. | 10/10/1989 / 9/24/1994 | FGDUSTCOLLECTORS |
| EUDUSTCOLLECTOR6 | A 75,000 cfm dust collection system serving primarily wood working machinery. Located north of Building F. The system collects waste materials from various types of machines that perform cutting, shaping, sanding, boring, edge profiling, edge banding, etc., operations on office furniture components. | 8/13/1992 / NA | FGDUSTCOLLECTORS |
| EUDUSTCOLLECTOR7 | A 50,000 cfm dust collection system serving primarily wood working machinery. One of five located north of Building D. The system collects waste materials from various types of machines that perform cutting, shaping, sanding, boring, edge profiling, edge banding, etc., operations on office furniture components. | 9/2/1994 / 8/1/2003 | FGDUSTCOLLECTORS |
| EUDUSTCOLLECTOR8 | A 50,000 cfm dust collection system serving primarily wood working machinery. One of five located north of Building D. The system collects waste materials from various types of machines that perform cutting, shaping, sanding, boring, edge profiling, edge banding, etc., operations on office furniture components. | 6/2018 | FGDUSTCOLLECTORS |
| EURHODESLINE3 | Rhodes line applies stains and finishes to wood furniture parts. A conveyor moves parts through four spray booths equipped with panel filters and two ovens. | 7/1/1994 | FGGENERALPERMIT |
| EUUVFINLINE1 | A UV coating line composed of a panel cleaner for dust, IR board preheater, spray booth, two section drying oven to remove the water and a UV oven to cure the part. | 6/1/2008 | FGGENERALPERMIT |

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.

**EUBOILER3162
 EMISSION UNIT CONDITIONS**

DESCRIPTION

The 28 MMBtu/ hour boiler is a wood waste fired boiler used to generate steam primarily for on-site space heating and cooling, some process steam heating and the capability to generate electricity via a steam driven turbine generator. The fuel consists of wood and resinated wood waste produced on-site. This unit is subject to rule 40 CFR Part 63, Subpart JJJJJ (Area Source Boiler MACT) as an existing Area Source Boiler.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Reburn tunnels and a baghouse with the addition of a sorbent for acid gas removal.

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period / Operating Scenario | Equipment | Monitoring / Testing Method | Underlying Applicable Requirements |
|----------------------|--------------|---|------------------|------------------------------------|---|
| 1. NO _x | 7.2 pph | Test Protocol* | EUBOILER3162 | SC V.1 | R 336.1205(3) |
| 2. NO _x | 31.54 tpy | Annual | EUBOILER3162 | SC V.1 | R 336.1205(3) |
| 3. PM _{2.5} | 0.015pph | Test Protocol* | EUBOILER3162 | SC V.1 | R 336.1205(3) |
| 4. HCl | 0.15 pph | Test Protocol* | EUBOILER3162 | SC V.1 | R 336.1205(3) |
| 5. HCl | 0.66 tpy | 12-month rolling time period | EUBOILER3162 | SC V.1 | R 336.1205(3) |

* Test protocol will specify the averaging period

II. MATERIAL LIMIT(S)

| Material | Limit | Time Period / Operating Scenario | Equipment | Monitoring / Testing Method | Underlying Applicable Requirements |
|-----------------|---|---|------------------|------------------------------------|--|
| 1. Fuel | Fuel other than wood waste shall comprise less than 25% of the total fuel heat input to the boiler ² | NA | EUBOILER3162 | SC VI.2 & 3 | R 336.1205(3), R 336.1331(1)(a) Table 31(A)(6) |

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUBOILER3162 unless the reburn tunnels, fabric filter collector, and hydrochloric acid gas sorbent injection system, are installed and operating properly. **(R 336.1205(3), R 336.1910)**
2. The permittee shall not substitute any fuels without prior notification to and approval by the AQD. **(R 336.1205(3), R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. Within 180 days after start-up of EUBOILER3162 and upon the unit achieving 90% of the design capacity or upon achieving routine operating conditions, the permittee shall verify PM2.5, NO_x, and HCL emission rates from EUBOILER3162 by testing at owner's expense, in accordance with Department requirements. 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. Verification of emission rates includes the submittal of 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 336.1224, R 336.225, R 336.1205(3))**
2. Within 30 days after start-up of EUBOILER3162 and upon the unit achieving 90% of the design capacity or upon achieving routine operating conditions, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. **(R 336.1201(7)(a))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall conduct and record daily non-certified visual observations when EUBOILER3162 is operating. **(R 336.201(3))**
2. The permittee shall record the quantity of wood fuel and waste fuel consumed. **(R 336.1201(3))**
3. The permittee shall record the percentage of total Btu value from wood fuel. **(R 336.1201(3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

| Stack & Vent ID | Maximum Exhaust Diameter / Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|----------------------------|---|---|---|
| 1. SVBLR1 | 24 | 75 | 40 CFR 52.21(c) & (d) |

IX. OTHER REQUIREMENT(S)

1. The permittee shall implement and maintain an acceptable Preventative Maintenance Plan and Malfunction Abatement Procedures. **(R 336.1201(3))**

X. AREA SOURCE BOILER MACT 40 CFR PART 63, SUBPARTS A AND JJJJJJ SUBMITTED BY THE PERMITTEE

Area Source MACT Requirements

1. The permittee must achieve compliance by applicable compliance dates under 63.11196 (a)(1) and (3).
2. The permittee must comply with applicable standards under 63.11201 (b) except as allowed under 63.11201(d).
3. The permittee must comply with applicable general requirements under 63.11205.
4. The permittee must meet initial compliance requirements under 63.11210 by methods identified in 63.11211 and 63.11214.
5. The permittee shall demonstrate continuous compliance through applicable methods identified in 63.11223.
6. The permittee must comply with applicable notification, reporting, and recordkeeping requirements under 63.11225.

Footnotes:

- ¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

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

| Flexible Group ID | Flexible Group Description | Associated Emission Unit IDs |
|--------------------------|--|---|
| FGDUSTCOLLECTORS | Dust collection systems serving primarily wood working machinery from various types of machines that perform cutting, shaping, sanding, boring, edge profiling, edge banding, etc., operations on office furniture components. | EUDUSTCOLLECTOR1, EUDUSTCOLLECTOR2, EUDUSTCOLLECTOR3, EUDUSTCOLLECTOR4, EUDUSTCOLLECTOR5, EUDUSTCOLLECTOR6, EUDUSTCOLLECTOR7, EUDUSTCOLLECTOR8 |
| FGGENERALPERMIT | The UV finish line and Rhodes finish line. | EURHODESLINE3 EUUVFINLINE1 |

**FGDUSTCOLLECTORS
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Dust collection systems serving primarily wood working machinery from various types of machines that perform cutting, shaping, sanding, boring, edge profiling, edge banding, etc., operations on office furniture components.

Emission Unit: EUDUSTCOLLECTOR1, EUDUSTCOLLECTOR2, EUDUSTCOLLECTOR3, EUDUSTCOLLECTOR4, EUDUSTCOLLECTOR5, EUDUSTCOLLECTOR6, EUDUSTCOLLECTOR7, EUDUSTCOLLECTOR8

POLLUTION CONTROL EQUIPMENT

Baghouses

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period / Operating Scenario | Equipment | Monitoring / Testing Method | Underlying Applicable Requirements |
|------------------|--|---|------------------|------------------------------------|---|
| 1. Particulate | 0.005 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis | Hourly | FGDUSTCOLLECTORS | SC V.1, VI.1, VI.2, VI.3 | R 336.1331(1)(c), R 336.1205 |
| 2. PM | 50.0 tpy | 12-month rolling time period determined at the end of each calendar month | FGDUSTCOLLECTORS | SC V.1, VI.1, VI.2, VI.3 | R 336.1331(1)(c), R 336.1205 |
| 3. PM2.5 | 50.0 tpy | 12-month rolling time period determined at the end of each calendar month | FGDUSTCOLLECTORS | SC V.1, VI.1, VI.2, VI.3 | R 336.1331(1)(c), R 336.1205 |
| 4. PM10 | 50.0 tpy | 12-month rolling time period determined at the end of each calendar month | FGDUSTCOLLECTORS | SC V.1, VI.1, VI.2, VI.3 | R 336.1331(1)(c), R 336.1205 |

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGDUSTCOLLECTORS unless an updated malfunction abatement plan (MAP) as described in Rule 911(2), for all dust collectors at the facility, has been submitted within 30 days of permit issuance, and is implemented and maintained. The 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.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended 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 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the woodworking equipment unless the baghouse dust collectors 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) and (d))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a pressure drop monitoring device on each dust collector in FGFACILITY. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

V. TESTING/SAMPLING

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

1. Within 270 days after permit issuance, the permittee shall verify the PM, PM10, and PM2.5 dust collector emission rate of a representative dust collector for each size of dust collector at the facility by testing at the owner's expense, in accordance with Department requirements. The hourly emission rate during testing shall be determined by the average of the acceptable test runs per the method requirements. Testing shall be performed using an approved EPA Method listed in:

| Pollutant | Test Method Reference |
|------------|---|
| PM | 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules |
| PM10/PM2.5 | 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. 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 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

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

1. The presence of particulate shall be continuously monitored using a broken bag detector system for each dust collector. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
2. The permittee shall conduct and record the results of non-certified visible emission checks when the collector is discharging to the outside air and a broken bag alarm is activated. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
3. The permittee shall record all broken bag alarm events during operation of the dust collectors. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

4. The permittee shall record each baghouse pressure drop once per week in an acceptable manner.
(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**FGGENERALPERMIT
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

The UV finish line and Rhodes finish line.

Emission Units: EURHODESLINE3, EUUVFINLINE1

POLLUTION CONTROL EQUIPMENT

For spray application: Dry filters or a water curtain for particulate control.

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period | Equipment | Testing/ Monitoring Method | Applicable Requirement |
|-----------|----------------|---|---|----------------------------------|-----------------------------|
| 1. VOC | 2000 pounds | per calendar month per coating line determined at the end of each calendar month | EUUVFINLINE1 coating line and clean-up operations EURHODESLINE3 coating line and purge and clean-up operations | SC V.1 SC VI.1-6 | R 336.1225 R 336.1702(d) |
| 2. VOC | 10.0 tons | per year per coating line based on a 12- month rolling time period determined at the end of each calendar month | EUUVFINLINE1 coating line and clean-up operations EURHODESLINE3 coating line and purge and clean-up operations | SC V.1 SC VI.1-6 | R 336.1225 R 336.1702(d) |
| 3. VOC | 30.0 tons | per year for all coating lines combined based on a 12-month rolling time period determined at the end of each calendar month | EUUVFINLINE1 EURHODESLINE3 | SC V.1 SC VI.1-6 | R 336.1225 R 336.1702(d) |

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- High volume-low pressure (HVLP) spray or equivalent technology with equal or better transfer efficiency (e.g., electrostatic spray, dip, flowcoat, roller, dip-spin). **(R 336.1702(d))**
- The permittee shall not operate any spray coating process unless dry filters or a water curtain is installed and operating properly. **(R 336.1910, R 336.1331)**

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

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

1. If requested by the DEQ-AQD, the permittee shall test VOC emissions and VOC content in pounds per gallon of any coating, reducer or purge/clean-up solvent as applied or as received, using 40 CFR Part 60, EPA Method 25A; Method 24 or other EPA approved reference method. Upon prior approval of the AQD District Supervisor VOC content of any coating or reducer may alternatively be determined from manufacturer's formulation data. **(R 336.2001(1), R 336.2001(2), R 336.2004(1))**
2. Test Results must be submitted within 60 days following the last date of the test. **(R 336.2001(4))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain a monthly record of purchase orders and invoices for all coatings, reducers, and purge/clean-up solvents where point of use records are not maintained. **(R 336.1225, R 336.1702(d))**
2. The permittee shall maintain a monthly record of the VOC content in pounds per gallon of all reducers and purge/clean-up solvents, the usage rate in gallons and disposal records. **(R 336.1225, R 336.1702(d))**
3. The permittee shall maintain a monthly record of the VOC content in pounds per gallon of each coating and the usage rate in gallons. **(R 336.1225, R 336.1702(d))**
4. The permittee shall maintain monthly and annual VOC emission rate calculations for each coating line, in tons per month and tons per 12-month rolling time period, using the calculation method specified in Appendix 7-1. **(R 336.1225, R 336.1702(d))**
5. Annual records, based upon a 12-month rolling time period, of the actual VOC emission rate in tons per year for all coating lines and associated purge and clean-up operations at the stationary source. **(R 336.1702(d))**
6. The permittee shall maintain a current listing of the chemical composition of each coating, including the weight percent of each component. The data may consist of material safety data sheets, manufacturer's formulation data, or both. **(R 336.1225, R 336.1702(d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

1. All waste coatings and reducers shall be captured and stored in closed containers and be disposed of in an acceptable manner in compliance with all applicable rules and regulations. **(R 336.1702(d))**

Footnotes:

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

FGFACILITY CONDITIONS

DESCRIPTION: The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment and exempt equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period / Operating Scenario | Equipment | Monitoring / Testing Method | Underlying Applicable Requirements |
|--------------------|-----------|---|------------|-----------------------------|------------------------------------|
| 1. Aggregated HAPs | 22.5 tons | 12-month rolling time period determined at the end of each calendar month | FGFACILITY | SC VI.1 | R 336.1205(3) |
| 2. Individual HAPs | 9.0 tons | 12-month rolling time period determined at the end of each calendar month | FGFACILITY | SC VI.1 | R 336.1205(3) |

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall determine the HAP content of any material as received and as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. **(R 336.1205(3))**

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 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(3))**
2. The permittee shall keep the following records and shall maintain the records for a period of five years: **(R 336.1205(3))**
 - a. Total calculated HAP emissions (lbs. per year and tons per year) based upon a rolling 12-month time period.
 - b. Individual calculated HAP emissions (lbs. per year and tons per year) based upon a rolling 12-month time period.
 - c. Records of coating usage and the HAP content of each coating, both on an individual and aggregated HAP basis, based upon a rolling 12-month time period.
 - d. Records of fuel usage and the individual and aggregated HAPs emitted through the stack or in the fly-ash based on stack test data, sampling data or established emission factors on a rolling 12-month time period.

The permittee shall keep records using mass balance or an alternate method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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