MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

EFFECTIVE DATE: October 19, 2022

ISSUED TO

LaFata Enterprises Inc.

State Registration Number (SRN): B7625

LOCATED AT

50905 Hayes Road, Shelby Township, Macomb County, Michigan 48315

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B7625-2022

Expiration Date: October 19, 2027

Administratively Complete ROP Renewal Application Due Between April 19, 2026 and April 19, 2027

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Rule 210(1) of the administrative rules promulgated under Act 451, this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B7625-2022

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environment, Great Lakes, and Energy

Joyce Zhu, Warren District Supervisor

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AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a Source-Wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements are identified for each ROP term or condition. All terms and conditions that are included in a PTI are streamlined, subsumed and/or is state-only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. (R 336.1213(5))
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. (R 336.1213(5)(a), R 336.1214a(5))
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. (R 336.1213(5)(b), R 336.1214a(3))

General Provisions

- The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. (R 336.1213(1)(a))
- 2. It shall not be a defense for the 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 this ROP. (R 336.1213(1)(b))
- 3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. (**R 336.1213(1)(c)**)
- 4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: (**R 336.1213(1)(d**))
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
- 5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information, which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. (**R 336.1213(1)(e)**)

- 6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. (**R 336.1213(1)(f)**)
- 7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. (R 336.1213(1)(g))
- 8. This ROP does not convey any property rights or any exclusive privilege. (R 336.1213(1)(h))

Equipment & Design

- 9. Any 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).² (R 336.1370)
- 10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (**R 336.1910**)

Emission Limits

- 11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"² (**R 336.1301(1)**)
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.

The grading of visible emissions shall be determined in accordance with Rule 303.

- 12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ (R 336.1901(a))
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ (R 336.1901(b))

Testing/Sampling

- 13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² (**R 336.2001**)
- 14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. (R 336.2001(2), R 336.2001(3), R 336.2003(1))
- 15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (**R 336.2001(5)**)

Monitoring/Recordkeeping

- 16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. (R 336.1213(3)(b))
 - a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
- 17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. (R 336.1213(1)(e), R 336.1213(3)(b)(ii))

Certification & Reporting

- 18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
- 19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. (R 336.1213(4)(c))
- 20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. (**R 336.1213(4)(c)**)
- 21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. (**R 336.1213(3)(c)**)
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

- 22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
 - a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete." The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
- 23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. (R 336.1213(3)(c)(i))
- 24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
- 25. 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 appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² (R 336.1912)

Permit Shield

- 26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. (R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))
 - a. The applicable requirements are included and are specifically identified in the ROP.
 - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.

- 27. Nothing in this ROP shall alter or affect any of the following:
 - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. (R 336.1213(6)(b)(i))
 - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. (R 336.1213(6)(b)(ii))
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))

- d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))
- 28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
 - a. Operational flexibility changes made pursuant to Rule 215. (R 336.1215(5))
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). (R 336.1216(1)(b)(iii))
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. (R 336.1216(1)(c)(iii))
 - d. Minor Permit Modifications made pursuant to Rule 216(2). (R 336.1216(2)(f))
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. (R 336.1216(4)(e))
- 29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. (R 336.1217(1)(c), R 336.1217(1)(a))

Revisions

- 30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. (R 336.1215, R 336.1216)
- 31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). (R 336.1219(2))
- 32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. (R 336.1210(10))
- 33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. (R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))

Reopenings

- 34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. (R 336.1217(2)(a)(i))
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. (R 336.1217(2)(a)(ii))
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. (R 336.1217(2)(a)(iii))
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. (R 336.1217(2)(a)(iv))

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. (R 336.1210(9))

Stratospheric Ozone Protection

- 36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
- 37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the 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 by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

- 38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
- 39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
 - a. June 21, 1999,
 - b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - c. The date on which a regulated substance is first present above a threshold quantity in a process.
- 40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
- 41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). (40 CFR Part 68)

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. (R 336.1213(12))

Permit to Install (PTI)

- 43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.² (**R 336.1201(1)**)
- 44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² (R 336.1201(8), Section 5510 of Act 451)
- 45. The terms and conditions of a PTI 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 the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI 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. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² (R 336.1219)
- 46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² (R 336.1201(4))

Footnotes:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

C. EMISSION UNIT SPECIAL CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

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
EU-WOODWORK-N	Emission unit consists of cutting, sawing, sanding, and milling machines. The particulate emissions from the operations are controlled by two baghouses. The filtered air is re- circulated into the plant.	09-05-1978 05-12-1996 10-21-2011	FG-WOODWORK
EU-WOODWORK-S	Emission unit consists of cutting, sawing, sanding, and milling machines. The particulate emissions from the operations are controlled by one baghouse. The filtered air is re- circulated into the plant.	06-15-1996 12-04-2003 10-21-2011	FG-WOODWORK
EU-AUTOLINE2	A dry filter coating booth with robotic spray applicators to apply clearcoats, pigmented topcoats, and sealers/primers onto wood furniture and wood furniture components (kitchen cabinets and parts). The booth is followed by a conveyorized natural gas-fired oven to dry the coated parts.	03-06-2015 07-17-2015	FG-MACT
EU-BOOTH1	A dry filter spray coating booth used to apply stains, varnishes, lacquers, and paints on wood furniture and wood furniture components (kitchen cabinets and parts). Manual spray applicators will be used in the booth. <u>Note</u> : Common areas located between/around EU-BOOTH1 and EU-BOOTH2 are also used for manual application of coatings.	09-16-1998 10-21-2011	FG-FINISH FG-MACT
EU-BOOTH2	A dry filter spray coating booth used to apply stains, varnishes, lacquers, and paints on wood furniture and wood furniture components (kitchen cabinets and parts). Manual spray applicators will be used in the booth. <u>Note</u> : Common areas located between/around EU-BOOTH1 and EU-BOOTH2 are also used for manual application of coatings.	03-26-2002 10-21-2011	FG-FINISH FG-MACT

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-BOOTH3	A dry filter spray coating booth used to apply stains, varnishes, lacquers, and paints on wood furniture and wood furniture components (kitchen cabinets and parts). Manual spray applicators will be used in the booth.	06-15-2001 10-21-2011	FG-FINISH FG-MACT
EU-CLEANUP	Purge and clean-up operations associated with wood furniture and wood furniture components (kitchen cabinets and parts) finishing processes.	07-06-2005	FG-FINISH FG-MACT
EU-ASSEMBLY	Assembly of various wood furniture and wood furniture components (kitchen cabinets and parts) including the use of contact adhesives and glues for bonding of components and/or veneers and other laminates.	09-05-1978	FG-FINISH FG-MACT
Changes to the equipm by R 336.1278 to R 336	ient described in this table are subject to the requ 3.1290.	irements of R 336.12	01, except as allowed

EUAUTOLINE2 EMISSION UNIT CONDITIONS

DESCRIPTION

A dry filter coating booth with robotic spray applicators to apply clearcoats, pigmented topcoats, and sealers/primers onto wood furniture and wood furniture components (kitchen cabinets and parts). The booth is followed by a conveyorized natural gas-fired oven to dry the coated parts.

Flexible Group ID: FG-MACT

POLLUTION CONTROL EQUIPMENT

Dry exhaust filters to control particulate emissions

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC and acetone combined	60.1 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-AUTOLINE2	SC VI.2, VI.3	R 336.1224 R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
 VOC content of sealers/ primers 	4.6 lb/gal (minus water) as applied ^{2, a}	Instantaneous	EU-AUTOLINE2	SC V.1	R 336.1702(a)
2. VOC content of pigmented/ clear topcoats	4.6 lb/gal (minus water) as applied ^{2,a}	Instantaneous	EU-AUTOLINE2	SC V.1	R 336.1702(a)

The phrase "minus water" shall also include compounds which are used as organic solvents, and which are excluded from the definition of volatile organic compound. (R 336.1602(4))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations.² (**R 336.1224, R 336.1702(a)**)
- 2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air.² (**R 336.1224, R 336.1370**)
- 3. The permittee shall handle all VOC and/or HAP containing materials, including coatings, reducers, solvents, and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary.² (R 336.1224, R 336.1702(a))

IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 1. The permittee shall not operate EU-AUTOLINE2 unless all respective exhaust filters are installed, maintained, and operated in a satisfactory manner.² (**R 336.1224, R 336.1301, R 336.1910**)
- 2. The permittee shall equip and maintain EU-AUTOLINE2 with robotic air-assisted airless applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing.² (**R 336.1702(a)**)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

The permittee shall determine the VOC content, water content and density of any coating (sealers/primers and topcoats), as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² (R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 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.² (R 336.1225, R 336.1299, R 336.1702)
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1225, R 336.1299, R 336.1702)
- 3. The permittee shall keep the following information on a monthly basis for EU-AUTOLINE2:
 - a. Gallons (with water) of each coating (sealers/primers and topcoats), thinner, reducer, and purge and cleanup solvent (material) used and reclaimed.
 - b. VOC content (minus water and with water) and acetone content (with water) of each material as applied.
 - c. VOC and acetone mass emission calculations determining the monthly emission rate in tons per calendar month.
 - d. VOC and acetone mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1224, R 336.1299, R 336.1702)

VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

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. SV-AUTOBOOTH	17.5 x 24 ²	40 ²	R 336.1225 40 CFR 52.21(c) & (d)
2. SV-AUTOOVEN1	23.5 x 36 ²	40 ²	R 336.1225 40 CFR 52.21(c) & (d)
3. SV-AUTOOVEN2	10 ²	40 ²	R 336.1225 40 CFR 52.21(c) & (d)
4. SV-AUTOOVEN3	23.5 x 36 ²	40 ²	R 336.1225 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. 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 JJ, as they apply to EU-AUTOLINE2.² (40 CFR Part 63, Subparts A & JJ)

Footnotes:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D. FLEXIBLE GROUP SPECIAL CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

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
FG-WOODWORK	All woodworking equipment, including cutting, sawing, sanding, and milling machines. The particulate emissions from the operations are controlled by baghouses. The filtered air is recirculated into the general plant environment.	
FG-FINISH	Three (3) dry filter spray coating booths used to apply stains, varnishes, lacquers, and paints on wood furniture and wood furniture components (kitchen cabinets and parts), associated purge and clean-up operations, and assembly of various wood furniture and wood furniture components.	EU-BOOTH1 EU-BOOTH2 EU-BOOTH3 EU-CLEANUP EU-ASSEMBLY
FG-MACT	All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment and exempt equipment involved in the surface coating of wood kitchen cabinet parts and products that meet the requirements in 40 CFR Part 9 and Part 63, Subpart JJ, 40 CFR 63.800 and are thereby subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Wood Furniture Manufacturing.	EU-AUTOLINE2 EU-BOOTH1 EU-BOOTH2 EU-BOOTH3 EU-CLEANUP EU-ASSEMBLY

FG-WOODWORK FLEXIBLE GROUP CONDITIONS

DESCRIPTION

All woodworking equipment, including carving, cutting, routing, turning, drilling, sawing, sanding, planning, buffing and milling machines.

Emission Units: EU-WOODWORK-N, EU-WOODWORK-S

POLLUTION CONTROL EQUIPMENT

The particulate matter emissions from the operations are controlled by three baghouse systems. The South Dust Collector and the North Dust Collector are also equipped with cyclones for control of wood shavings. The filtered air is re-circulated into the general plant environment.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate Matter (PM)	0.010 lbs ²	Per 1000 lbs exhaust gas calculated on a wet gas basis	EU-WOODWORK-N EU-WOODWORK-S	SC III.1	R 336.1331(1)(c)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

 The permittee shall not operate FG-WOODWORK unless the cyclones and baghouse filters are installed and operating properly.² (R 336.1205, R 336.1331, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall inspect the baghouses and accessories semi-annually to verify proper operation. Record the date, time, name of the person inspected, findings and date of repairs, if necessary. (R336.1213(3))

VII. <u>REPORTING</u>

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))

- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (**R 336.1213(3)(c)(i)**)
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

1. The exhaust gases from FG-WOODWORK shall not be directly vented to the outside atmosphere at any time.² (R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-FINISH FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Three (3) dry filter spray coating booths used to apply stains, varnishes, lacquers, and paints on wood furniture and wood furniture components (kitchen cabinets and parts), associated purge and clean-up operations, and assembly of various wood furniture and wood furniture components.

Emission Units: EU-BOOTH1, EU-BOOTH2, EU-BOOTH3, EU-CLEANUP, EU-ASSEMBLY

POLLUTION CONTROL EQUIPMENT

EU-BOOTH1, EU-BOOTH2, and EU-BOOTH3 equipped with dry exhaust filters to control particulate emissions.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	29.2 tpy ²	12-month rolling time period as determined at the end of each calendar month	FG-FINISH	SC VI.1 SC VI.2 SC VI.3	R 336.1225 R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
 VOC content of each coating 	6.7 lb/gal (minus water) as applied ^{2,a}	Instantaneous	FG-FINISH	SC V.1 SC VI.1 SC VI.2 SC VI.3	R 336.1702(a)

The phrase "minus water" shall also include compounds which are used as organic solvents and which are excluded from the definition of volatile organic compound. (R 336.1602(4))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall capture all waste stains, varnishes, lacquers, paints, purge/cleanup solvents, *etc.* (materials) and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations.² (R 336.1225, R 336.1299, R 336.1702(a))
- 2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air.² (**R 336.1224, R 336.1370**)
- The permittee shall handle all VOC and/or HAP containing materials, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary.² 1225, R 336.1299, R 336.1702(a))

IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 1. The permittee shall not operate EU-BOOTH1, EU-BOOTH2, and EU-BOOTH3 unless all respective exhaust filters are installed, maintained, and operated in a satisfactory manner.² (**R 336.1224, R 336.1301, R 336.1910**)
- 2. The permittee shall equip and maintain EU-BOOTH1, EU-BOOTH2, and EU-BOOTH3 with manual HVLP applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing.² (**R 336.1702(a)**)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

 The permittee shall determine the VOC content, water content and density of any coatings (stains, varnishes, lacquers, and paints), as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.² (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 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.² (R 336.1225, R 336.1702(a))
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1225, R 336.1299, R 336.1702(a))
- 3. The permittee shall keep the following information on a calendar month basis for FG-FINISH:
 - a. Gallons (with water) of each stain, varnish, lacquer, paint, purge/cleanup solvents, *etc.* (material) used and reclaimed.
 - b. VOC content (minus water and with water) of each material as applied.
 - c. VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - d. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1225, R 336.1299, R 336.1702)

VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

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. SV-BOOTH1	342	40 ²	R 336.1225 40 CFR 52.21(c) & (d)
2. SV-BOOTH2	342	40 ²	R 336.1225 40 CFR 52.21(c) & (d)
3. SV-BOOTH3	24 ²	28 ²	R 336.1225 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

 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 JJ, as they apply to FG-FINISH.² (40 CFR Part 63, Subparts A & JJ)

Footnotes:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-MACT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

40 CFR 63, Subpart JJ-National Emission Standards for Wood Furniture Manufacturing Operations

This flexible group consists of all process equipment at the stationary source including equipment covered by other permits, grandfathered equipment and exempt equipment involved in the surface coating of wood kitchen cabinet parts and products that meet the requirements in 40 CFR Part 63, Subparts A and JJ, 40 CFR 63.800 and are thereby subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Wood Furniture Manufacturing Operations.

All processes that are engaged, either in part or in whole, in the manufacturing of wood furniture or wood furniture components that is located at a major source of Hazardous Air Pollutant (HAP) emissions as defined in 40 CFR 63.2, and 40 CFR 63.

Subpart JJ standards were first proposed in the Federal Register on December 6, 1994. (59 FR 62652). The facility is considered "New Source" for 40 CFR 63, Subpart JJ applicability.

Emission Units installed before EPA first proposed 40 CFR 63, Subpart JJ standards in the Federal Register (Date: December 6, 1994): None

Emission Units installed after EPA first proposed 40 CFR 63, Subpart JJ standards in the Federal Register (Date: December 6, 1994): EU-AUTOLINE2, EU-BOOTH1, EU-BOOTH2, EUBOOTH3

40 CFR Part 63, Subpart A

New source means any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part (40 CFR Part 63) establishing an emission standard applicable to such source.

New affected source means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory that is subject to a section 112(d) or other relevant standard for new sources. This definition of "new affected source," and the criteria to be utilized in implementing it, shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002.

Existing source means any affected source that is not a new source.

40 CFR 63.800(f) - The compliance date for existing affected sources that emit less than 50 tons per year of HAP in 1996 is December 7, 1998. The compliance date for existing affected sources that emit 50 tons or more of hazardous air pollutants in 1996 is November 21, 1997. The owner or operator of an existing area source that increases its emissions of (or its potential to emit) HAP such that the source becomes a major source that is subject to this subpart shall comply with this subpart one year after becoming a major source.

40 CFR 63.800(g) - Existing affected sources shall be in compliance with 40 CFR 63.802(a)(4) and 40 CFR 63.803(h) no later than November 21, 2014. The owner or operator of an existing area source that increases its emissions of (or its potential to emit) hazardous air pollutants (HAP) such that the source becomes a major source that is subject to this subpart shall comply with this subpart one year after becoming a major source.

40 CFR 63.800((h) - New affected sources must comply with the provisions of this standard immediately upon startup or by December 7, 1995, whichever is later. New area sources that become major sources shall comply with the provisions of this standard immediately upon becoming a major source.

Emission Units: EU-AUTOLINE2, EU-BOOTH1, EU-BOOTH2, EU-BOOTH3, EU-CLEANUP, and EU-ASSEMBLY

POLLUTION CONTROL EQUIPMENT

EU-AUTOLINE2 is equipped with a dry filter system to control particulate matter emissions. EU-BOOTH1, EU-BOOTH2, and EU-BOOTH3 are equipped with dry exhaust filters to control particulate matter emissions.

I. EMISSION LIMIT(S)

- 1. The permittee shall comply with the limits established in 40 CFR 63.802.² (40 CFR 63.802)
- 2. For existing sources and new sources, the permittee shall limit VHAP emissions from the finishing operations by meeting the emission limitations presented in Table 3 of 40 CFR 63, Subpart JJ (included below), using any compliance methods in 40 CFR 63.804(a). (40 CFR 63.802(a)(1))

En	nission Point	Existing Source	New Source
a.	Achieve a weighted average VHAP content across coatings (maximum kg VHAP/kg solids (Ib VHAP/lb solids), as applied	1.0ª	0.8ª
b.	Use compliant finishing materials (maximum kg VHAP/kg solids (lb VHAP/lb solids), as applied		
	stains	1.0 ^{a,b}	1.0 ^{a,b}
	washcoats	1.0ª	0.8ª
	sealers	1.0ª	0.8ª
	topcoats	1.0ª	0.8ª
	basecoats	1.0 ^{a,b}	0.8 ^{a,b}
	enamels	1.0 ^{a,b}	0.8 ^{a,b}
or	Thinners (maximum percent VHAP allowable);	100	10.0
C.	Use any combination of (a) and (b)	1.0	0.8

- a. The limits refer to the VHAP content of the coating, as applied.
- b. 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 the above table, and thinners containing no more than 3.0 percent VHAP by weight.
- 3. For existing sources, the permittee shall determine VHAP emissions from a emissions from a finishing material containing formaldehyde or styrene, the permittee shall use the methods presented in 40 CFR <u>63.803(I)(2)</u> for determining styrene and formaldehyde usage. **(40 CFR 63.802(a)(1))**
- 4. For existing sources, the permittee shall limit VHAP emissions from contact adhesives by achieving a VHAP limit for contact adhesives based on the following criteria: (40 CFR 63.802(a)(2)(i) & (ii))
 - a. For foam adhesives (contact adhesives used for upholstery operations) used in products that meet the upholstered seating flammability requirements of California Technical Bulletin 116, 117, or 133, the Business and Institutional Furniture Manufacturers Association's (BIFMA's) X5.7, UFAC flammability testing, or any similar requirements from local, State, or Federal fire regulatory agencies, the VHAP content of the adhesive shall not exceed 1.8 kg VHAP/kg solids (1.8 lb VHAP/lb solids), as applied; or
 - b. For all other contact adhesives (including foam adhesives used in products that do not meet the standards presented in SC I.4(a) but excluding aerosol adhesives and excluding contact adhesives applied to nonporous substrates, the VHAP content of the adhesive shall not exceed 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied.

- 5. For existing sources, the permittee shall limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 kg VOC/kg solids (0.8 lb VOC/lb solids), as applied. (40 CFR 63.802(a)(3))
- 6. For a new affected source, the permittee shall limit VHAP emissions from the finishing operations by meeting the emission limitations presented in Table 3 of 40 CFR 63, Subpart JJ (included in SC I.2), using any compliance methods in 40 CFR 63.804(d). (40 CFR 63.802(b)(1))
- For a new affected source, the permittee shall determine VHAP emissions from a finishing material containing formaldehyde or styrene, the owner or operator of the affected source shall use the methods presented in 40 CFR 63.803(I)(2) for determining styrene and formaldehyde usage. (40 CFR 63.802(b)(1))
- For a new affected source, the permittee shall limit VHAP emissions from contact adhesives by achieving a VHAP limit for contact adhesives, excluding aerosol adhesives and excluding contact adhesives applied to nonporous substrates, of no greater than 0.2 kg VHAP/kg solids (0.2 lb VHAP/lb solids), as applied, using either of the compliance methods in 40 CFR 63.804(e). (40 CFR 63.802(b)(2))
- 9. For a new affected source, the permittee shall limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 kg VOC/kg solids (0.8 lb VOC/lb solids), as applied. (40 CFR 63.802(b)(3))
- 10. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the USEPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance p

See Appendix 9 for detailed NESHAP Subpart JJ Applicable standards and emission limits

II. MATERIAL LIMIT(S)

- 1. For existing sources, the permittee shall limit formaldehyde emissions by complying with the provisions specified in either (a) or (b) below: (40 CFR 63.802 (a)(4)(i) & (ii))
 - a. Limit total formaldehyde (F_{total}) use in coatings and contact adhesives to no more than 400 pounds per rolling 12-month period.
 - b. Use coatings and contact adhesives only if they are low-formaldehyde coatings and adhesives, in any wood furniture manufacturing operations.
- 2. For a new affected source, the permittee shall limit formaldehyde emissions by complying with the provisions specified in either (a) or (b), below: (40 CFR 63.802(b)(4)(i) & (ii))
 - a. Limit total formaldehyde (F_{total}) use in coatings and contact adhesives to no more than 400 pounds per rolling 12-month period.
 - b. Use coatings and contact adhesives only if they are low-formaldehyde coatings and adhesives, in any wood furniture manufacturing operations.

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall comply with the Work Practice Standards in 40 CFR 63.803.² (40 CFR 63.803)
- 2. The permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture operation manufacturing operation and addresses each of the work practice standards presented in 40 CFR 63.803(b) through (l). (40 CFR 63.803(a)(1))
- 3. The written work practice implementation plan shall be available for inspection by the EGLE-AQD upon request. If the EGLE-AQD determines that the work practice implementation plan does not include sufficient mechanisms

for ensuring that the work practice standards are being implemented, the EGLE-AQD may require the affected source to modify the plan. (40 CFR 63.803(a)(2))

4. The inspection and maintenance plan required by 40 CFR 63.803(3) and the formulation assessment plan for finishing operations required by 40 CFR 63.803(I) are also reviewable by the EGLE-AQD. (40 CFR 63.803(a)(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- 1. The permittee shall comply with the performance test method requirements in 40 CFR 63.805.² (40 CFR 63.805)
- 2. Performance test methods shall be used as provided in Certified Product Data Sheet (CPDS) to calculate liquid coating Volatile Hazardous Air Pollutant (VHAP) content.² (**40 CFR 63.805**)
- 3. The permittee shall use the EPA Method 311 of appendix A of 40 CFR part 63 in conjunction with formulation data to determine the VHAP content of the liquid coating. Formulation data shall be used to identify VHAP present in the coating. The EPA Method 311 shall then be used to quantify those VHAP identified through formulation data. (40 CFR 63.805(a))
- 4. The permittee shall use the EPA Method 24 (40 CFR part 60, appendix A) to determine the solids content by weight and the density of coatings. (40 CFR 63.805(a))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- The permittee subject to the 40 CFR 63.802 (a)(1) or (b)(1) that comply through the procedures established in 40 CFR 63.804 (a)(1) or (d)(1) shall demonstrate continuous compliance by submitting the results of the averaging calculation (Appendix 7, Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report required by 40 CFR 63.807(c). (40 CFR 63.804(g)(1))
 - a. The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0 for existing sources or 0.8 for new sources. The affected source is in violation of the standard if E is greater than 1.0 for existing sources or 0.8 for new sources for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.
 - b. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.
- The permittee subject to the provisions of 40 CFR 63.802 (a)(1) or (b)(1) that comply through the procedures established in 40 CFR 63.804 (a)(2) or (d)(2) shall demonstrate continuous compliance by using compliant coatings and thinners, maintaining records that demonstrate the coatings and thinners are compliant, and submitting a compliance certification with the semiannual report required by 40 CFR 63.807(c). (40 CFR 63.804(g)(2))
 - a. The compliance certification shall state that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.

- b. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.
- The permittee subject to the provisions of 40 CFR 63.802 (a)(1) or (b)(1) that are complying through the procedures established in 40 CFR 63.804 (a)(2) or (d)(2) and are applying coatings using continuous coaters shall demonstrate continuous compliance by following the procedures in 40 CFR 63(g)(3) (i) or (ii) (below). (40 CFR 63.804(g)(3))
 - a. Using compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, using compliant thinners, and submitting a compliance certification with the semiannual report required by 40 CFR63.807(c).
 - i. The compliance certification shall state that compliant coatings have been used each day in the semiannual reporting period or should otherwise identify the days of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.
 - ii. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.
 - b. Using compliant coatings, as determined by the VHAP content of the coating in the reservoir, using compliant thinners, maintaining a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintaining records of solvent additions, and submitting a compliance certification with the semiannual report required by 40 CFR 63.807(c).
 - i. The compliance certification shall state that compliant coatings, as determined by the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period.
 - ii. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.
 - iii. An affected source is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit established in 40 CFR 63.804 (a)(2) or (d)(2), as determined using EPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating.
- 4. The permittee subject to the provisions of 40 CFR 63.802 (a)(2) (i) or (ii) or (b)(2) that comply through the procedures established in 40 CFR 63.804 (b), (c)(1), or (e)(1), shall submit a compliance certification with the semiannual report required by 40 CFR63.807(c). (40 CFR 63.804(g)(5))
 - a. The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.
 - b. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.
- 5. The permittee subject to the provisions of 40 CFR 63.802 (a)(3) or (b)(3) shall submit a compliance certification with the semiannual report required by 40 CFR 63.807(c). (40 CFR 63.804((g)(7))
 - a. The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.

- b. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.
- 6. The permittee subject to the work practice standards in 40 CFR 63.803 shall submit a compliance certification with the semiannual report required by 40 CFR 63.807(c). **(40 CFR 63.804(g)(8))**
 - a. The compliance certification shall state that the work practice implementation plan is being followed or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that an owner or operator is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation.
 - b. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.
- 7. The permittee shall maintain records in accordance with the requirements of 40 CFR 63.806.² (40 CFR 63.806)
- 8. The permittee shall maintain all records in accordance with the requirements of 40 CFR 63.10(b)(1).² (40 CFR 63.806(j))
- 9. The permittee shall maintain records of the following:
 - a. A certified product data sheet for each coating, finishing material, thinner, contact adhesive and strippable spray booth coating subject to the emission limits in 40 CFR 63.802.² (40 CFR 63.806(b)(1))
 - b. The VHAP content, in kg VHAP/kg solids (lb VHAP/lb solids), as applied, of each coating, finishing material and contact adhesive subject to the emission limits in 40 CFR 63.802.² (40 CFR 63.806(b)(2))
 - c. The VOC content, in kg VOC/kg solids (lb VOC/lb solids), as applied, of each strippable booth coating subject to the emission limits in 40 CFR 63.802(a)(3) or 40 CFR 63.802(b)(3).² (40 CFR 63.806(b)(3))
 - d. The formaldehyde content (C_f) in lb/gal as applied, of each finishing materials and contact adhesives (G_f) in lb/gal subject to the emission limit in 40 CFR 63.802(a)(4) or (b)(4) and choose to comply with the 400 lbs/yr limit on formaldehyde in 40 CFR 63.802(a)(4)(i) or (b)(4)(i). **(40 CFR 63.806(b)(4))**
- 10. Finishing Operations Averaging Approach:

The permittee following the compliance method in 40 CFR 63.804(a)(1) or (d)(1), shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of the emission limit (E) in Equation 1.² (40 CFR 63.806(c))

- 11. Finishing Operations Continuous Coating/Compliant Finishing Materials: The permittee following the compliance method in 40 CFR 63.804(f)(3)(ii) or 40 CFR 63.804(g)(3)(ii), shall maintain the records required by 40 CFR 63.806(b), as well as records of the following:
 - a. Solvent and coating additions to the continuous coater reservoir.² (40 CFR 63.806(d)(1))
 - b. Viscosity measurements.² (40 CFR 63.806(d)(2))
 - c. Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.² (40 CFR 63.806(d)(3))
- 12. Control System:

The permittee following the compliance method of 40 CFR 63.804(f)(4) or 40 CFR 63.804(g)(4), shall maintain copies of the calculations demonstrating that the overall control efficiency (R) of the control system results in the value of the emission limit after the control (E_{ac}) required by Equation 2, records of the operating parameter values and copies of the semiannual compliance reports required by 40 CFR 63.807(d).² (40 CFR 63.806(f))

13. Finishing Operations – Combination of Compliance Methods:

The permittee following the compliance method of 40 CFR 63.804(f)(6) or 40 CFR 63.804(g)(6), shall maintain copies of the calculations demonstrating that the overall control efficiency (R) of the control system results in the applicable value of VHAP limit of contact adhesives (G_{ac}) calculated using Equation 3, records of the operating parameter values and copies of the semiannual compliance reports required by 40 CFR 63.807(d).² (40 CFR 63.806(g))

14. Work Practice Plan:

The permittee shall maintain, on-site, the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:

- a. Records demonstrating that the operator training program required by 40 CFR 63.803(b) is in place.² (40 CFR 63.806(e)(1))
- b. Records collected in accordance with the inspection and maintenance plan required by 40 CFR 63.803(c).² (40 CFR 63.806(e)(2))
- c. Records associated with the cleaning solvent accounting system required by 40 CFR 63.803(d).² (40 CFR 63.806(e)(3))
- d. Records associated with the formulation assessment plan required by 40 CFR 63.803(I).² (40 CFR 63.806(e)(5))
- e. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.² (40 CFR 63.806(e)(6))
- 15. The permittee shall calculate total formaldehyde emissions from all finishing materials and contact adhesives used in the facility and maintain a value of Ftotal by using the equation below if the permittee chooses to comply with the 400 lbs/yr limit on formaldehyde in 40 CFR 63.802(a)(4)(i) or (b)(4)(i):

$$F_{total} + C_{f1}V_{c1} + C_{f2}V_{c2} + \dots + C_{fn}V_{cn} + G_{f1}Vg_1 + G_{f2}Vg_2 + \dots + GfnV_{gn}$$

Where:

Ftotal = formaldehyde emission (lb /12-mon)

V_c = finishing materials used in a 12-month rolling time period (gal/12-month)

 C_f = formaldehyde content of the finishing material (C) (lb / gal)

 V_g = contact adhesive used in a 12-month rolling time period (gal/12-month)

 G_f = formaldehyde content of the contact adhesive (G) (lb / gal)

n = number of finishing materials or contact adhesives used

- 16. The permittee following the compliance provisions of 40 CFR 63.804(f)(1), (2), (3), (5), (7), and (8) and 40 CFR 63.804(g)(1), (2), (3), (5), (7), and (8) shall maintain records of the compliance certification submitted in accordance with 40 CFR 63.807(c) for each semiannual period following the compliance date.² (40 CFR 63.806(h))
- The owner or operator shall maintain records of all other information submitted with the compliance status report required by 40 CFR 63.9(h) and 40 CFR 63.807(b) and the semiannual reports required by 40 CFR 63.807(c).² (40 CFR 63.806(i))

See Appendices 7 and 9

VII. <u>REPORTING</u>

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))

- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (**R 336.1213(3)(c)(i)**)
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. All emission units subject to 40 CFR Part 63, Subpart JJ, shall comply with the Reporting Requirements in 40 CFR 63.807.² (40 CFR 63.807)
- 5. The permittee demonstrating compliance in accordance with 40 CFR 63.804 (g)(1), (2), (3), (5), (7), and (8), shall submit semiannual reports according to 40 CFR 63.807(c).² (**40 CFR 63.807(c)**)
- 6. The semiannual reports specified in SC VII.5 shall include the information required by 40 CFR 63.804(g) (1), (2), (3), (5), (7), (8), (h)(1), and (h)(3), a statement of whether the affected source was in compliance or noncompliance, and, if the affected source was in noncompliance, the measures taken to bring the affected source into compliance. If there was a malfunction during the reporting period, the report shall also include the number, duration and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.802(c), including actions taken to correct a malfunction. (40 CFR 63.807(c)(3))
- The permittee required to provide a written notification under 40 CFR 63.803(I)(4) shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred. (40 CFR 63.807(e))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S

1. The permittee shall meet all applicable requirements of 40 CFR Part 63, Subpart A and Subpart JJ.² (40 CFR Part 63, Subparts A and JJ)

See Appendix 9

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b). ²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 1. Acronyms and Abbreviations

Common Acronyms			Pollutant / Measurement Abbreviations		
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 ₂ e	Carbon Dioxide Equivalent		
CEMS	Continuous Emission Monitoring System	dscf	-		
CFR	C ,		Dry standard cubic foot		
	Code of Federal Regulations	dscm °F	Dry standard cubic meter		
COM	Continuous Opacity Monitoring		Degrees Fahrenheit		
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr HAP	Grains Hazardous Air Pollutant		
EGLE	Michigan Department of Environment,	Hg	Mercury		
LOLL	Great Lakes, and Energy	hr	Hour		
EU	Emission Unit	HP	Horsepower		
FG			•		
GACS	Flexible Group	H₂S kW	Hydrogen Sulfide Kilowatt		
	Gallons of Applied Coating Solids				
GC	General Condition	lb	Pound		
GHGs	Greenhouse Gases	m	Meter		
HVLP	High Volume Low Pressure*	mg	Milligram		
ID	Identification	mm	Millimeter		
IRSL	Initial Risk Screening Level	MM	Million		
ITSL	Initial Threshold Screening Level	MW	Megawatts		
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds		
MACT	Maximum Achievable Control Technology	NOx	Oxides of Nitrogen		
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram		
MAP	Malfunction Abatement Plan	PM	Particulate Matter		
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10		
NA	Not Applicable		microns in diameter		
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5		
			microns in diameter		
NESHAP	National Emission Standard for Hazardous	pph	Pounds per hour		
NSPS	Air Pollutants New Source Performance Standards	ppm	Parts per million Parts per million by volume		
NSR	New Source Review	ppmv			
PS		ppmw %	Parts per million by weight Percent		
	Performance Specification				
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute		
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge		
PTI	Permit to Install	scf	Standard cubic feet		
RACT	Reasonable Available Control Technology	sec	Seconds		
ROP	Renewable Operating Permit	SO ₂	Sulfur Dioxide		
SC	Special Condition	TAC	Toxic Air Contaminant		
SCR	Selective Catalytic Reduction	Temp	Temperature		
SDS	Safety Data Sheet	THC	Total Hydrocarbons –		
SNCR	Selective Non-Catalytic Reduction	tpy	Tons per year		
SRN	State Registration Number	μg	Microgram		
TEQ	Toxicity Equivalence Quotient	μm	Micrometer or Micron		
USEPA/EPA	United States Environmental Protection	VOC	Volatile Organic Compounds		
	Agency	yr	Year		
VE	Visible Emissions				

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

Appendix 2. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 4. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 5. Testing Procedures

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

Appendix 6. Permits to Install

The following table lists any PTIs issued, or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B7625-2017. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B7625-2017 is being reissued as Source-Wide PTI No. MI-PTI-B7625-2022.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)	
NA	NA	NA	NA	

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing, or recordkeeping data to determine compliance with the applicable requirements referenced in FG-MACT.

- 1. For an existing source subject to 40 CFR 63.802(a)(1), the permittee shall comply with the provisions using any of the methods presented in 40 CFR 63.804 (a)(1) through (a)(4). (40 CFR 63.804(a))
 - a. Use Equation 1 from 40 CFR 63.804(a)(1) to calculate the average VHAP content of all finishing materials (including each stain, sealer, topcoat, basecoat, washcoat, and enamel) used at the facility, and maintain the value of E no greater than 1.0

Equation 1: $E = (M_{c1}C_{c1} + M_{c2}C_{c2} + \dots + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + \dots + S_nW_n)/(M_{c1} + M_{c2} + \dots + M_{cn})$

Where:

E = emission limit (lb VHAP/lb solids)

M_c = mass of solids in the finishing material (c) (lb solids/month)

C_c = VHAP content of the finishing material (c) (lb VHAP/lb solids, as applied)

S = VHAP content of a solvent added to finishing materials, expressed as a weight fraction

W = amount of solvent added to finishing materials during the monthly averaging period (lb)

n = number of finishing materials used

- b. Use compliant finishing materials according to the following criteria:
 - i. Demonstrate that each stain, sealer, and topcoat has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner;
 - ii. Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner; and
 - iii. Demonstrate that each washcoat, basecoat, and enamel that is formulated at the affected source is formulated using a finishing material containing no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent VHAP by weight.
- c. Use any Use any combination of an averaging approach, as described in 40 CFR 63.804(a)(1), compliant finishing materials, as described in 40 CFR 63.804(a)(2) and a control system, as described in 40 CFR 63.804(a)(3) to comply with the emission limit specified in 40 CFR Part 63.802(a)(1).
- For an existing source subject to 40 CFR 63.802(a)(2)(i), the permittee shall comply with the provisions by using compliant foam adhesives with a VHAP content no greater than 1.8 kg VHAP/kg solids (1.8 lb VHAP/lb solids), as applied. (40 CFR 63.804(b))
- For an existing source subject to 40 CFR 63.802(a)(2)(ii), for contact adhesives, the permittee shall comply with those provisions by using either of the methods presented in 40 CFR 63.804(c)(1) and (c)(2), as specified below. (40 CFR 63.804(c))
 - a. Use compliant contact adhesives with a VHAP content no greater than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied; or
- 4. For a new affected source subject to 40 CFR 63.802(b)(1) shall comply with those provisions by using any of the following methods: (40 CFR 63.804(d))
 - a. Calculate the average VHAP content across all finishing materials used at the facility using Equation 1 and maintain a value of E no greater than 0.8.

$$E = (M_{c1} C_{c1} + M_{c2} C_{c2} + * * * + M_{cn} C_{cn} + S_1 W_1 + S_2 W_2 + * * * S_n W_n)/(M_{c1} + M_{c2} + * * * + M_{cn})$$
(Equation 1)

- b. Use compliant finishing materials according to the following criteria:
 - i. Demonstrate that each sealer and topcoat has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, each stain has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight.
 - ii. Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 0.8 kg

VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight; and

- iii. Demonstrate that each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent HAP by weight.
- iv. Use any combination of an averaging approach, as described in 40 CFR 63.804(d)(1), or compliant finishing materials, as described in 40 CFR 63.804(d)(2). **40 CFR 63.804(d)(3).**
- 5 For a new affected source subject to 40 CFR 63.802(b)(2) shall comply with the provisions using either of the following methods:
 - a. Use compliant contact adhesives with a VHAP content no greater than 0.2 kg VHAP/kg solids (0.2 lb VHAP/lb solids), as applied.

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

The permittee shall use the following approved formats and procedures for the reporting requirements referenced in FG-MACT. Alternative formats must be approved by the AQD District Supervisor.

Continuous Compliance Status Report

Continuous compliance status reports indicate whether or not the facility is in compliance with all the requirements of the NESHAP for each six-month period. The content of the continuous compliance status reports include statements that the facility is in compliance or identification of dates of noncompliance. Additional information may also be required for the continuous compliance status reports depending on the facility's compliance method. *Table 2* summarizes the content requirements for continuous compliance status reports for each method. The first continuous compliance status report is due within 30 days of the six-month period following the compliance date (see *Table 1* for the actual dates). Subsequent reports are due within 30 days after each six-month reporting period. Beginning July 1, 2003, the reporting schedule shall be adjusted to coincide with the six-month time period required by the ROP as follows: January 1 through June 30 of each calendar year shall be reported by July 30 and July 1 through December 31 of each calendar year shall be reported by January 30 of the following year.

TYPE OF FACILITY	CONTINUOUS COMPLIANCE STATUS REPORTS
Existing source (on or before 12-6-1994) that emitted less than 50 tons HAPs in 1996	7-7-1999, then every 6 months
Existing source (on or before 12-6-1994) that emitted 50 tons or more of HAPs in 1996	6-20-1998, then every 6 months
New sources (after 12-6-1994)	Every 6 months after date of start-up

Table 1. Reporting Submittal Dates

COMPLIANCE METHOD	INITIAL COMPLIANCE REPORT CONTENT	CONTINUOUS COMPLIANCE STATUS REPORT CONTENT
Averaging approach	Statement that the facility has developed and implemented the work practice implementation plan.	Statement that during the reporting period, the work practices were followed in accordance with the work practice implementation plan and the inspection and maintenance plan.
	Averaging calculation for month in which compliance date fell.	Statement that the facility has met the emission limits every month by using an averaging approach. Averaging calculation for each month in reporting period. Identification of dates and reasons for noncompliance.
Compliant materials	Statement that the facility has developed and implemented the work practice implementation plan.	Statement that during the reporting period, the work practices were followed in accordance with the work practice implementation plan and the inspection and maintenance plan.
	Statement that the facility is using Compliant coatings, thinners and/or contact adhesives.	Statement that compliant coatings, thinners and/or contact adhesives were used each day in the reporting period. Identification of dates and reasons for noncompliance.
Continuous coaters used to apply compliant materials	Statement that the facility has developed and implemented the work practice implementation plan.	Statement that during the reporting period, the work practices were followed in accordance with the work practice implementation plan and the inspection and maintenance plan.
	 Statement that the facility is using either: (1) Compliant materials as determined by the VHAP content of the coating in the reservoir and the calculated VHAP content, and compliant thinners; or (2) Compliant coatings, thinners and 	Statement that either; (1) Compliant coatings (as determined by the VHAP content of the coating in the reservoir and the VHAP content of the coating as calculated from records), and compliant thinners were used each day in the reporting period; or
	monitoring the viscosity of the coating in the reservoir [also attach data demonstrating the relationship between viscosity and VHAP content of the coating].	 (2) Compliant coatings (as determined by the VHAP content of the coating in the reservoir) and compliant thinners were used each day in the reporting period, and the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating. (3) Identification of dates and reasons for noncompliance.
Control System	Statement that the facility has developed and implemented the work practice implementation plan.	Statement that during the reporting period, the work practices were followed in accordance with the work practice implementation plan and the inspection and maintenance plan.

Table 2. Compliance Report Content Requirements

COMPLIANCE METHOD	INITIAL COMPLIANCE REPORT CONTENT	CONTINUOUS COMPLIANCE STATUS REPORT CONTENT	
	Monitoring plan indemnifying each operating parameter to be monitored and why each parameter is appropriate for demonstrating compliance.	Statements that capture or control devices have not been operating at daily average values greater than or less than (as appropriate) the operating parameter values established in the initial performance test.	
	Results of initial performance test.	Identification of dates and reasons for noncompliance.	
Combination of compliance methods	Content requirements for each method used.	Content requirements of each method used.	

Appendix 9. NESHAP for Wood Furniture Manufacturing Operations

The permittee shall use one of the following options as referenced in Flexible Group FG-MACT.

Finishing Operations:

Option 1: Averaging Approach

Use an averaging approach so that the average VHAP content for all finishing materials used at the facility is no greater than 1.0 lb VHAP/lb solids, as applied, for existing sources, and no greater than 0.8 lb VHAP/lb solids, as applied, for new sources. See Equation 1 in Appendix 7 to calculate the VHAP content.

Option 2: Compliant Materials

Use compliant coatings and thinners (those that meet the emission limits in *Table 3 (see below)*. Each washcoat, basecoat and enamel that is formulated on-site by thinning another finishing material, must be formulated using a finishing material containing no more than 1.0 lb VHAP/lb solids for existing sources (no more than 0.8 lb VHAP/lb solids for new sources) and a thinner containing no more than 3% VHAP by weight.

When using continuous coaters to apply compliant materials, choose one of the following:

- Use compliant coatings as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records and use compliant thinners; or
- Use compliant coatings as determined by the VHAP content of the coating in the reservoir, use compliant thinners
 and maintain a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating.
 Monitor the viscosity with a viscosity meter or testing the viscosity of the initial coating and retesting the coating
 in the reservoir each time solvent is added.

Option 3: Control System

Use a control system with an overall control efficiency so that the emissions are no greater than 1.0 lb VHAP/lb solids for existing sources and no greater than 0.8 lb VHAP/lb solids for new sources. See Equation 2 in Appendix 7 to determine the overall control efficiency. This option requires facilities to conduct an initial performance test and to calculate each operating parameters value that demonstrates compliance with the NESHAP as the arithmetic of the maximum and minimum, as appropriate, of three test runs.

Option 4: Combination of Compliance Methods

Use any combination of an averaging approach, compliant finishing materials and a control system.

Contact Adhesives:

Option 1: Compliant Materials

For existing sources using contact foam adhesives in products flammability requirements, use foam adhesives with a VHAP content no greater than 1.8 lb VHAP/lb of solids, as applied.

For all other contact adhesives, use compliant adhesives with VHAP emissions no greater than 1.0 lb VHAP/lb solids, as applied, for existing sources, or no greater than 0.2 lb VHAP/lb of solids, as applied, for new sources.

Option 2: Control System

Use a control system with an overall control efficiency so that the VHAP emissions are no greater than 1.0 lb VHAP/ lb of solids for existing sources and no greater than 0.2 lb VHAP/lb solids for new sources. See Equation 3 in Appendix 7 to determine the overall control efficiency. This option requires facilities to conduct an initial performance test and to calculate each operating parameter value that demonstrates compliance with the NESHAP as the arithmetic average of the maximum or minimum, as appropriate, of three test runs.

WORK PRACTICE STANDARDS

All facilities subject to this NESHAP must comply with the work practice standards' portion of the regulation. There are 12 components to the work practice standards including a work practice implementation plan; operator training program; an inspection and maintenance plan; a cleaning and washoff solvent accounting system; chemical composition requirements; spray booth cleaning requirements; storage requirements; application equipment requirements; line cleaning requirements; gun cleaning requirements; washoff operation requirements; a formulation assessment plan for finishing operations. The requirements for each of these components are described below. Should there exist any discrepancies between the Wood Furniture NESHAP Standard 40 CFR Part 63, Subpart JJ and this appendix, the Standard shall take precedence.

1. Work practice implementation plan

Develop a work practice implementation plan that defines how the other 11 work practice standards are to be implemented. This plan should include the operator training program, the inspection and maintenance plan, and the formulation assessment plan for finishing operations (these three plans are described below). The work practice implementation plan must be developed within 60 days after the compliance date.

2. Operator training program

Train all personnel who are involved in finishing, gluing, cleaning and washoff operations; use of manufacturing equipment or implementation of the requirements of this regulation. New personnel (those hired after the compliance date) must be trained upon hiring. Existing personnel (those hired before the compliance date) must be trained within six months of the compliance date. All personnel must be given annual refresher training. The operator training program must include the following:

- A list of all current personnel by name and job description that are required to be trained;
- An outline of subjects to be covered in the initial and refresher training;
- Lesson plans for the initial and refresher training that include application techniques, cleaning and washoff procedures, equipment setup and adjustment, and management of cleanup wastes; and
- A description of how the facility will document that personnel have successfully completed the training program.

3. Inspection and maintenance plan

Prepare a written inspection and maintenance plan that will address equipment leaks. Each facility is required, at least once a month, to visually inspect all equipment used to transfer or apply finishing coatings, adhesives or organic HAP solvents to ensure that there are no leaks. The inspection and maintenance plan should specify the following:

- An inspection schedule;
- A method for documenting the date and results of each inspection and any repairs that were made; and
- A timeframe between identifying a leak and making the repair. A first attempt at repair must be made no later than 5 calendar days after the leak is detected. Final repairs must be made within 15 calendar days after the leak is detected unless the leaking equipment is going to be replaced, in which case the repairs must be completed within 3 months.

4. Cleaning and washoff solvent accounting system

Develop an accounting system to record the quantity and type of an organic HAP solvent used each month for washoff and cleaning to include: the number of pieces washed off and the reason for the washoff; the quantity of spent solvent generated from each washoff and cleaning operation each month; and whether the solvent is recycled on-site or disposed off-site.

5. Chemical composition requirements

Do not use cleaning and washoff solvents that contain any of the pollutants listed in *Table 4* of 40 CFR Subpart JJ in concentrations greater than 1% for noncarcinogenic volatile hazardous air pollutants (VHAPs), or greater than 0.1% for carcinogenic VHAPs as required for reporting on all material safety data sheets (MSDS).

6. Spray booth cleaning requirements

To clean spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, do not use compounds containing more than 8% by weight of volatile organic compounds (VOCs) unless the booth is being refurbished. If the spray booth is being refurbished (the coating or other protective material used to cover the booth is being replaced), do not use more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.

7. Storage requirements

Store finishing, gluing, cleaning and washoff materials in normally closed containers.

8. Application equipment requirements Do not use conventional air spray guns

9. Line cleaning requirements

Pump or drain all organic HAP solvent used for line cleaning into a normally closed container.

10. Gun cleaning requirements

Collect all organic HAP solvent used to clean spray guns in a normally closed container.

11. Washoff operation requirements

Control the emissions from washoff operations by using **closed tanks** for washoff and tilting or rotating the part to drain as much solvent as possible.

12. Formulation assessment plan for finishing operations

Prepare a formulation assessment plan for finishing operations to keep track of volatile hazardous air pollutants (VHAPs). The VHAPs discussed in this section are only those listed in *Table 5* of 40 CFR subpart JJ and are called VHAPs of potential concern. The formulation assessment plan for finishing operations should do all of the following:

- Identify the VHAPs from Table 5 of 40 CFR subpart JJ that are being used in finishing operations.
- Establish a baseline level of usage for each VHAP used at the facility. The baseline usage level is the highest annual usage from 1994, 1995, and 1996 for each VHAP.
- Track the annual usage of each VHAP that is present in amounts greater than 1% for noncarcinogenic VHAPs or greater than 0.1% for carcinogenic VHAPs as required, or reporting on all material safety data sheet (MSDS).
- If after November, 1998, the annual usage of VHAP exceeds its baseline level, provide a written notification to the Michigan Department of Environment, Great Lakes and Energy (EGLE), Air Quality Division (AQD) that describes the amount of the increase and explains the reason for exceedance of the baseline level.
- If after November, 1998, a facility uses a VHAP of potential concern for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level. If the usage of VHAP of potential concern exceeds the de minimis level, provide a written notification to the Michigan Department of Environment, Great Lakes and Energy (EGLE), Air Quality Division (AQD) that describes the amount of the increase and explains the reason for exceedance of the de minimis level.

Table 3. NESHAP Summary of Emission Limits

EMISSION POINT	EXISTING SOURCE	NEW SOURCE
Finishing Operations:		
(a) Achieve a weighted average VHAP content across all coatings (maximum lb VHAP/lb	1.0	0.8
solids), as applied		
(b) Use compliant finishing materials (maximum lb VHAP/lb solids), as applied:		
• Stains	1.0	1.0
Washcoats	1.0	0.8
Sealers	1.0	0.8
Topcoats	1.0	0.8
Basecoats	1.0	0.8
Enamels	1.0	0.8
 Thinners (maximum % HAP allowable); or 	10.0	10.0
(c) As an alternative, use control device; or	1.0	0.8
(d) Use any combination of (a), (b), and (c)		0.8
Cleaning Operations:		
	0.8	0.8
Strippable spray booth material (maximum VOC content, lb VOC/lb solids)	0.0	0.0
Contact Adhesives:		
(a) Use compliant contact adhesives (maximum lb VHAP/lb solids, as applied) based of the		
following criteria:	NIA	NIA
i. For aerosol adhesives, and for contact adhesives applied to nonporous substrates	NA	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	1.0	0.2

For original table see 40 CFR Part 63, Subpart JJ, Table 3