

**AIR EMISSION PERMIT NO. 03700202-001
IS ISSUED TO**

MERILLAT INDUSTRIES INC.
Merillat Corp - Lakeville
21755 Cedar Ave South
Lakeville, Dakota County, MN 55044

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

| | |
|---------------------------------|------------------|
| Permit Type | Application Date |
| Total Facility Operating Permit | 02/17/2000 |

This permit authorizes the Permittee to operate and construct the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Federal; Part 70/Limits to avoid NSR

Issue Date: January 31, 2001

Expiration: January 31, 2006

All Title I Conditions do not expire.

Richard J. Sandberg, Manager
Major Facilities Section
Metro District

For Karen A. Studders, Commissioner
Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

| | |
|--------------------|----------------|
| Metro Area | (651) 296-6300 |
| Outside Metro Area | 1-800-657-3864 |
| TTY | (651) 282-5332 |

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

Merillat Corporation is a manufacture of custom finished cabinets. The facility currently assembles wood cabinets at their existing facility in Lakeville. Merrillat facility receives prestained and/or laminated cabinet components. The components are assembled into cabinets and then shipped from the Lakeville facility. As the facility exists today, no laminating or staining of the cabinet components is completed at the facility. As part of corporate-wide restructuring, Merrillat intends to vertically integrate its operations. That is, instead of coating at one facility and shipping to another for assembly, each plant will be responsible for coating components and final assembly. To accomplish this goal Merrillat proposes to add a coating line to its existing Lakeville plant. The finishing process will consist of coating booths, curing ovens, and some additional sanding and cutting operations.

The finishing process will involve the application of stains, toners, sealers, and top-coatings to wood cabinet components. The application of the coating components will generate air emissions of volatile organic compounds (VOC), some of which will be hazardous air pollutants. The addition of the finishing operation will subject the facility to the National Emission Standards for Hazardous Air Pollutants Sources according to 40 CFR pg. 63 – Subpart JJ –Wood Furniture Manufacturing Operation. The affected source to which this subpart applies is engaged, either in part or in whole, in the manufacture of wood furniture components and that is located at a plant site that is a major source as defined in 40 CFR pt. 63.2.

Merillat has requested a flexible emission cap (FlexCap) with a cap on VOC, PM and PM₁₀ emissions. Under a FlexCap permit, the Permittee may install new emission units and modify existing emission units without applying for an amendment as long as the applicable requirements for the new and modified units are already included in the permit, and total facility emissions, including emissions from the new and modified units, remain below the cap. Any modifications made under this FlexCap permit are thus not Major under the federal Prevention of Significant Deterioration, New Source Review Regulation.

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item: Total Facility

| What to do | Why to do it |
|--|--|
| GENERAL REQUIREMENTS | hdr |
| A. OPERATIONAL REQUIREMENTS | hdr |
| Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. | Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J) |
| Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted. | Minn. R. 7011.0020 |
| Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150. | Minn. R. 7011.0150 |
| The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16. | Minn. R. 7007.0800, subp. 16 |
| Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A). | Minn. R. 7007.0800, subp. 9(A) |
| Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act. | Minn. R. 7030.0010 - 7030.0080 |
| B. TESTING REQUIREMENTS | hdr |
| Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C. | Minn. R. ch. 7017 |
| C. MONITORING REQUIREMENTS | hdr |
| Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued. | Minn. R. 7007.0800, subp. 4(D) |
| Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit). | Minn. R. 7007.0800, subp. 4(D) |
| Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system. | Minn. R. 7007.0800, subp. 4(D) |
| D. RECORDKEEPING | hdr |
| Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes. | Minn. R. 7007.0800, subp. 5(B) |
| Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A). | Minn. R. 7007.0800, subp. 5(C) |
| E. REPORTING | hdr |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

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|---|---|
| <p>Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.</p> <p>At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.</p> | Minn. R. 7019.1000, subp. 3 |
| <p>Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.</p> <p>At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.</p> | Minn. R. 7019.1000, subp. 2 |
| <p>Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.</p> | Minn. R. 7019.1000, subp. 1 |
| <p>Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description:</p> <ol style="list-style-type: none"> 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. | Minn. R. 7019.1000, subp. 1 |
| <p>Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.</p> | Minn. R. 7019.1000, subp. 4 |
| <p>Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.</p> | Minn. R. 7007.1150 through Minn. R. 7007.1500 |
| <p>Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).</p> | Minn. R. 7007.1400, subp. 1(H) |
| <p>Emissions Inventory Report: due 91 days after end of each calendar year following Permit Issuance (April 1). To be submitted on a form approved by the Commissioner.</p> | Minn. R. 7019.3000 through Minn. R. 7019.3010 |
| <p>Emission Fees: due 60 days after receipt of an MPCA bill.</p> | Minn. R. 7002.0005 through Minn. R. 7002.0095 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

Subject Item: GP 001 Finishing Line**Associated Items:** EU 003 Toner Booth

EU 004 Stain Booth

EU 005 Wiping Area

EU 006 Sealer Booth

EU 007 Topcoat Booth

EU 008 Cure Oven 1

EU 009 Cure Oven 2

EU 010 Cure Oven 3

| What to do | Why to do it |
|---|--|
| A. GROUP 1 CAP EMISSION LIMITS | hdr |
| Volatile Organic Compounds: less than or equal to 247 tons/year using 12-month Rolling Sum | Title I Condition: Limit to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000 |
| Particulate Matter < 10 micron: less than or equal to 40 tons/year using 12-month Rolling Sum | Title I Condition: Limit to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000 |
| Total Particulate Matter: less than or equal to 40 tons/year using 12-month Rolling Sum | Title I Condition: Limit to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000 |
| The Permittee shall vent emissions from all spray booths to control equipment meeting the requirements of GP 002. | Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000 |
| Pre-authorized Changes: The Permittee may change or move existing emission units; or add new spray booths, spray guns, filters, ovens and air make-up units at the facility. They may also add new emission units that might be considered insignificant under Minn. R. 7007.1300 or changes made under Minn. R. 7007.1250. All replaced, changed or new emission units must meet the requirements for Group 001. Any units added to the facility that emit other regulated pollutants, must include those emissions in the other pollutant caps in this permit. Changes are pre-authorized by this permit as long as all the applicable requirements are included in this permit. If a proposed change triggers an applicable requirement that is not contained in this permit, the change must go through the appropriate procedure in Minn. R. ch. 7007. | Title I Condition: Limit to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000 |
| Opacity: less than or equal to 20 percent. | Minn. R. 7011.0715, subp. 1(B) |
| Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to meet the less stringent limit either Minn. R. 7011.0730 or Minn. R. 7011.0735. | Minn. R. 7007.0250, subp. 5 Minn. R. 7011.0715, subp. 1(A) |
| B. MONITORING AND RECORDKEEPING ASSOCIATED WITH TOTAL FACILITY CAP LIMITS | hdr |
| Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain the total quantity of all coatings and other VOC and HAP containing materials used at the facility. This shall be based on either written usage logs or flowmeters. | Title I Condition: Monitoring for Limit to avoid classification as major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 and 5 |
| Monthly Recordkeeping -- VOC Emissions. By the 15th of the month, the Permittee shall calculate and record the following: 1) The total usage of VOC containing materials for the previous calendar month using the daily usage records. This record shall also include the VOC and solids contents of each material as determined by the Material Content requirement of this permit. 2) The VOC emissions for the previous month using the formulas specified in this permit. 3) The 12 month rolling sum VOC emissions for the previous 12 month period by summing the monthly VOC emissions data for the previous 12 months. This number shall be less than or equal to the specified VOC limit of 247 tons per year listed above. 4) All records shall be recorded and maintained at the facility. | Minn. R. 7007.0800, subp. 4 and 5 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

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|--|---|
| <p>Monthly Calculation -- VOC Emissions. The Permittee shall calculate VOC emissions using the following equations:</p> <p>VOC (tons/month) = V - W $V = (A1 \times B1) + (A2 \times B2) + (A3 \times B3) + \dots$ $W = (C1 \times D1) + (C2 \times D2) + C3 \times D3) + \dots$</p> | Minn. R. 7007.0800, subp. 4 and 5 |
| <p>Monthly VOC Emissions Calculation Continued:</p> <p>where: V = total VOC used in tons/month; A# = amount of each VOC containing material used, in tons/month; B# = weight percent VOC in A#, as a fraction; W = the amount of VOC shipped in waste, in tons/month; C# = amount, in tons/month, of each VOC containing waste material shipped. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero; and D# = weight percent of VOC in C#, as a fraction.</p> | Minn. R. 7007.0800, subp. 4 and 5 |
| <p>Monthly Recordkeeping - HAP Emissions. By the 15th of the month, the Permittee shall calculate and record the following using the formulas specified in this permit:</p> <ol style="list-style-type: none"> 1). The total HAP containing materials used in the previous calendar month using the daily usage records. This record shall also include the individual and total HAP contents of each HAP containing material used in the previous month, as determined by the Material Content requirement of this permit. 2). The total and individual HAP emissions for the previous month using the formulas specified in this permit. 3). The 12 month rolling sum total and individual HAP emissions for the previous 12 month period by summing the monthly emissions data for the previous 12 months. | Minn. R. 7007.0800, subp. 4 and 5; |
| <p>PM10 Emission Calculation Method: By the 15th day of each month, the Permittee shall do the following to determine PM10 emissions from the facility:</p> <ol style="list-style-type: none"> 1. Calculate, record and maintain a monthly log of PM10 emissions for the preceeding month. 2. Calculate the cumulative 12-month rolling sum of the PM10 emissions for the previous 12 months using the monthly PM10 emissions log. This number shall be less than or equal to the specified PM10 limit of 40 tons per year listed above. 3. All records shall be recorded and maintained at the facility. | Minn. R. 7007.0800, subp. 4 and 5 |
| <p>PM Emission Calculation Method: By the 15th day of each month, the Permittee shall do the following to determine PM emissions from the facility:</p> <ol style="list-style-type: none"> 1. Calculate, record and maintain a monthly log of PM emissions for the preceeding month. 2. Calculate the cumulative 12-month rolling sum of the PM emissions for the previous 12 months using the monthly PM emissions log. This number shall be less than or equal to the specified PM limit of 40 tons per year listed above. 3. All records shall be recorded and maintained at the facility. | Minn. R. 7007.0800, subp. and 5 |
| <p>PM and PM10 Emission Calculation Method: from each emission unit other than fuel combustion or fugitive sources, the PM and PM10 emissions shall be calculated as follows:</p> <p>PM or PM10 = $A \times S \times (1-T) \times (1-E)$</p> <p>where: A=gallons of coating(s) used (based on monthly disbursement records) gal/month S=solids content of coating in lb/gal T=transfer efficiency (default to .6 for air-assisted airless spray) E=control efficiency of control equipment (.80 x .90 = .72)</p> | Title I Condition: Monitoring for limit taken to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

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|---|---|
| <p>Monthly Calculation -- HAP Emissions. The Permittee shall calculate each individual HAP and total HAP emissions using the following equations:</p> <p>HAP Emissions (tons/month) = H - W $H = (A1 \times B1) + (A2 \times B2) + (A3 \times B3) + \dots$ $W = (C1 \times D1) + (C2 \times D2) + (C3 \times D3) + \dots$</p> <p>Where: H = the amount of each pollutant (either total HAP or each individual HAP), used, in tons/month. A# = Amount of each HAP containing material used in the previous month, in tons/month. B# = weight percent of each individual or total HAP in A#, as a fraction (e.g., 50% is 0.50). W = the amount of each pollutant (either total HAP or each individual HAP) shipped in waste, in tons/month. C# = amount, in tons/month, of each HAP containing waste material shipped. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero. D# = weight percent of each individual or total HAP in C#, as a fraction.</p> | Minn. R. 7007.0800, subp. 4 and 5 |
| <p>Material Content: VOC, HAPs, and Solids (PM and PM<10 microns) contents in all materials shall be determined by Certified Product Data Sheet (CPDS) provided by the supplier for each material used. If a material content range is given on the CPDS, the highest number in the range shall be used in all permit calculations. When using the CPDS as the basis of calculating particulate emissions, the conservative assumption is made that PM consists entirely of PM less than 10 microns. Other alternative methods approved by the MPCA may be used to determine the VOC, HAPs, and solids contents. The Commissioner reserves the right to require the Permittee to determine the VOC, HAP, and solids contents of any material, according to EPA and ASTM reference methods. If an EPA or ASTM reference method is used for material content determination, the data obtained shall supersede the CPDS.</p> | <p>Title I Condition: Monitoring and Recordkeeping for limits taken to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p> |
| <p>Waste Credit: If the Permittee elects to obtain credit for HAPs and VOC shipped in waste materials, the Permittee shall either use item 1 or 2 to determine the VOC and total and individual HAP content for each credited shipment.</p> <p>1) The Permittee shall analyze a composite sample of each waste shipment to determine the weight content of VOC, total HAP, and each individual HAP, excluding water.</p> <p>2) The Permittee may use supplier certified data for raw materials to determine the VOC and HAP contents of each waste shipment, using the same content data used to determine the content of raw materials. If the waste contains several materials, the content of mixed waste shall be assumed to be the lowest VOC and total and individual HAP content of any of the materials.</p> | Minn. R. 7007.0800, subp. 4 and 5 |
| <p>Recordkeeping of Equipment and Formulation Changes:</p> <p>The Permittee shall keep records of any equipment that is replaced. This record shall be updated any time equipment is replaced. The record shall include the date the equipment was replaced (startup of new, shutdown of old), the corresponding EU number (003-010), the manufacturer and model numbers of the new equipment, the spray technology and manufacturer specified transfer efficiency, and the spray capacity in gallons per hour.</p> <p>The Permittee shall keep a log of all coating formulations as determined by the Material Content requirement of this permit.</p> | <p>Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p> |
| <p>Labeling Requirements: The Permittee shall permanently display on each emission unit the Emission Unit (EU) number and on each item of air pollution control equipment, the Control Equipment (CE) number. The identifying number shall be legible from a safe distance.</p> | Minn. R. 7007.0800, subp. 2 |
| <p>Equipment List: The Permittee shall maintain a written list of all emission units on site that are not insignificant activities. The list shall include the type of equipment; identifying number; dates of installation; modification and/or reconstruction; and reference to applicable Standards of Performance for New Stationary Sources (40 CFR pt. 60) and National Emission Standards for Hazardous Air Pollutants (40 CFR pt. 63).</p> | Minn. R. 7007.0800, subp. 2 |
| <p>Updating the Equipment List: The list shall be updated to include new, modified, or relocated equipment before making a change. New emission units may be installed if they are of a type already listed in this permit, and existing units may be modified or moved, without obtaining a permit amendment, provided Group 001 emissions remain within the limits specified above.</p> | Minn. R. 7007.0800, subp. 2 |
| <p>C. NESHAPS (Subpart JJ)</p> | hdr |
| <p>Volatile hazardous air pollutant (VHAP) means any volatile hazardous air pollutant listed in Table 2 of 40 CFR Section 63, subp. JJ.</p> | 40 CFR Section 63.801 and Table 2 of 40 CFR pt. 63, subp. JJ |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

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|---|---|
| Emission Limit for Finishing Operations (compliance based on compliant coating method): the weighted average VHAP content of all finishing materials, including but not limited to stains, basecoats, washcoats, enamels sealers, thinners, and topcoats used, shall not exceed 0.8 kg VHAP /kg solids (0.8 lb VHAP/lb solids), as applied. | 40 CFR Section 63.802(b)(1) and Table 3 of 40 CFR pt. 63, subp. JJ |
| Compliance Procedure: The Permittee shall use compliant finishing materials according to the following: (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 by maintaining certified product data sheets for each finishing material. (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 not more than 0.8kg VHAP/kg solids (0.8 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 | 40 CFR Section 63.804(d)(2) |
| continuation: Compliance Procedure: (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 VHAP by weight. | 40 CFR Section 63.804(d)(2) |
| Emission Limit (strippable spray booth coatings): 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 Section 63.802(b)(3) |
| Work Practice Implementation Plan: Each owner or operator of an affected source shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the work practice standards presented in paragraphs (b) through (l) of section 63.803. The plan shall be developed no more than 60 days after the compliance date (Issuance of the permit), the Permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture manufacturing operation. The plan shall be available for inspection by the Administrator upon request. | 40 CFR Section 63.803(a) |
| At a minimum, a work practice implementation plan (WPIP) shall contain the following: 1. Operator training course - the Permittee shall train all personnel who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the requirements of the MACT standards. The personnel hired before the compliance date of the standard, shall be trained within six months of the compliance date. All new personnel, those hired after compliance date of the standard, shall be trained upon hiring. All personnel shall be given refresher training annually. The Permittee shall maintain a copy of the training program with the WPIP. | 40 CFR Section 63.803(b) and Table 4 & 5 of 40 CFR Section 63, subp. JJ |
| continuation: WPIP: The training program shall include at a minimum, the following: a. A list of current personnel by name and job description; b. An outline of the subjects to be covered in the initial and refresher training; c. Lesson plans for courses shall include: appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup waste; and d. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion. | 40 CFR Section 63.803(b) and Table 4 & 5 of 40 CFR Section 63, subp. JJ |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

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|---|--|
| <p>continuation: WPIP:</p> <p>2. Inspection and maintenance plan - The Permittee shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies: a. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic solvents; b. An inspection schedule; c. Methods for documenting the date and results of each inspection and any repairs that were made; d. The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule: (i) A first attempt at repair (e.g. tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and (ii) final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.</p> | <p>40 CFR Section 63.803(c) and Table 4 & 5 of 40 CFR Section 63, subp. JJ</p> |
| <p>continuation: WPIP:</p> <p>3. Cleaning and washoff solvent accounting system - An accounting system shall be maintained to record the following: a. The quantity and type of organic solvent used each month for cleaning and washoff operations; b. The number of pieces washed off and the reason for the washoff; and c. The quantity of spent solvent from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.</p> <p>4. Chemical composition of cleaning and washoff solvents - the Permittee shall not use cleaning, or washoff solvents that contain any chemicals listed in Table 4 of 40 CFR pt. 63, subp. JJ, in concentrations subject to MSDS reporting as required by OSHA.</p> | <p>40 CFR Section 63.803(d)-(e) and Table 4 & 5 of 40 CFR Section 63, subp. JJ</p> |
| <p>continuation: WPIP:</p> <p>5. Spray booth cleaning - The Permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth. This limit does not apply to cleaning conveyors, continuous coaters and their enclosures, or metal filters. If the Permittee is replacing the spray booth coating or other protective material used to cover the booth, the Permittee shall use no more than 1 gallon of organic solvent per booth to prepare the surface of the booth prior to applying the booth coating.</p> <p>6. Storage requirements - The Permittee shall use normally closed containers for storing, finishing, gluing, cleaning, and washoff materials.</p> <p>7. Application equipment requirements - The permittee shall use conventional air spray guns to apply finishing materials as outlined in 40 CFR Section 63.803(h).</p> | <p>40 CFR Section 63.803(f)-(h) and Table 4 & 5 of 40 CFR Section 63, subp. JJ</p> |
| <p>continuation: WPIP:</p> <p>8. Line Cleaning - The Permittee shall pump or drain all organic solvent used for line cleaning into a normally closed container.</p> <p>9. Gun cleaning - The Permittee shall collect all organic solvent used to clean spray guns into a normally closed container.</p> <p>10. Washoff operations - The Permittee shall control emissions from washoff operations by using closed tanks for washoff and minimizing dripping by tilting or rotating the part to drain as much solvent as possible.</p> | <p>40 CFR Section 63.803(i)-(k) and Table 4 & 5 of 40 CFR Section 63, subp. JJ</p> |
| <p>continuation: WPIP:</p> <p>11. Formulation assessment plan (FAP) for finishing operation - prepare and maintain with the WPIP a formulation assessment plan only if the following chemicals are being used and finishing chemicals are being used in finishing operations: dimethyl formamide, formaldehyde, methylene chloride, 2-nitropropane, isophorone, styrene monomer, phenol, diethanolamine, 2-methoxyethanol, 2-ethoxyethyl acetate. A FAP shall be done in accordance with 40 CFR Section 63.803(1), 40 CFR Section 63.803(b)-(l) and Table 4 & 5 of 40 CFR pt. 63, subp. JJ.</p> | <p>40 CFR Section 63.803(l) and Table 4 & 5 of 40 CFR Section 63, subp. JJ</p> |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

| | |
|---|---|
| The minimum WPIP onsite record shall include: 1. Records demonstrating that the operator training program is in place; 2. Records collected in accordance with the inspection and maintenance plan; 3. Records associated with the cleaning solvent accounting system; 4. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with this type of spray guns for each semiannual period; and 5. Copies of documentation such as logs developed to demonstrate that the other provisions of the WPIP are followed. | 40 CFR Section 63.806(e) |
| The Permittee shall maintain all records for a period of 5 years and, at a minimum, the most recent 2 years of data shall be retained on site. The records including all required reports shall be in a form suitable and readily available for expeditious inspection and review. | 40 CFR Section 63.806(j) and 40 CFR Section 63.10(b)(1) |
| Recordkeeping: The Permittee shall maintain the following records: 1. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating; 2. The VHAP content, in kg VHAP/kg solids, as applied, of each finishing material and contact adhesive; 3. The VOC content, in kg VOC/kg solids, as applied, of each strippable booth coating; and 4. Onsite the WPIP and all records associated with fulfilling the requirements of the WPIP. | 40 CFR Section 63.806(b), (e) |
| The Permittee shall maintain records of all reports submitted to the agency including the supporting materials. | 40 CFR Section 63.806(h) and (i) |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

Subject Item: GP 002 Control Equipment Units for the Finishing Line**Associated Items:** CE 004 Fiberglass Filter w/Cardboard Frame

CE 005 Fiberglass Filter w/Cardboard Frame

CE 006 Fiberglass Filter w/Cardboard Frame

CE 007 Fiberglass Filter w/Cardboard Frame

| What to do | Why to do it |
|--|--|
| A. EMISSION AND OPERATING LIMITS | hdr |
| The Permittee shall operate and maintain control equipment such that it achieves a control efficiency for Total Particulate Matter: greater than or equal to 72 percent control efficiency | Title I Condition: Limit to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000 |
| The permittee shall operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter < 10 micron: greater than 72 percent control efficiency | Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000 |
| Operation and Maintenance of Filters: The Permittee shall operate and maintain each filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of O & M Plan available onsite for use by staff and review by MPCA staff. | Minn. R. 7007.0800, subp. 14 |
| B. MONITORING AND RECORDKEEPING | hdr |
| Daily Inspections: Once each operating day when the spray booth is used, the Permittee shall visually inspect the condition of the wall filters, including but not limited to alignment, saturation, tears and holes. The Permittee shall maintain a written record of any action resulting from the inspection and maintenance. | Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000 |
| Periodic Inspections: The Permittee shall inspect the control equipment components as required by the manufacturer's specifications. The frequency of the inspections shall be specified in the O & M Plan. The Permittee shall maintain a written record of these inspections. | Minn. R. 7007.0800, subp. 2, 5 and 14 |
| Corrective Actions: If the filters are found to need repair during the visual inspections, the Permittee shall follow the O & M Plan for the filters and take corrective action as soon as possible to restore the pressure differential to within the prescribed range. The Permittee shall keep a record of the type and date of any corrective action taken for each filter, as soon as possible after completion of any corrective action. | Minn. R. 7007.0800, subp. 2, 5 and 14 |
| Hood Certification and Recordkeeping: If the control equipment device does not have total enclosure as defined in Minn. R. 7011.0060, subp. 5, the Permittee can use the hood control efficiency listed in this permit (79 percent) if the hood conforms to the rule requirements listed in Minn. R. 7011.0070, subp. 1 and the Permittee certifies this as required in Minn. R. 7011.0070, subp. 3. The Permittee shall maintain a copy of this on site, as well as a monthly record of the pressure drop through the filter. | Minn. R. 7007.0800, subp. 2 and 14. |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

Subject Item: GP 003 Curing Ovens**Associated Items:** EU 008 Cure Oven 1

EU 009 Cure Oven 2

EU 010 Cure Oven 3

| What to do | Why to do it |
|--|-----------------------------------|
| Fuel Usage: Natural gas only. | Minn. R. 7007.0800, subp. 2 |
| Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions in order to comply with the less stringent limit or either Minn. R. 7011.0730 or Minn. R. 7011.0735. | Minn. R. 7011.0610, subp. 1(A)(1) |
| Opacity: less than or equal to 20 percent except for one six-minute per hour of not more than 60 percent opacity. | Minn. R. 7011.0610, subp. 1(A)(2) |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

Subject Item: GP 004 Baghouse and Dust Collector Units**Associated Items:** CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 003 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 002 Brushing (Prep of cabinets parts prior to coating)

SV 011 Sanding & Inspection

| What to do | Why to do it |
|---|---|
| A. EMISSION AND OPERATING LIMITS | hdr |
| Operate and maintain control equipment to achieve a control efficiency for Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency | Title I Condition: Limit taken to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0065, subp. 1(A) |
| Operate and maintain control equipment to achieve a control efficiency for Total Particulate Matter: greater than or equal to 99 percent control efficiency | Title I Condition: Limit taken to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0065, subp. 1(A) |
| Alternative Pressure Drop Range: If the Permittee wished to propose an alternative pressure drop range to the one specified in this permit without conducting a performance test, the Permittee shall submit the proposal to MPCA for review. The proposal shall contain control equipment vendor data, actual operating data or other information as necessary, in order to justify an alternative range. Upon written approval by MPCA the alternative range shall become an enforceable part of this permit. | Title I Condition: Monitoring of control equipment used to avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000, Minn. R. 7011.0080 |
| Maintenance of Control Equipment: The Permittee shall maintain the control equipment as specified in Minn. R. 7011.0075, subp. 2(A)-(G). The Permittee shall keep records of maintenance activities and corrective actions as specified in Minn. R. 7011.0075, subp. 2(H) and (I). | Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.0075, subp 2 |
| If necessary, the Permittee shall apply for an amendment to update the pressure drop range given for this control device once vendor data is available or after actual normal operating data has been obtained. If necessary, the Permittee shall apply for the amendment no later than 60 days after startup. | Minn. R. 7007.0800, subp. 2 and subp. 14 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

Subject Item: GP 005 Comfort Heating Furnaces**Associated Items:** EU 013 Comfort Heating Furance 1.75 MMBtu/hr

EU 014 Comfort Heating Furance 2.0 MMBtu/hr

EU 015 Comfort Heating Furance 2.25 MMBtu/hr

| What to do | Why to do it |
|--|-----------------------------------|
| Fuel Usage: Natural gas only. | Minn. R. 7007.0800, subp. 2 |
| Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions in order to comply with the less stringent limit or either Minn. R. 7011.0730 or Minn. R. 7011.0735. | Minn. R. 7011.0610, subp. 1(A)(1) |
| Opacity: less than or equal to 20 percent except for one six-minute per hour of not more than 60 percent opacity. | Minn. R. 7011.0610, subp. 1(A)(2) |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

Subject Item: EU 001 Maintenance Department woodwaste handling system**Associated Items:** CE 001 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 001 Maintenance Department (woodwaste handling existing)

| What to do | Why to do it |
|--|---|
| A. EMISSION AND OPERATING LIMITS | hdr |
| Operate and maintain control equipment to achieve a control efficiency for Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency | Title I Condition: Limit taken to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0065, subp. 1(A) |
| Operate and maintain control equipment to achieve a control efficiency for Total Particulate Matter: greater than or equal to 99 percent control efficiency | Title I Condition: Limit taken to avoid classification as a major source or modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7011.0065, subp. 1(A) |
| Pressure Drop: greater than or equal to 0.2 inches of water column and less than or equal to 0.3 inches of water column, or as established during the most recent performance test, recorded once every 24 hours when in operation. | Title I Condition: Monitoring of control equipment used to avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000, Minn. R. 7011.0080 |
| B. MONITORING AND RECORDKEEPING | hdr |
| Maintenance of Control Equipment: The Permittee shall maintain the control equipment as specified in Minn. R. 7011.0075, subp. 2(A)-(G). The Permittee shall keep records of maintenance activities and corrective actions as specified in Minn. R. 7011.0075, subp. 2(H) and (I). | Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.0075, subp 2 |
| If necessary, the Permittee shall apply for an amendment to update the pressure drop range given for this control device once vendor data is available or after actual normal operating data has been obtained. If necessary, the Permittee shall apply for the amendment no later than 60 days after startup. | Minn. R. 7007.0800, subp. 2 and subp. 14 |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

Subject Item: EU 002 Brushing (Prep sanding)**Associated Items:** CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 002 Brushing (Prep of cabinets parts prior to coating)

| What to do | Why to do it |
|---|---|
| Opacity: less than or equal to 20 percent. | Minn. R. 7011.0715, subp. 1(B) |
| Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to meet the less stringent limit either Minn. R. 7011.0730 or Minn. R. 7011.0735. | Minn. R. 7007.0250, subp. 5 Minn. R. 7011.0715, subp. 1(A) |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

Subject Item: EU 011 Inspection & Sanding**Associated Items:** CE 003 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 011 Sanding & Inspection

| What to do | Why to do it |
|---|---|
| Opacity: less than or equal to 20 percent. | Minn. R. 7011.0715, subp. 1(B) |
| Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to meet the less stringent limit either Minn. R. 7011.0730 or Minn. R. 7011.0735. | Minn. R. 7007.0250, subp. 5 Minn. R. 7011.0715, subp. 1(A) |

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/31/01

Facility Name: Merrillat Corp - Lakeville

Permit Number: 03700202 - 001

Subject Item: EU 012 Cabinet Assembly

| What to do | Why to do it |
|---|---------------------------------|
| A. Emission Limits | hdr |
| Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to meet the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. | Minn. R. 7011.071 5, subp. 1(A) |
| Opacity: less than or equal to 20 percent opacity. | Minn. R. 7011.015, subp. 1(B) |
| B. NESHAPS (Subpart JJ) | hdr |
| Emission limit (contact adhesives): The Permittee shall use contact adhesives with VHAP content no greater than 0.2 lb VHAP/lb solids, as applied, using either compliance methods in Part 63.804(e). | 40 CFR Section 63.802(b)(2) |
| This limit does not apply to aerosol adhesives and contact adhesives applied to nonporous substrates. | 40 CFR Section 63.802(b)(2) |
| Compliance Procedure: The owner or operator of a new affected source subject to Part 63.802(b)(2) shall comply with the provisions using complaint contact adhesive with a VHAP content no greater than 0.2 lb VHAP/lb solids as applied. | 40 CFR Section 63.804(e)(1) |
| Work Implementation Plan: As described under NESHAPS requirements in GP 001 of this permit. | 40 CFR Section 63.803(a) |
| Compliance Procedure: The Permittee shall use complaint contact adhesives with a VHAP content no greater than 0.2 kg VHAP/kg solids (0.2 lbVHAP/lb solids), as applied. | 40 CFR Section 63.804(d)(2) |

TABLE B: SUBMITTALS

01/31/01

Facility Name: Merrillat Corp - Lakeville
Permit Number: 03700202 - 001

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

Permit Technical Advisor
Permit Section
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Unless another person is identified in the applicable Table, send all other submittals to:

Supervisor
Compliance Determination Unit
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

01/31/01

Facility Name: Merillat Corp - Lakeville
Permit Number: 03700202 - 001

| What to send | When to send | Portion of Facility Affected |
|-----------------------------------|---|------------------------------|
| Application for Permit Reissuance | due 180 days before expiration of Existing Permit | Total Facility |

TABLE B: RECURRENT SUBMITTALS

01/31/01

Facility Name: Merillat Corp - Lakeville

Permit Number: 03700202 - 001

| What to send | When to send | Portion of Facility Affected |
|------------------------------|--|------------------------------|
| Compliance Status Report | due 30 days after end of each calendar half-year following Permit Issuance. The permittee shall submit subsequent reports 30 calendar day after the end of each 6-month period following the first report. Continuous Compliance report shall be submitted with the semiannual report required by Section 63.807(c). 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 and/or foam adhesive is used is a single violation of the standard. | EU012 |
| Compliance Status Report | due 30 days after end of each calendar half-year following Permit Issuance. The Permittee shall submit subsequent reports 30 calendar days after the end of each 6-month period following the first report. At a minimum the report shall include: 1. Records of using compliant coatings and thinners, maintaining records that demonstrate the coatings and thinners are compliant. 2. The compliant certification shall state that 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 reason of noncompliance. 3. The compliance certification shall be signed by a responsible official of the company. | GP001 |
| Semiannual Deviations Report | due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. | Total Facility |
| Compliance Certification | due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner, and to the U.S. EPA regional office in Chicago. This report covers all deviations experienced during the calendar year. The EPA copy shall be sent to: Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604. | Total Facility |
| Equipment List | due 30 days after end of each calendar year following Permit Issuance to be submitted with Compliance Certification. | GP001 |

APPENDIX MATERIAL

Facility Name:Merillat Corp - Lakeville

Permit Number: 03700202-001

Remodeling requirements for FlexCap permits subject to an EAW

Stack Parameters – Initial Submittal

The parameters used in the modeling performed for an Environmental Assessment Worksheet under Minn. R. ch. 4410 for this facility (for permit action 001) assumed all emissions were through a single stack with a flowrate of 6300 cfm. With the first Equipment List Update report required by this permit (due January 30, 2002; see page 3 of Table B of the permit), the Permittee shall provide a list of the actual stacks and stack parameters installed at the facility. This submittal must include, but is not limited to: the locations, heights and diameters of the stacks; locations and dimensions of nearby buildings; velocity and temperatures of the gases emitted; and the emission rates. The plume dispersion characteristics must equal or exceed the dispersion characteristics modeled for this permit, and the Permittee shall demonstrate this in the submittal. If the information does not demonstrate equivalent or better dispersion characteristics, or if a conclusion cannot readily be made about the dispersion, the Permittee must remodel.

Stack Parameters – future changes

For changes to this facility which are preauthorized by this permit (no amendment required), the Permittee must include a list and description of **revised** stack parameters with each subsequent annual Equipment List Update report (reports due January 30, 2003 and thereafter). This submittal must include, but is not limited to: the locations, heights and diameters of the stacks; locations and dimensions of nearby buildings; velocity and temperatures of the gases emitted; and the emission rates. The plume dispersion characteristics must equal or exceed the dispersion characteristics modeled for this permit, and the Permittee shall demonstrate this in the submittal. If the information does not demonstrate equivalent or better dispersion characteristics, or if a conclusion cannot readily be made about the dispersion, the Permittee must remodel.

Changes to Pollutants/Pollutant Emission Rates

If the Permittee proposes to emit any pollutant in addition to those considered in the Air Toxics Evaluation dated August 2, 2000, or proposes to increase the emission rate of any pollutant above that assumed in the modeling, the Permittee shall first complete a new Air Toxics Evaluation for the change in emissions. The Permittee shall submit a report to the MPCA of the proposed change and demonstrate that the recalculated risk for all pollutants emitted from the facility does not exceed the acceptable risk criteria used in the Merillat Co. Air Toxics Evaluation and Environmental Assessment Worksheet submitted for permit action 001. The Permittee must receive written approval from the MPCA before making either of the above changes.

For changes involving increases in emission rates and that require a minor permit amendment, the proposed new stack parameters must be submitted as soon as practicable, but no less than 60 days before making the change to any parameter.

For changes involving increases in emission rates and that require a permit amendment other than a minor amendment, the proposed new stack parameters must be submitted prior to or with the permit amendment application.

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 03700202-001

This technical support document is for all interested parties of the draft permit. The purpose of this document is to set forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions.

1. General Information

1.1. Applicant and Stationary Source Location:

| Owner and Operator Address and Phone Number (list both if different) | Facility Address (SIC Code: 2434) |
|---|---|
| Merillat Industries Corporate Manager P.O. Box 1946 Adrian, MI 49221 | Merillat Corporation 21755 Cedar Avenue Lakeville, MN 55044 |

1.2. Description of the Facility

Merillat Corporation-Lakeville has submitted an application for a Total Facility air emission permit as required by Minnesota Rules chapter (Minn. R. ch.) 7007. Minn. R. ch. 7007 implements the Title V operating permit program of the federal Clean Air Act as amended 1990. The Title V operating permit application was originally received on February 17, 2000. Further information was requested and received on June 2, 2000.

Merillat assembles and ships cabinets using finished components that are prepared at other Merillat facilities. These components consist of cabinet door and frames. Final finishes include stains and sealers. As this facility exists, today no laminating or staining of the cabinet components is completed at the facility. Merillat is proposing to modify the current facility. The modification consists of the addition of a finishing line to the assembly process. The finishing process will consist of coating booths, curing ovens and some additional sanding and cutting operations.

The manufacture of cabinetry and casework involves woodworking (sawing, shaping, molding, and sanding) spray finishing, laminating and assembly. The primary pollutants generated by Merillat's operations are Volatile Organic Compounds (VOC), Particulate Matter (PM) and Particulate Matter less than 10 microns (PM₁₀) as a result of the spray finishing and woodworking. There are also small amounts of Nitrogen Oxides (NO_x), Sulfur Dioxide (SO₂) and Carbon Monoxide (CO) generated as a result of limited natural gas at the facility in curing ovens and comfort heating units. Hazardous Air Pollutants (HAP) are also released during spray finishing operations.

The finishing process will involve the application of stains, toners, sealers, and top-coating to wood cabinet components. The application of the coating components will generate air

emissions of VOC, some of which will be HAPs. The addition of the finishing operation will subject the facility to the National Emission Standards for Hazardous Air Pollutants Sources according to 40 CFR pt. 63- Subpart JJ – Wood Furniture Manufacturing Operation. The affected source to which this subpart applies is engaged, either in part or in whole, in the manufacture of wood furniture components and is located at a plant site that is a major source as defined in 40 CFR pt. 63.2.

The Permittee completed a Screening level inhalation Risk Assessment that evaluates toxic air pollutants emitted from the proposed Merillat facility. This analysis was completed as part of the Environmental Assessment Worksheet (EAW) for Merillat proposed operations. An EAW was required under Minn. R. ch. 4410. A copy of the Risk Manager decision can be found in Attachment B of this technical support document.

Merillat is proposing a facility-wide flexible emission cap (FlexCap) with a cap on VOC, PM and PM₁₀ emissions. Under a FlexCap permit, the Permittee may install new emission units and modify existing emission units without applying for an amendment as long as the applicable requirements for new and modified units are already included in the permit, and total facility emissions, including emissions from the new and modified units, remain below the cap. Any modifications made under this FlexCap permit are thus not Major under federal Prevention of Significant Deterioration, New Source Review (NSR) Regulations.

1.3. Description of Changes Authorized by this Permit Issuance

This permit authorizes the following total facility emission FlexCaps:

| | |
|--------------------|-------------------|
| VOC: | 247 tons per year |
| PM: | 40 tons per year |
| PM ₁₀ : | 40 tons per year |

The changes allowed under the CAP authorized by this Total Facility operating permit are not subject to the federal New Source Review (NSR) regulations, because this permit establishes limits on groups of emission units which make the facility as a whole a minor source for NSR purposes.

1.4. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

| ID # | S V # | Emission Unit Description | PM tpy | PM ₁₀ tpy | SO ₂ Tpy | NO _x tpy | CO Tpy | VOC Tpy | All HAPs Tpy |
|--------|-------------|---|-----------|-------------------------|------------------------|------------------------|-----------|------------|--------------------|
| GP001 | | Group 1 limits EU003 - EU010 | 30 | 30 | NA | NA | NA | 247 | 218 |
| GP002 | | Control equipment for finishing line | (1) | (1) | 0 | 0 | 0 | (1) | |
| GP003 | | Curing Ovens | (1) | (1) | 0 | 2.5 | 2.1 | (1) | |
| GP004 | | Baghouse and dust collector | 5 | 5 | 0 | 0 | 0 | 0 | |
| EU001 | | Woodwaste handling system (2) | 5 | 5 | 0 | 0 | 0 | 0 | |
| EU002 | | Brushing (Prep sanding) | (2) | (2) | 0 | 0 | 0 | 0 | |
| GP005 | | Comfort heating units | (1) | (1) | 0 | 2.5 | 2.1 | (1) | |
| EU012 | | Cabinet Assembly | (2) | (2) | 0 | 0 | 0 | 0 | |
| FS 001 | | Wood waste fugitive source | (2) | (2) | 0 | 0 | 0 | 0 | |

Notes: NA = not applicable, no facility-wide limit is proposed for this pollutant

(1) included in Group 001 limits

(2) included in Group 004 limits

| | PM tpy | PM ₁₀ tpy | NO _x tpy | CO Tpy | VOC Tpy | All HAPs tpy |
|---|-----------|-------------------------|------------------------|-----------|------------|--------------------|
| Total Facility Limited Potential Emissions | 40 | 40 | 5.0 | 2.4 | 247 | 218 |

(3) Most VOC emitted are also HAP, so HAP is approximately equal to VOC.

Table 2. Facility (TF) and Permit Classification

| Classification (put x in appropriate box) | Major/Affected Source | *Synthetic Minor | *Minor |
|---|-----------------------|----------------------|--|
| Prevention of Significant Deterioration | | VOC | SO ₂ , NO _x , CO |
| Nonattainment area new source review | NA | NA | NA |
| Part 70 Permit Program (list pollutant) | VOC, HAP | PM, PM ₁₀ | SO ₂ , NO _x , CO |

* Refers to potential emissions that are less than those specified as major by 40 CFR § 52.21, 40 CFR pt. 51 Appendix S, and 40 CFR pt. 70.

1.5. Calculation of a 12-month Rolling Sum:

Merillat has proposed the following for Monitoring and Recordkeeping of VOC emissions:

Merillat will maintain monthly records of usage of all VOC-containing finishing materials, using records of the amount disbursed from inventory. VOC emissions will be calculated using a 12-month rolling sum based on quantities disbursed from inventory and quantities in recovered materials.

The quantity of VOC in recovered materials will be calculated by multiplying the amount of recovered material sent off-site for recycling each month by the VOC content of the waste stream(s). The VOC content of recovered materials will be based on a waste analysis of each waste stream provided monthly by the recycling facility.

2. Regulatory and/or Statutory Basis

2.1 Summary Regulatory and/or Statutory Basis of the Emission or Operational Limit

Regulatory Overview of Facility

| *EU, GRP, or SV # | Applicable Regulations | **Comments: |
|-------------------|---|--|
| GP001 | Title I Condition to avoid classification as a major source under NSR | Group-wide limits on PM, PM ₁₀ , and VOC in tons/year |

| | | |
|--|---|---|
| | Title I Condition: Periodic Monitoring | Recordkeeping of amount and VOC-content of materials dispensed and of VOC-containing materials sent off site for recycling; emissions from Insignificant Activities must be included; calculation methods specified for VOC and PM |
| | Title I Condition: Periodic Monitoring | Supplier certifications, maintained on site |
| | Minn. R. 7011.0715 | Limits PM and opacity |
| | Title I Condition: Periodic Monitoring | All emissions are vented through filters which are covered by Group GP002 in the permit as described below |
| | 40 CFR 63, subp. JJ | Limits HAP emissions from wood finishing |
| | Title I Condition: Periodic Monitoring | All monitoring, recordkeeping, and reporting required by this federal regulation are included in the permit on pages A-5, A-6, A-7 and A-8. These include maintaining certified product data sheets with the HAP content of materials used and establishment of a Work Practice Implementation Plan, which includes annual operator training. |

Regulatory Overview of Facility (cont)

| | | |
|-------|---|--|
| GP002 | Title 1 Condition to avoid classification as a major source under NSR | Requires combined capture and control efficiency for PM and PM ₁₀ of at least 72 % |
| | Title I Condition: Periodic Monitoring | Pressure drop across filters, daily visual inspection, maintenance of O and M plan on site, maintenance records, performance test on new units |
| | Minn. R. 7007.0800 | Hood certification for each filter. |

| | | |
|--------|---------------------|---|
| GP 003 | Minn. R. 7007.0800 | Limits fuel use to natural gas |
| | Periodic Monitoring | This unit is not capable of burning any other fuels |
| | | |
| | Minn. R. 7011.0610 | Limits PM and opacity |
| | Periodic Monitoring | None specified since the fuels used do not allow this emission unit to exceed the emission limits |

| | | |
|--------|---|--|
| EU 001 | Title 1 Condition to avoid classification as a major source under NSR | Requires control efficiency for PM and PM ₁₀ of at least 99 % |
| | Title I Condition: Periodic Monitoring | Install pressure drop gage on each baghouse, maintain pressure drop within specified range, calibrate gage annually, maintain O and M plan onsite, conduct daily visual emissions inspection and maintain records of observations and actions, conduct monthly and quarterly inspections |

| | | |
|-------|---|---|
| GP004 | Title 1 Condition to avoid classification as a major source under NSR | Requires control efficiency for PM and PM ₁₀ of at least 99 % |
| | Title I Condition: Periodic Monitoring | Install pressure drop gage on each baghouse, maintain pressure drop within specified range, calibrate gage annually, maintain O and M plan on site, conduct daily visual emissions inspection and maintain records of observations and actions, conduct monthly and quarterly inspections |

| | | |
|--------|---------------------|---|
| GP 005 | Minn. R. 7007.0800 | Limits fuel use to natural gas |
| | Periodic Monitoring | This unit is not capable of burning any other fuels |
| | | |
| | Minn. R. 7011.0610 | Limits PM and opacity |
| | Periodic Monitoring | None specified since the fuels used do not allow this emission unit to exceed the emission limits |

| | | |
|-----------------|---------------------|---------------------------|
| EU001, EU002 | Minn. R. 7011.0715 | Limits PM and opacity |
| | Periodic Monitoring | Vent to control equipment |

Regulatory Overview of Facility (cont)

| | | |
|-------|-----------------------------|--|
| EU012 | Minn. R. 7011.0715 | Limits PM and opacity |
| | Periodic Monitoring | None, since use of water-based adhesives is expected to limit emissions to less than the allowable under the rule. |
| | | |
| | 40 CFR section 63.802(b)(2) | NESHAP, limits HAP content of adhesives |
| | Periodic Monitoring | Supplier certifications maintained on site |

2.2. Deviations from Delta Guidance

In general, the permit meets the Minnesota Pollution Control Agency (MPCA) Delta Guidance for ordering and grouping of requirements. One item that deviates from guidance is the listing of certain applicable requirements at the group level even though they apply at the individual unit or control device. Specifically: GP 003, the IPER applies to each individual oven. The control equipment requirements for the spray booths are listed at GP 002. In general, limits that apply to individual pieces of equipment should be tracked at unit level.

3. Technical Information

The existing facility consists of gluing of cabinet components, a woodwaste handling system, maintenance activities, and comfort units; these units do not generate emissions. Merillat is proposing to construct a new Finishing Line. With the proposed modification the facility needs a total Facility Permit.

3.1. Pre-authorized Changes

The Permit pre-authorized certain changes that might otherwise be considered modification under state and federal rules. The permit allows the Permittee to replace units with similar or like-kind units as long as no new applicable requirements are triggered and as long as emission are tracked and calculated as specified in the permit.

3.2. Potential to Emit Calculations

Attachment A to this Technical Support Document (TSD) contains a summary of the Potential to Emit (PTE) of the Facility. Form GI-07 is also part of this attachment. The calculations submitted by the Permittee were used in the EAW and were used as part of the screening level risk evaluation process.

3.3. Risk Management Decision for need to conduct Air Toxics Review for Merrillat Corporation, Lakeville

The MPCA conducted a “screening level risk evaluation” to evaluate toxic air pollutants emitted from the proposed Merrillat facility. This screening level risk evaluation was conducted, as part of the EAW required for Merrillat’s proposed operations.

The purpose of this screening level risk evaluation was to calculate potential human health inhalation risks expected from the Merrillat facility and compare them to Minnesota Department of Health (MDH) target risk level in order to estimate the likelihood of adverse human health impacts resulting from the proposed facility.

MPCA technical staff evaluated data, as part of the screening level risk evaluation for the proposed Merrillat facility did not indicate much significant human health inhalation risk. The evaluation risks calculated as part of this evaluation were below the MDH acceptable risk levels. The Memorandum is in Attachment B of this TSD.

3.4. Air Make Up Units

The Air Make Up units are listed in the permit application. The Air Make Up units listed as Insignificant Activities are connected to a dust collection system vented internally 100 percent of the time.

3.5. Preparation and Final Inspection

To prepare the wood cabinet components for finishing, the components are lightly brushed prior to the application of the first coating. A dust collection device, operating at an estimated control efficiency of 99 percent, will control emissions of PM and PM₁₀ from this operation. Maximum expected PM and PM₁₀ emissions from this process are estimated in GP005 of this permit.

During the finishing operation, the wood cabinet components are sanded prior to the application of a final topcoat. A dust collection device, operating at an estimated control efficiency of 99 percent, will control emissions of PM and PM₁₀ from this operation. It is likely that the dust collection system will exhaust air back into the building year around. At a minimum, dust collection air will be exhausted back into the work areas during the winter months in order to conserve building heat.

3.6. Woodwaste Loadout

The woodwaste collected by the cyclone and the baghouse is stored in a bin. Approximately every other week, a truck is loaded with the woodwaste. The truck drives under the bin mouth and a canvas tent is lowered prior to the wood waste being discharged into the truck bed. The discharges take a matter of minutes. The canvas tent is used to minimize the generation of fugitive emissions from the unloading

process. The drop into the truck is estimated to be approximately 5 to 6 feet. It was estimated that the use of the canvas tent reduces generation of fugitive dust emissions by approximately 70 percent. Group 4 in the permit covers emissions from this operation.

Sawdust generated from the facility's woodworking equipment/dust collection system is supplied to area agriculture establishments. The woodwaste storage silo is listed in the application and classified as a fugitive emission source.

4. Conclusion

Based on the information provided by the Merillat Corporation, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 03700202-001, and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota rules.

Staff Members on Permit Team: Roxana Dorsey
Scott Parr

Attachment A: Potential to Emit Calculations

Attachment B: Risk Manager Decision for need to conduct Air Toxics Review for Merillat Corporation, Lakeville, signed on August 17, 2000

Attachment C: COPC List submitted by Merillat, June 06, 2000
COC List submitted by Merillat, June 06, 2000

Attachment D: Modeling and Summary for Merrillat Air Toxics Evaluation prepared by OnSoon K. Berglund, August 02, 2000

Attachment E: Merillat Corporation Air Toxics Emissions Summary and Screening Level Risk Evaluation, prepared by Brian Gove, August 16, 2000

ATTACHMENT A

EMISSION CALCULATIONS