

7008.2500 WOODWORKING FACILITY; TECHNICAL STANDARDS.**Subpart 1. Eligibility.**

A. To be eligible to operate without a permit under this chapter, the owner or operator of a woodworking facility must comply with this part and part 7008.2000.

B. Equipment for manufacturing, mechanical finishing and refinishing, and restoring wood products and ovens for curing or drying wood products must account for substantially all the emissions from the woodworking facility. All other emissions from the stationary source must be from insignificant activities under part 7007.1300, subpart 2 or 3, or conditionally insignificant activities that comply with parts 7008.4000 and 7008.4100, or both.

C. The combined total heat input capacity of all fuel-burning ovens for curing or drying wood products must be less than or equal to 25,000,000 Btu per hour.

D. The owner or operator must limit emissions of particulate matter from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment to less than 40,000 pounds per calendar year, calculated according to the method in subpart 5, or limit the aggregate exhaust airflow rate from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment to less than or equal to:

(1) 177,000 standard cubic feet per minute if all emissions from wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment are vented to control equipment through a total enclosure; or

(2) 80,000 standard cubic feet per minute if all emissions from wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment are vented to control equipment through a certified hood or total enclosure.

Subp. 2. Operational requirements. The owner or operator of a woodworking facility must:

A. ensure that equipment for manufacturing, mechanical finishing and refinishing, and restoring wood products vents emissions to control equipment meeting the requirements in subpart 3 at all times the equipment is operating;

B. operate and maintain the control equipment as required by the manufacturer's specifications and part 7008.0200, item D;

C. ensure that opacity from the control-equipment exhaust does not exceed 20 percent opacity when venting externally;

D. when emissions are vented externally, check the control-equipment exhaust for any visible emissions once each day of operation during daylight hours except during inclement weather. If visible emissions are observed for longer than six minutes, the owner or operator must:

(1) inspect the control equipment; and

(2) take corrective actions, including repairing or replacing control-equipment components when necessary;

E. inspect the control equipment once each calendar quarter or more frequently according to the manufacturer's specification; and

F. perform the hood evaluation in subpart 4, item D, if the owner or operator:

- (1) chooses to comply with the requirements in subpart 1, item D, subitem (2); or
- (2) uses the certified hood values in subpart 5.

Subp. 3. **Control requirements.** The owner or operator of a woodworking facility must comply with the applicable requirements for control equipment in items A to C.

A. The owner or operator of a woodworking facility that chooses to comply with the emission limit for particulate matter in subpart 1, item D, must install, operate, and maintain control equipment designed to control emissions of particulate matter on all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment.

B. The owner or operator of a woodworking facility that chooses to comply with the requirements in subpart 1, item D, subitem (1), must ensure all emissions from wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment are vented to control equipment through a total enclosure and must:

(1) if the aggregate exhaust airflow rate from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment is less than or equal to 17,000 standard cubic feet per minute, install, operate, and maintain control equipment designed to emit particulate matter in a concentration less than or equal to 0.03 grains per standard cubic foot of exhaust gas on all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment;

(2) if the aggregate exhaust airflow rate from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment is greater than 17,000 standard cubic feet per minute and less than or equal to 26,000 standard cubic feet per minute, install, operate, and maintain control equipment designed to emit particulate matter in a concentration less than or equal to 0.02 grains per standard cubic foot of exhaust gas on all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment;

(3) if the aggregate exhaust airflow rate from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment is greater than 26,000 standard cubic feet per minute and less than or equal to 53,000 standard cubic feet per minute, install, operate, and maintain control equipment designed to emit particulate matter in a concentration less than or equal to 0.01 grains per standard cubic foot of exhaust gas on all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment;

(4) if the aggregate exhaust airflow rate from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment is greater than 53,000 standard cubic feet per minute and less than or equal to 106,000 standard cubic feet per minute, install, operate, and maintain control equipment designed to emit particulate matter in a concentration less than or equal to 0.005 grains per standard cubic foot of exhaust gas on all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment; or

(5) if the aggregate exhaust airflow rate from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment is greater than 106,000 standard cubic feet per minute and less than or equal to 177,000 standard cubic feet per minute, install, operate, and maintain control equipment designed to emit particulate matter in a concentration less than or equal to 0.003 grains per standard cubic foot of exhaust gas on all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment.

C. The owner or operator of a woodworking facility that chooses to comply with the requirements in subpart 1, item D, subitem (2), must ensure all emissions from wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment are vented to control equipment through a certified hood or total enclosure and must:

(1) if the aggregate exhaust airflow rate from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment is less than or equal to 8,000 standard cubic feet per minute, install, operate, and maintain control equipment designed to emit particulate matter in a concentration less than or equal to 0.03 grains per standard cubic foot of exhaust gas on all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment;

(2) if the aggregate exhaust airflow rate from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment is greater than 8,000 standard cubic feet per minute and less than or equal to 12,000 standard cubic feet per minute, install, operate, and maintain control equipment designed to emit particulate matter in a concentration less than or equal to 0.02 grains per standard cubic foot of exhaust gas on all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment;

(3) if the aggregate exhaust airflow rate from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment is greater than 12,000 standard cubic feet per minute and less than or equal to 24,000 standard cubic feet per minute, install, operate, and maintain control equipment designed to emit particulate matter in a concentration less than or equal to 0.01 grains per standard cubic foot of exhaust gas on all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment;

(4) if the aggregate exhaust airflow rate from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment is greater than 24,000 standard cubic feet per minute and less than or equal to 48,000 standard cubic feet per minute, install, operate, and maintain control equipment designed to emit particulate matter in a concentration less than or equal to 0.005 grains per standard cubic foot of exhaust gas on all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment; or

(5) if the aggregate exhaust airflow rate from all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment is greater than 48,000 standard cubic feet per minute and less than or equal to 80,000 standard cubic feet per minute, install, operate, and maintain control equipment designed to emit particulate matter in a concentration less than or equal to 0.003 grains per standard cubic foot of exhaust gas on all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment.

Subp. 4. **Record keeping.** The owner or operator of a woodworking facility:

A. must maintain a record of inspection, maintenance, and repair activities performed pursuant to the manufacturer's specifications for the control equipment;

B. must maintain a written list of all wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment and ovens for curing or drying wood products on site that contains:

(1) the design airflow rate from the control equipment associated with each wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment;

(2) the manufacturer's design particulate matter concentration from each control equipment installed;

(3) if the manufacturer's design particulate matter concentration is not used for the calculation method in subpart 5, the default concentration value used for each control equipment installed; and

(4) the heat input capacity of each fuel-burning oven used for curing or drying wood products.

C. must maintain records of the date and time of each visible emission check and whether or not any visible emissions were observed;

D. if the owner or operator chooses to comply with the emission limit for particulate matter in subpart 1, item D, must maintain records for each calendar year of the hours operated for the control equipment associated with each wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment; and

E. if the emissions from wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment are vented to the control equipment through a hood, may evaluate, on a form provided by the commissioner, whether the hood conforms to the design and operating practices recommended in "Industrial Ventilation - A Manual of Recommended Practice, American Conference of Governmental Industrial Hygienists." The manual is incorporated by reference under part 7011.0061. An owner or operator that performs this evaluation must:

(1) maintain at the stationary source records of the evaluation of each hood and certification required in part 7011.0072, subpart 2; and

(2) record each month the fan rotation speed, fan power draw, face velocity, or other comparable airflow indicator for each hood.

Subp. 5. Calculating emissions of particulate matter. The owner or operator that chooses to comply with the emission limit for particulate matter in subpart 1, item D, must calculate emissions of particulate matter from each wood-product manufacturing, mechanical finishing and refinishing, and restoring equipment according to the following equations:

$$E = E_C + E_U$$

$$E_C = OP \times EF \times Q_{Air} \times (1 \text{ lb}/7,000 \text{ grains}) \times (60 \text{ minutes}/1 \text{ hour})$$

$$E_U = R \times E_C$$

Where:

E = actual emissions from the wood-product manufacturing, mechanical finishing and refinishing, or restoring equipment, in pounds per calendar year.

E_C = actual emissions from the control equipment, in pounds per calendar year.

E_U = actual emissions that are uncaptured by the control equipment, in pounds per calendar year.

OP = hours of operations of the control equipment per calendar year.

EF = design concentration for particulate matter from the control equipment, in grains per standard cubic foot, but if the manufacturer's design value is unknown, then the default value is 0.07 grains per standard cubic foot for cyclones or 0.03 grains per standard cubic foot for fabric filters.

Q_{Air} = design airflow rate from the control equipment, in standard cubic feet per minute.

R = the ratio of emissions that are uncaptured by the control equipment to the emissions that are captured and controlled by the control equipment. When emissions are captured through a total enclosure and vented to any type of control equipment, the value of R is 0. When emissions are captured through a certified hood, the value of R is 3.57 when vented to a fabric filter or 1.14 when vented to a cyclone or other type of control equipment. When emissions are captured through an uncertified hood, the value of R is 14.29 when vented to a fabric filter or 4.54 when vented to a cyclone or other type of control equipment.

Subp. 6. Notification.

A. If the owner or operator of a woodworking facility covered by a permit issued under parts 7007.0050 to 7007.1850 intends to operate without a permit according to this chapter, the owner or operator must:

(1) request that the commissioner void the permit issued under parts 7007.0050 to 7007.1850 for the stationary source before operating under this chapter; and

(2) notify the commissioner in a format specified by the commissioner.

B. The owner or operator of a woodworking facility not described in item A must notify the commissioner in a format specified by the commissioner within 120 days after January 14, 2019, or within 120 days after beginning to operate a woodworking facility.

C. The notification required under this subpart must contain:

(1) the owner's name;

(2) the operator's name, if different than the owner's name;

- (3) the facility name and address; and
- (4) the manufacturer's design particulate matter concentration and airflow rate from each control equipment installed or, if the facility has not been in operation for one calendar year, the anticipated manufacturer's design particulate matter concentration and airflow rate from each control equipment.

Statutory Authority: *MS s 116.07*

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