

**7008.4110 CONDITIONALLY INSIGNIFICANT ACTIVITY; MECHANICAL FINISHING OPERATIONS.**

Subpart 1. **Applicability.** This part applies to the owner or operator of a stationary source claiming mechanical finishing operations that emit only particulate matter as a conditionally insignificant activity. To qualify as a conditionally insignificant activity under this part, all mechanical finishing operations at the stationary source must be included in the limits under subpart 2. If lead is a component of any mechanical finishing operation at the stationary source, this part does not apply. All particulate matter is considered filterable particulate matter under this part.

Subp. 2. **Requirements.** The owner or operator of a stationary source claiming mechanical finishing operations as a conditionally insignificant activity must:

A. install, operate, and maintain control equipment designed to control emissions of particulate matter on the mechanical finishing operations; and

B. limit emissions of particulate matter from all mechanical finishing operations to less than 10,000 pounds in each calendar year, calculated according to the method in subpart 4. All emissions of particulate matter from all mechanical finishing operations at the stationary source must be accounted for in the annual calculation.

Subp. 3. **Monitoring and record keeping.** The owner or operator of a stationary source claiming mechanical finishing operations as a conditionally insignificant activity:

A. must operate the control equipment as required by the manufacturer's specification and part 7008.0200, item D;

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

C. must maintain the control equipment according to the manufacturer's specification;

D. must maintain a record of inspection, maintenance, and repair activities and the manufacturer's inspection, maintenance, and repair specifications for the control equipment for at least five years;

E. must maintain records for each calendar year of the hours operated for the control equipment associated with each mechanical finishing operation;

F. must maintain records for each calendar year of the design airflow rate from the control equipment associated with each mechanical finishing operation;

G. if the default value is not used, must maintain records for each calendar year of the manufacturer's design concentration for particulate matter from the control equipment associated with each mechanical finishing operation; and

H. if the emissions from mechanical finishing operations 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," in order to use the certified hood values in subpart 4. The manual is incorporated by reference under part 7011.0061. An owner or operator that performs this evaluation must:

- (1) if a permit is required under chapter 7007, include with the permit application the certification required in part 7011.0072, subpart 2;
- (2) maintain at the stationary source records of the evaluation of each hood; and
- (3) record each month the fan rotation speed, fan power draw, face velocity, or other comparable airflow indicator for each hood.

Subp. 4. **Calculating emissions of particulate matter.** The owner or operator claiming mechanical finishing operations as a conditionally insignificant activity must calculate emissions of particulate matter from each mechanical finishing operation 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 mechanical finishing operation, 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.

**Statutory Authority:** *MS s 115.03; 116.07*

**History:** 28 SR 1482; 41 SR 763; 43 SR 797

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