

7007.0502 MERCURY EMISSIONS; REDUCTION PLANS.

Subpart 1. **Statewide goal for mercury air emissions.** The statewide mercury air emissions goal of 789 pounds per year from Minnesota sources, is to be achieved by December 31, 2025, as described in the agency's total maximum daily load study approved by the United States Environmental Protection Agency on March 27, 2007.

Subp. 2. **Applicability.** The owners or operators of an existing mercury emission source must comply with this part. For the purposes of this part, "existing mercury emission source" means that the owners or operators have been issued an air emission permit by the agency as of September 29, 2014. For initial applicability, owners or operators must calculate emissions following methods in part 7019.3030 for the calendar year 2014. If, after 2014, the actual mercury emissions from the existing mercury emission source are below the threshold of three pounds per year or more for three consecutive years, then the stationary source is no longer considered a mercury emission source and is not subject to this part. The owner or operator must:

A. retain records of the actual mercury emissions for the qualifying three years on site for five years from the date the determination was made;

B. make the records available for inspection and submit the records, within specified timelines, upon request of the commissioner; and

C. immediately resume compliance with applicable requirements for mercury emission sources if a physical or operational change causes the stationary source to again become a mercury emission source. Owners or operators must resubmit a mercury emissions reduction plan under subpart 3 within 12 months of again becoming a mercury emission source.

Subp. 3. **Mercury emissions; reduction plan.** Owners or operators of an existing mercury emission source must prepare a mercury emissions reduction plan as described in this part unless the mercury emission source is:

A. a mercury emission source subject to Minnesota Statutes, sections 216B.68 to 216B.688;

B. a mercury emission source that is a stationary source that has only combustion devices and the combustion emissions of the source are from only natural gas, liquid propane gas, propane, or oil fuels;

C. a mercury emission source subject to a performance standard for mercury in part 7011.0561 for electric generating units; parts 7011.1201 to 7011.1285 and 7011.1350 to 7011.1370 for waste combustors or incinerators; and part 7011.7050 or 7011.7055 for boilers, except that units subject to part 7011.7050 or 7011.7055 must also comply with subpart 6, item C, subitem (2);

D. a mercury emission source that:

(1) holds a Minnesota industrial storm water multisector general permit as required by part 7090.3010;

(2) has a primary SIC code in Sector M or Sector N of the Minnesota industrial storm water multisector general permit;

- (3) is required to prepare a mercury management plan under part 7090.3010; and
- (4) is in compliance with the provisions of the mercury management plan; or

E. a mercury emission source that has an emissions limit or enforceable schedule of mercury reductions when the emissions limit or reductions are equal to or greater than those required in subpart 6. The emissions limit or enforceable schedule of mercury reductions may be in an air emission permit or an enforceable agreement that is in effect with the commissioner.

Subp. 4. Reduction plan; submittal deadlines.

A. The owners or operators of an existing mercury emission source that does not meet an exception under subpart 3 must prepare and submit a mercury emissions reduction plan to the commissioner no later than June 30, 2015, for approval and inclusion in a permit or other enforceable document, or as provided under item B.

B. The owners or operators of an existing mercury emission source that is a ferrous mining or processing facility must submit a mercury emissions reduction plan by December 30, 2018, for approval and inclusion in a permit or other enforceable document.

Subp. 5. Reduction plan elements and format.

A. The owners or operators of an existing mercury emission source must submit a mercury emissions reduction plan that complies with this item:

(1) the plan must be submitted in a format specified by the commissioner and must contain:

(a) a description of the specific control equipment, processes, materials, or work practices that will be employed to achieve the applicable control efficiencies, reductions, or allowable emissions and work practices listed in subpart 6 and a schedule for adopting the processes or installation of equipment;

(b) the mercury reduction, control efficiency, or emission rate that each emissions unit will achieve once the plan for that emissions unit is fully implemented;

(c) a description of how operating parameters will be optimized to maintain the mercury control efficiency in the plan;

(d) a proposed periodic monitoring and record-keeping system for proposed control equipment, processes, materials, or work practices or citation to an applicable requirement for monitoring and record keeping consistent with chapter 7017. An evaluation of the use of a continuous mercury emission monitoring system must be included in the plan;

(e) if the plan includes elements that meet the definition of a modification under part 7007.0100, subpart 14, or requires an air permit amendment or notification under part 7007.1150, a projected schedule for submitting the appropriate permit applications; and

(f) the date that the mercury reductions proposed in the plan will be demonstrated. This date must be no later than January 1, 2025, or as specified in subpart 6; or

(2) if the owner or operator determines that the mercury reductions listed in subpart 6, if applicable, are not technically achievable by the identified compliance date, the owners or operators may submit an alternative plan to reduce mercury emissions, in a format specified by the commissioner. The alternative plan must contain:

(a) the plan elements in item A, substituting the owners' or operators' proposed reduction for the requirements under subpart 6;

(b) a detailed explanation of why the mercury reductions listed in subpart 6 are not technically achievable;

(c) a demonstration that air pollution control equipment, work practices, or the use of alternative fuels or raw materials have been optimized such that the source is using the best controls for mercury that are technically feasible; and

(d) an estimate of the annual mass of mercury emitted under the requirements of subpart 6 and the proposed alternative plan.

B. The commissioner shall identify plan deficiencies and notify the owners or operators of the deficiencies.

Subp. 6. **Mercury control and work practices.** Unless the requirements of subpart 3 are met, the owners or operators of an existing mercury emission source that is in a source category listed in this subpart and required to submit a plan under subpart 4 must include in the plan the minimum mercury control requirements for source categories listed in this subpart.

A. For ferrous mining or processing:

(1) the plan must address the indurating furnace or kiln of a taconite processing facility or the rotary hearth furnace of a direct-reduced iron facility and must demonstrate that by January 1, 2025, mercury emissions from the indurating furnace or kiln or rotary hearth furnace do not exceed 28 percent of the mercury emitted in 2008 or 2010, whichever is greater. The commissioner shall determine the mercury emitted in 2008 and 2010. If the facility held a Minnesota Pollution Control Agency construction permit but was operating in 2010 at less than 75 percent of full capacity, the operating furnace must not exceed 28 percent of the mercury potential to emit included in the permit authorizing construction; and

(2) the plan may accomplish reductions as:

(a) 28 percent of 2008 or 2010 emissions for each furnace;

(b) 28 percent of 2008 or 2010 emissions across all furnaces at a single stationary source; or

(c) 28 percent of 2008 or 2010 emissions across furnaces at multiple stationary sources. Owners of the stationary sources must enter into an enforceable agreement as provided by Minnesota Statutes, section 115.071, subdivision 1, to reduce mercury emissions between the stationary sources. If this option is selected, the reduction plan must include the enforceable agreement. Execution of an enforceable agreement under this part does not relieve the owner or

operator of the obligation to obtain a permit or permit amendment if otherwise required under this chapter.

B. For iron and steel melters, the plan must demonstrate that, by June 30, 2018, mercury emissions from the iron or steel melter shall not exceed 77×10^{-6} pounds of mercury per ton (35 milligrams per ton) of iron or steel produced. For purposes of this item:

(1) "iron or steel melter" means a stationary source where shredded motor vehicle scrap or other undifferentiated shredded ferrous scrap is melted to produce steel or iron products;

(2) "motor vehicle scrap" means vehicle or automobile bodies, including automobile body hulks, that have been processed through a shredder. Motor vehicle scrap does not include miscellaneous vehicle parts, such as wheels, bumpers, or other components that do not contain mercury switches; and

(3) "undifferentiated shredded ferrous scrap" means white goods or industrial equipment that has been processed through a shredder and the component parts were not separated and sorted prior to shredding.

C. For the purposes of this item, "boiler," "industrial boiler," "commercial boiler," and "institutional boiler" have the meanings given under Code of Federal Regulations, title 40, section 63.7575 or 63.11237, except that a waste heat boiler, process heater, electric generating unit as defined under part 7011.0561, subpart 2, and autoclave are excluded from the definition of boiler under this item. For industrial, commercial, and institutional (ICI) coal-fired boilers, the plan must demonstrate mercury emissions reductions of 70 percent from emissions calculated for initial applicability at each ICI coal-fired boiler with actual mercury emissions of five pounds per year or more. Initial applicability is calculated using the method described in subpart 2.

(1) A reduction plan under this part is not required if:

(a) actual mercury emissions from the ICI coal-fired boiler, considering existing controls, are less than five pounds per year; or

(b) actual mercury emissions from the ICI coal-fired boiler are greater than five pounds per year and 70 percent of the mercury present in the fuel when combusted is captured and not emitted.

(2) If the exemptions in subitem (1) are not met, the owner or operator must evaluate actual mercury emissions that will be achieved under the federal regulations incorporated under part 7011.7050 or 7011.7055 relative to the 70 percent reduction. If the emission limits, control equipment, or operating practices under the federal regulations do not achieve the 70 percent reduction, the owner or operator must ensure that by January 1, 2018, mercury emissions are reduced by at least 70 percent from the levels calculated for the initial applicability of this item.

D. For mercury emission sources with processes that individually emit three or more pounds of mercury per year and that are not otherwise identified in items A to C, owners or operators must submit a plan to the commissioner that shows that air pollution control equipment, work practices, or the use of alternative fuels or raw materials has been optimized such that the actual, annual

amount of mercury emitted is reduced by 70 percent or greater from the input of mercury to the process or processes emitting mercury.

Subp. 7. **Posting plans.** The commissioner shall electronically post the mercury emissions reduction plans submitted by the owners or operators of an existing mercury emission source on the agency's Internet site. A person may request to receive notification from the commissioner of plans received.

Subp. 8. **Implementing reduction plan.** The owner or operator must implement the mercury emissions reduction plan as approved by the commissioner. The owners or operators must submit annual progress reports to the commissioner by April 1 of each year starting with the year following plan approval until one full year after achievement of the reduction as described in the plan. The report must provide the status of facility modifications and actions taken in the preceding 12 months on each of the plan elements in subpart 5.

Subp. 9. **Modifying plans.**

A. The owners or operators of an existing mercury emission source may request modification of the approved mercury emissions reduction plan or enforceable agreement by submitting a written request to the commissioner. The request must include:

- (1) a description of the modification;
- (2) reasons for the modification; and
- (3) if the request is to modify the mercury reduction, the information required under subpart 5, item A, subitem (1), for the requested new reduction.

B. The owners or operators may not implement any proposed plan modifications until the commissioner approves the modification, issues an amended permit, or revises an enforceable agreement, as applicable.

Statutory Authority: *MS s 115.03; 116.07*

History: *39 SR 386; 41 SR 763*

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