

GUIDELINES FOR NEW AND MODIFIED MERCURY AIR EMISSION SOURCES

DECEMBER 6, 2012

Based on stakeholder recommendations, the Minnesota Pollution Control Agency (MPCA) prepared this guidance for proposed new mercury air emission sources and modifications to existing sources that result in increased mercury emissions. The MPCA and stakeholders acknowledge that new emission sources are expected, however, any proposal for increased mercury emissions in the state will be evaluated by the MPCA in light of the state's plan to decrease emissions to below 789 pounds (lb.) by 2025. This plan includes reduction goals for nearly all emission source categories in Minnesota. Source categories with reduction targets include coal-fired electric utilities, industrial boilers, taconite processing, metal smelters and crematories. Details of this plan can be found on the MPCA's website at www.pca.state.mn.us/index.php/topics/mercury/plan-to-reduce-mercury-releases-by-2025.html.

The MPCA will strictly scrutinize source category and overall reduction targets. Increases due to a new or modified source should not jeopardize the specific source category's ability to reach its interim and final lb/year air emission goals or the overall reduction goal.

The MPCA has used the original Guidance since September of 2009 and completed its planned revision in December 2012. The MPCA intends to implement this guidance until at least 2016 with periodic minor changes. The MPCA, with stakeholder input, will consider major changes to these guidelines every three years. Potential changes will be considered in conjunction with emission reduction progress reviews based on improved source measurement and reporting.

New and Modified Source Guidelines

Any existing mercury-emitting facility with an MPCA air permit seeking to modify its permit or any new facility with permitted potential mercury emissions of greater than 3 lbs. per year or its equivalent should implement the measures listed below to address the increases. These guidelines apply to all sources of mercury emissions greater than 3 lb. Common sources are coal and biomass-fired boilers, taconite-processing facilities, and other mineral-processing operations, medical and municipal solid waste incinerators and sewage sludge incinerators.

New emission sources permitted as of May 1, 2008, but not yet operational are counted as existing emission sources. This guidance will go into effect on January 1, 2013.

New and modified sources should:

1. Employ the best mercury control available. The MPCA expects facilities to explore all pollution-prevention opportunities and utilize the best control with the highest control efficiency that is technically feasible considering environmental, energy and economic impacts. If 90% or greater control efficiency technology is used, a limit based on that level of control will be placed into the facility's permit or other enforceable document and items 3-5 below are not applicable. If best control efficiency technology reduces emissions by less than 90%, the MPCA will periodically review the source for opportunities for improved control efficiency.
2. Complete environmental review as required by Minnesota law, including evaluation of local and cumulative impacts per MPCA guidelines found at www.pca.state.mn.us/index.php/topics/environmental-review/index.html.

3. A permittee proposing a facility modification shall provide its new emission estimates (i.e., proposed emission limits and allowable annual emission rate) to the MPCA. If the MPCA determines the project will not impede the reduction goals within the mercury TMDL implementation plan, an emissions limit will be placed into the facility's permit or other enforceable document and items 4 through 5 below are not applicable.
4. If actual emissions from a new or modified facility are greater than 3 lb. per year, and the MPCA determines emissions have the potential to impede the reduction goals within the mercury TMDL implementation plan, the facility permittee shall submit to the MPCA a mitigation plan that is consistent with the objectives of the Mercury TMDL and that demonstrates an environmental benefit related to mercury. The mitigation plan must be approved by the MPCA and placed into an enforceable document.
5. During permitting, the new or modified facility permittee shall submit to the MPCA the information describing the facility's specific plan (from item #4) to satisfy guidelines 1-4, as applicable, in a format provided by the MPCA.

Implementation and Evaluation:

The MPCA will issue permits with enforceable conditions for new or modified sources based on the facility's plan. Public comment on the plan will be sought during the environmental review process and/or during permitting. The MPCA may also use other enforceable documents, such as compliance agreements or administrative orders, to achieve the reductions outlined in the facility's plan.

New and modified facilities not required to obtain an MPCA air emissions permit will be handled on a case-by-case basis applying a similar approach to 1 – 4 above. The MPCA will consider if additional requirements are needed for unpermitted sources after emissions are reported to the MPCA and published in 2013.

At least every three years, coinciding with preparation of the MPCA air toxics inventory and improved mercury reporting based on pending rule-making, the MPCA, with stakeholder input, will review progress in meeting source category reduction targets and the overall target. If sufficient progress is not made, the MPCA will implement measures to achieve reductions and will consider adjusting these guidelines or establishing rules to specify additional requirements for new and expanding facilities. A major review of this policy will occur in 2016 at the latest.