

One commenter encouraged EPA to consult with the Minnesota Department of Natural Resources, Division of Lands and Minerals, to get the most up-to-date information on potential mercury control strategies for taconite facilities before promulgation. The commenter stated that viable mercury control technologies or strategies may be identified in the very near future. The commenter asserted that the best strategies to control mercury may be operational modifications such as different handling practices for captured dust from indurating furnaces.

Two commenters stated that the EPA must set an emission standard for mercury based on the statute's "minimum stringency requirement" (*i.e.*, the MACT floor) even if specific technologies or operating practices to achieve it have not been identified. One commenter stated that if no such controls or practices are being used, EPA must find some other factor on which to base the standard. Three commenters suggested that EPA determine the floor based on the average mercury emission level of the five plants (or furnaces) with the lowest emissions, and then set the mercury emission limit there. One commenter stated that if certain plants will not be able to meet such a standard within 4 years, the statute provides relief through a Presidential exemption for a period of not more than 2 years. The commenter also contends that the CAA allows relief for a company that makes a significant effort to identify and implement effective controls but is still unable to meet the standard by the 4-year deadline. The commenter stated that EPA included a similar provision in the Portland Cement NESHAP. The commenter believes that setting a standard would induce the industry to invest in research and development to meet it. The commenter stated that promising mercury control technologies for the taconite industry are on the horizon. The commenter stated that the EPA should investigate the COHPAC-TOXECON system, corona discharge, and catalytic oxidation, as well as an iron oxide sorbent system being tested in Minnesota.

One commenter stated that EPA recognized in the proposed rule that the mercury content of the taconite ore is the "key factor" affecting mercury emissions. The commenter reasoned that by setting a mercury standard, plants that use ore with high mercury content will have to find ways to reduce mercury emissions, including switching to cleaner raw materials or installing pollution controls.

One commenter stated that the final rule should consider precluding the use of coal, even as a secondary fuel, to control mercury emissions.

Thirteen commenters recommended that EPA establish a reasonable limit for mercury and allow relief for a company that is unable to meet the limit after making appropriate technological or research investments.

Two commenters requested more information supporting EPA's finding that "we were unable to find any viable control technologies or operating procedures for achieving reduction in mercury emissions from indurating furnaces at taconite iron ore plants." One of the commenters requested the cost of control per ton of mercury control that was estimated in EPA's analysis. Both commenters stated that control technologies being developed for coal-fired power plants could be used to control mercury emissions from taconite facilities. Two commenters mentioned activated carbon injection as a potential mercury control for taconite plants.

One commenter stated that, both within the binational program and in national policy documents, the EPA insinuates that the NESHAP program is the means by which the Agency will achieve mercury reduction goals. The commenter asserted that an emission limit for mercury should be set that pushes the industry to research and develop control technology but also allows for relief if a company is unable to meet the standard after diligently pursuing such technology. The standard should also include mercury monitoring requirements.

Three commenters stated that if mercury emissions from the taconite industry are not reduced, the goals of the binational program to protect the Lake Superior Basin cannot be met. One commenter stated that, if EPA does not intend to set standards for mercury emissions from industries that currently do nothing to control their emissions and that do not develop control technology on a voluntary basis, its regulations (if not its authority) are inadequate to protect the Great Lakes and other Great Waters from mercury deposition. The commenter stated that EPA's refusal to take action under CAA section 112(m) because authority is available under CAA section 112(d), and then failing to use the CAA section 112(d) authority is unacceptable. Furthermore, the commenter stated that Congress directed the EPA to take action to protect the Great Waters by 1995. The commenter stated that postponing regulations until residual risk standards

are required violates the spirit (if not the letter) of the congressional mandate.

One commenter stated that beyond-the-floor standards are warranted for mercury. The commenter stated that a mercury standard based on developing technologies is "achievable." The commenter stated that EPA could base beyond-the-floor mercury standards on the reductions that could be achieved through raw material change (low-mercury ore), fuel change (natural gas), or control technologies (wet scrubbers, carbon beds, or activated carbon injection). The commenter recommended that EPA investigate the COHPAC-TOXECON system, whereby a pulse-jet baghouse is installed downstream from existing ESP controls, and a sorbent injection system is installed between the existing ESP and the baghouse. The commenter also suggested that EPA look at developing multipollutant technologies, such as corona discharge, catalytic oxidation, and iron oxide sorbent systems being tested in Minnesota.

One commenter cited estimated costs for activated carbon systems that were developed for coal-fired boilers that ranged from \$4,940 to \$70,000 per pound (\$9.9 to \$140 million/ton) of mercury removed at 90 percent control (USDOE, September 2002; NESCAUM, June 2000). The commenter also provided costs for carbon filter beds used in European waste incinerators of \$513 to \$1,083 per pound (\$1.0 to \$2.2 million/ton) of mercury removed at 99 percent control. The commenter stated that the control costs for indurating furnaces should lie somewhere between the two cost ranges. The commenter also provided estimated costs for enhanced wet scrubbing systems for coal-fired boilers of \$76,000 to \$174,000 per pound (\$152 to \$348 million/ton) of mercury removed (NESCAUM, June 2000).

Response: There is no way to set a floor standard for mercury that is "achievable," as required by CAA section 112(d)(2), because there is no standard that can be duplicated by different sources or replicable by the same source. The opinion in *National Lime* did not deal with a situation where an emission standard was unachievable for these reasons. Mercury emitted from taconite iron ore processing plants originates primarily from the ore itself and to a much lesser extent the fuels powering the process. None of the taconite iron ore processing plants control mercury emissions by using at-the-stack controls. Thus, any differences in mercury emissions from existing indurating furnaces reflect different mercury levels in raw materials or fossil