

emissions at mercury chlor-alkali facilities for compliance demonstrations;

- The variability in the number of and location of exhaust vents at each facility affects the amount of air moved through the cell rooms and thus affects the mass emission rate of the fugitives; and
- The variability of the cell room roof configuration affects the feasibility of using the continuous emissions monitors at each facility.

Therefore, the establishment of numerical emission limitations for fugitive emissions from the cell room and other areas is "not feasible," as defined in CAA section 112(h)(2)(B). Thus, the final rule retains the work practice elements of the proposed rule.

However, in response to the concerns about unaccounted for mercury, we did add a provision in the final rule that requires each facility to record and report the mercury consumed each year. While there are no mercury consumption reduction targets in the final rule, we believe that reporting mercury consumption on a plant-specific basis will encourage additional action to identify unaccounted for mercury and reduce mercury consumption.

*Comment:* A commenter that submitted comments well after the close of the comment period expressed the opinion that there was a fundamental flaw in the proposed rule because the proposal will weaken existing sources' obligations to limit mercury emissions from the cell room. They cited 42 U.S.C. § 7412(d)(7), which prohibits emission standards from weakening existing standards. This commenter summarized the 40 CFR part 61 mercury NESHAP, which requires mercury cell chlor-alkali plants to not emit more than 2,300 grams per day of mercury from the entire facility, including the cell room, the by-product hydrogen streams, the end box ventilation system vents, and other sources of mercury. The commenter stated that even if emissions from all other points were zero, emission from the cell room cannot exceed 2,300 grams per day. The commenter acknowledged that an owner or operator may forego cell room emission testing and assume that cell room emissions are 1,300 grams/day, but pointed out that complying with these work practices does not absolve the owner or operator of the obligation to meet the applicable numeric emission standard.

The commenter contrasted this with the proposed rule, which established numerical emission standards for by-

product hydrogen streams, end box ventilation systems, and mercury thermal recovery unit vents, but not for cell room fugitive emissions. The commenter claimed that emissions from the cell room will be able to exceed 2,300 grams/day so long as the work practices are followed, when the rule as proposed prohibits such a result.

The commenter concluded that it is not sufficient to say that the work practices that have been proposed are more stringent than the existing requirements, because neither the existing nor proposed work practices by themselves require any given numeric level to be achieved. They argued that the existing numeric limit provides EPA and the public with an enforceable limit of performance to which owners and operators can be held. The commenter went on to indicate that such a numerical standard is particularly necessary, as plants are currently emitting far more than 2,300 grams per day of mercury. To support this assertion, the commenter provided information indicating that mercury cell plants add much more mercury to their cells than 2,300 grams per day, and they concluded that cell room emissions is a very likely way that mercury is lost. In conclusion, the commenter stated that it would be inappropriate for EPA to rely entirely on a work practice standard and eliminate stricter provisions that would enable the Agency to insist that facilities keep their emissions below a set level.

*Response:* The 40 CFR part 61, Mercury NESHAP, § 61.53(c)(1), contains requirements for stack sampling to determine emission levels for cell room ventilation systems at mercury chlor-alkali plants. If an owner or operator meets the prescribed work practice standards, they can assume a mercury emission rate from the cell room of 1,300 grams per day.

While the final rule does not retain the numerical emission limitation from the 40 CFR part 61 Mercury NESHAP, the requirements in the final rule for fugitive mercury emissions from the cell room are far more stringent than the design, maintenance, and housekeeping practices allowed by the Mercury NESHAP in lieu of meeting the numerical limit. In addition, the Mercury NESHAP contained only 18 work practice requirements as compared to the more than 80 design, operation, maintenance, inspection, and required actions for repair contained in tables 1 through 4 to the final rule. The work practice standards specify the equipment and areas to be inspected along with the frequency of the inspections and conditions that trigger corrective action. Response time

intervals for when the corrective actions must occur are also specified.

Furthermore, some types of inspections are required at more frequent intervals than required by the Mercury NESHAP (e.g., inspecting decomposers for hydrogen leaks twice per day rather than once each day). In addition, the detailed recordkeeping procedures and reporting provisions are more fully developed than those in the Mercury NESHAP, as well as requirements for storage of mercury-containing wastes.

Finally, the work practice standards contain a requirement for owners and operators to develop and implement a plan for the routine washdown of accessible surfaces in the cell room and other areas. The standards establish the duty for owners or operators to prepare and implement a written plan for washdowns and specify elements to be addressed in the plan. A requirement for washdowns is an important part of an overall approach to reducing cell room fugitive emissions.

Along with a floor-level periodic mercury monitoring program (discussed later), not only will the work practice standards in the final rule result in reduced mercury fugitive emissions (and, therefore, mercury consumption), but provide much more enforceable provisions so that an inspector can verify that they are being met.

In addition, we have calculated emission reductions for the final rule. Assuming that every facility is complying with the 1,000 grams per day limit from point sources (this value assumes that 1,300 grams per day of the 2,300 grams per day facility limit are being used for fugitive emissions), we estimate that baseline emissions from all nine existing facilities (relative to the Mercury NESHAP) are 3,285 kg/yr. We estimate that annual emissions after the application of MACT to be 217 kg/yr. Therefore, the final rule will result in emission reductions of 3,068 kg/yr, or approximately 93 percent from the existing Mercury NESHAP. This supports our position that we are not setting a standard that allows backsliding. Therefore, once the final rule compliance date ensues, sources subject to the provisions of the final rule will no longer be subject to the Mercury NESHAP.

*Comment:* Commenters disagreed with EPA's proposal to institute a continuous mercury monitoring program whereby owners and operators would be required to continuously monitor mercury concentration in the upper portion of each cell room and take corrective actions when elevated mercury vapor levels are detected. The commenters stated that the proposed