

The EPA feels that the subcategorization scheme it has used for this category of sources (as described above and in the proposed rule) is consistent with the statute, the legislative history, and EPA's past implementation of section 112(c) and the MACT program. The HAP emitted by the two subcategories (mercury cell chlor-alkali plants and non-mercury cell chlorine production) plants are different—while plants in both categories emit chlorine and HCl, only plants in the mercury cell subcategory emit mercury. The processes used to produce chlorine that the plants in the two subcategories used are generally different (because of the use of the mercury cells). Thus, no change was made in response to this comment and the final rule does not ban mercury cells (except the final rule does prohibit the emission of mercury from new or reconstructed chlor-alkali production facility sources).

With regard to the cost effectiveness of a ban of mercury cell chlor-alkali facilities, the commenter did not provide any basis for their estimate so we could not verify these costs. Further, we do not feel that "conversion" accurately describes the replacement of a mercury cell plant to another technology. There is little salvageable from a mercury cell plant that can be used in the construction of a membrane cell plant, so the demolition of the mercury cell plant followed by the construction of a membrane cell plant is a more accurate characterization.

Therefore, we did not promulgate a final rule that requires non-mercury technology for chlorine production.

Comment: Two commenters did not agree with the proposed "beyond-the-floor" emission limitations. They stated that there is no justification for EPA to set emission limits beyond the floor, as proposed. The commenters stressed that EPA is required to assess the cost-benefit relationship when considering "beyond the MACT floor" limitations. According to the commenters, the Agency did not set forth an accurate basis for costs associated with meeting the MACT floor or cost/benefits associated with meeting the "beyond the MACT floor" emission limitations.

These commenters were also concerned that the very low emission limits required by EPA's beyond-the-floor determination cannot be obtained by the industry as a whole. Specifically, the commenters stated that the Agency lacks high quality point source emission data upon which to base their "beyond-the-floor" limits. The commenters pointed out that the mercury emission limitations for hydrogen vent gas

streams are based on limited data provided by a single facility in Maine that has been closed for nearly 2 years. The commenters maintained that for all of the eleven plants combined (ten affected plants plus the closed Maine plant), there was very little high quality point source emission data. Due to the significant chance that the data used to develop the standard are biased and quantitatively non-representative, the commenters stated that the Agency was not justified in moving beyond the floor to the most stringent value ever obtained by the industry.

The commenters further argued that EPA's conclusion that the "beyond-the-floor" emission limitations can be met with existing, commercially available control equipment is not supported and thereby seriously flawed. The commenters pointed out that EPA presented no data in the preamble or elsewhere in support of their decision that the proposed standards could be met with commercially available control systems.

Response: First, we disagree with the commenters' assertions that we did not have justification for going beyond the floor, and that we did not have an accurate basis for costs associated with meeting the MACT floor or meeting beyond-the-floor emission limitations. We conducted a very detailed plant-specific cost impacts analysis which is available in the docket. The commenters did not provide any specific comments on this detailed analysis or any specific data or rationale to refute our cost analysis. Therefore, we stand by our original analysis and have not made any changes to the cost impacts approach. Based on our analysis, we concluded that the costs/benefits of going beyond the floor are warranted. Given the persistent nature of mercury in the environment and its associated health and welfare impacts, we continue to feel that the additional emission reductions that will be achieved by the beyond-the-floor option are warranted considering the associated costs.

However, in the proposal preamble (67 FR 44682), we acknowledged that there was uncertainty associated with the level of control associated with the beyond-the-floor option proposed because the molecular sieve adsorption control technology is no longer commercially available, and because the plant representing this level of control is no longer operating. We did not receive any comments indicating that the molecular sieve control technology is commercially available. Further, since the plant has closed, we were unable to obtain additional information to further scrutinize the data to ensure that they

were not biased and quantitatively non-representative. Therefore, we have concluded that we cannot fully demonstrate that the proposed beyond-the-floor standard is achievable using commercially available technology.

In the proposal preamble, however, we also stated that we were retaining the option of setting the standard at the next lowest normalized emission value of 0.076g Hg/Mg Cl₂ for plants with end box ventilation systems. The plant with this emissions level controls its by-product hydrogen system with a series of iodine and potassium iodide impregnated carbon adsorbers, and their end box ventilation system vent with a condenser and demister, which are commercially available technologies. Further, in the documentation for the proposed standard, we determined on a plant-specific basis which commercially available technologies could be made to comply with the proposed standard. The commenters provided no comment on why the application of the very specific application of these technologies could not achieve the emission limitations.

The emissions estimates for the facility with normalized emissions of 0.076 g Hg/Mg Cl₂ are based on weekly testing using methods that are modifications of EPA Methods 101A and 102. The primary difference between the methods used by the facility and the EPA Reference Methods is that the sampling is not isokinetic. We discussed our opinion that data obtained using this type of modified method were acceptable to use in MACT standards in the proposal BID. Therefore, it can be considered that the emission estimates used to establish the level of 0.076 grams Hg/Mg Cl₂ are based on weekly performance tests. We do not consider such data to be of low quality. Therefore for the final rule, we have selected the 0.076 grams Hg/Mg Cl₂ beyond-the-floor option as MACT for plants with end box ventilation systems.

For the by-product hydrogen stream for plants without end box ventilation systems and mercury thermal recovery unit vents, there were no questions raised regarding the availability of the control techniques used at the lowest emitting plants that formed the basis for the proposed emission limitations. Further, at proposal, we examined the data used to establish the emission limitations and determined that they were of adequate quality to be used to establish standards. Therefore, the final rule retains the proposed emission limitations for these emission sources.

Comment: Commenters were concerned that the proposed mercury