

membrane cell chlor-alkali plants, etc). Thus, on July 3, 2002, we issued different proposals to address the emissions of mercury from the mercury cell chlorine production subcategory sources (67 FR 44672) and the emissions of chlorine and HCl from both the non-mercury cell chlorine production subcategory and the mercury cell chlorine production subcategory sources (67 FR 44713). While we are finalizing the NESHAP for the mercury cell chlor-alkali subcategory in a separate action in today's **Federal Register**, with certain modifications from the proposal (including our decision not to regulate chlorine and HCl emissions under the authority of CAA section 112(d)(4)), we have decided to delete the non-mercury cell chlorine production subcategory in accordance with CAA section 112(c)(9)(B)(ii).

We agree with those two commenters who suggested that exercising our authority under CAA section 112(c)(9)(B)(ii) is appropriate for this subcategory for a number of reasons. First, CAA section 112(c)(9)(B)(ii) permits the deletion of subcategories, and that is what is at issue here. We are not deleting the entire chlorine production category; neither are we deleting the mercury cell subcategory, the emissions from which and production methodology are different from those facilities that produce chlorine using diaphragm cells, membrane cells, and the various processes that produce chlorine as a by-product. Second, the only HAP emitted in significant quantities from the facilities in this subcategory are chlorine and HCl. Chlorine and HCl are not carcinogens (<http://www.epa.gov/iris/>). Third, as indicated in the proposal, both of these HAP are threshold pollutants. For the proposed action, we obtained chlorine and HCl emission estimates from every known major source facility in the non-mercury cell chlorine production subcategory using our authority under section 114 of the CAA and conducted risk assessments for each facility. We updated these assessments based on comments received. Our analysis showed both at the time of proposal and shows now that emissions of these HAP from every source in the non-mercury cell chlorine production subcategory do not exceed a level which is "adequate to protect public health with an ample margin of safety." Finally, our evaluation of environmental effects indicates that no adverse impacts will result from emissions from any source within the subcategory. Therefore, we agree with the commenters that our evaluation is

sufficient for delisting the subcategory under CAA section 112(c)(9)(B)(ii), and that such action is justified as a logical outgrowth of public comments received on our proposed action.

We have reviewed in some detail the comments which have questioned our proposed use of CAA section 112(d)(4) to not establish NESHAP for chlorine and HCl emissions from facilities within the non-mercury cell chlorine production subcategory. We do not agree with these comments, and we are exercising our authority under CAA section 112(d)(4) to not regulate chlorine and HCl emissions from the mercury cell chlorine production source category. The NESHAP for the mercury cell chlorine subcategory is being promulgated in a separate action listed elsewhere in today's **Federal Register**. We have decided to delete the non-mercury cell chlorine production subcategory under CAA section 112(c)(9)(B)(ii) for the reasons stated above. We do not feel that we are obligated to exercise our authority under both CAA section 112(d)(4) and CAA section 112(c)(9)(B)(ii) as suggested by the commenter. Therefore, today's final action is to delete the non-mercury cell chlorine production subcategory under CAA section 112(c)(9)(B)(ii).

Comment: Some commenters concluded that we did not establish either cancer or non-cancer thresholds for HCl and chlorine and, therefore, it is illegal for EPA to attempt to use CAA section 112(d)(4) to set standards.

Response: Section 112(d)(4) of the CAA states that, "With respect to pollutants for which a health threshold has been established, the Administrator may consider such threshold level, with an ample margin of safety, when establishing emission standards under this subsection." The threshold level refers to the level of concentration of a chemical under which no health effects are expected from exposure, although this term is not defined in CAA section 112. Further, CAA section 112 does not address the process that must be followed to establish a threshold level.

The Reference Concentration (RfC) is a long-term threshold, defined as an estimate of a daily inhalation exposure that, over a lifetime, would not likely result in the occurrence of noncancer health effects in humans. We have determined that the RfC for HCl of 20 microgram per cubic meter ($\mu\text{g}/\text{m}^3$) is an appropriate threshold value for assessing risk to humans associated with exposure to HCl through inhalation (<http://www.epa.gov/iris/subst/0396.htm>).

In cases where we have not studied a chemical itself, we rely on the studies of other governmental agencies, such as the Agency for Toxic Substances and Disease Registry (ATSDR) or the Office of Health Hazard Assessment of California's Environmental Protection Agency (CAL EPA), for RfC values. The CAL EPA developed an RfC value of 0.2 $\mu\text{g}/\text{m}^3$ for chlorine based on a large inhalation study with rats.

Acute exposure guideline level (AEGL) toxicity values are estimates of adverse health effects due to a single exposure lasting eight hours or less. The confidence in the AEGL (a qualitative rating of either low, medium, or high) is based on the number of studies available and the quality of the data. Consensus toxicity values for effects of acute exposures have been developed by several different organizations, and we are beginning to develop such values. A national advisory committee organized by EPA has developed AEGL's for priority chemicals for 30-minute, 1-hour, 4-hour, and 8-hour airborne exposures. They have also determined the levels of these chemicals at each exposure duration that will protect against discomfort (AEGL1), serious effects (AEGL2), and life-threatening effects or death (AEGL3). Hydrogen chloride has been assigned AEGL values (65 FR 39264, June 23, 2000), including the 1-hour, AEGL1 of 2,700 $\mu\text{g}/\text{m}^3$ used in our revised analysis. Chlorine has also been assigned AEGL values (62 FR 58840), including the 1 hour AEGL1 of 1,500 $\mu\text{g}/\text{m}^3$ used in our revised analysis.

We maintain that the listing of health thresholds by EPA and other organizations in the public domain as discussed above has established health thresholds for HCl and chlorine. Further, we believe that the recognition of these levels by EPA, ATSDR, and CAL EPA indicates that chlorine and HCl are threshold pollutants.

Moreover, we provided the public an opportunity to comment on the thresholds for chlorine and HCl that we used in our original analysis for the proposed action. We used the same threshold level for HCl for both the proposed and final NESHAP for the pulp and paper mill category. (Although there is no mention of the HCl threshold in the final rule preamble for the pulp and paper mill NESHAP, we received no comment on the use of the threshold and used it in deciding not to set a limitation for HCl in the final NESHAP). We have also used the same threshold for HCl in the proposed NESHAP for lime production (67 FR 78046). There is no requirement in either CAA section 112(d)(4) or CAA section 112(c)(9)(B)(ii)