

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 63**

[OAR-2002-0016, FRL-7554-6]

RIN 2060-AK38

National Emission Standards for Hazardous Air Pollutants: Chlorine and Hydrochloric Acid Emissions From Chlorine Production**AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final decision to delete subcategory.

SUMMARY: This final action deletes the subcategory of sources that do not utilize mercury cells to produce chlorine and caustic. We have determined that this non-mercury cell chlorine production subcategory should be deleted because chlorine and hydrochloric acid (HCl), the only hazardous air pollutants (HAP) emitted, are not carcinogenic, have well-defined health thresholds, and chlorine and HCl air emissions from each non-mercury cell chlorine subcategory source do not exceed a level which is adequate to protect public health with an ample margin of safety. In addition, the emissions of chlorine and HCl will not result in any adverse environmental effects. This final action does not address chlorine and HCl emissions from mercury cell chlor-alkali plants. The final rulemaking for the mercury cell chlor-alkali plant subcategory is contained elsewhere in this issue of the **Federal Register**.

EFFECTIVE DATE: December 19, 2003.

ADDRESSES: *Docket.* We have established an official public docket for this action under Docket ID No. OAR-2002-0016, A-2002-09, A-2000-32, and OAR-2002-0017 available for public viewing at the Office of Air and Radiation Docket and Information Center (Air Docket) in the EPA Docket Center, (EPA/DC) EPA West, Room B102, 1301 Constitution Avenue, NW, Washington, DC. Docket No. A-2002-09 or OAR-2002-0016 contains supporting information used in developing the proposed and final action for the non-mercury cell subcategory of the chlorine production source category addressed in this action. The docket is available for public viewing at the Office of Air and Radiation Docket and Information Center (Air Docket) in the EPA Docket Center, (EPA/DC) EPA West, Room B102, 1301 Constitution Avenue, NW, Washington, DC and may be inspected from 8:30 a.m. to 4:30 p.m., Monday

through Friday, excluding legal holidays.

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SUPPLEMENTARY INFORMATION:

Docket. The official public docket consists of the documents specifically referenced in this final action, any public comments received, and other information related to this final action. Although a part of the official docket, the public docket does not include Confidential Business Information or other information whose disclosure is restricted by statute. The official public docket is the collection of materials that is available for public viewing. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

Electronic Docket Access. You may access this final action electronically through the EPA Internet under the "**Federal Register**" listings at <http://www.epa.gov/fedrgstr/>.

An electronic version of the public docket is available through EPA's electronic public docket and comment system, EPA Dockets. You may use EPA Dockets at <http://www.epa.gov/edocket/> to view public comments, access the index listing of the contents of the official public docket, and to access those documents in the public docket that are available electronically. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the docket facility in the above paragraph entitled "Docket." Once in the system, select "search," then key in the appropriate docket identification number.

Judicial Review. Under CAA section 307(b), judicial review of the final action is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit on or before February 17, 2004. Only those objections to the final action which were raised with reasonable specificity during the period for public comment may be raised during judicial review.

Affected entities. Entities potentially affected by this action include facilities engaged in the production of chlorine using non-mercury cells, for example,

diaphragm cells and membrane cells. Affected categories and entities include those sources listed in the primary Standard Industrial Classification code 2812 or North American Information Classification System code 325181.

This description is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this final action. If you have questions regarding the applicability of this final action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

World Wide Web Information. In addition to being available in the docket, an electronic copy of today's final action will also be available through EPA's World Wide Web site. Following signature, a copy of this final action will be posted on our policy and guidance page for newly proposed or promulgated rules: <http://www.epa.gov/ttn/oarpg>. The web site provides information and technology exchange in various areas of air pollution control. If more information regarding the web site is needed, call our web site help line at (919) 541-5384.

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I. Background

A. What Are the Sources of Authority for This Final Action?

Section 112 of the Clean Air Act (CAA) contains our authorities for reducing emissions of HAP. Section 112(c)(1) of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish national emission standards for hazardous air pollutants (NESHAP) for the listed source categories and subcategories. Section 112(c)(9) of the CAA contains provisions that allow the deletion of source categories listed under CAA section 112(c)(1) provided that certain conditions are met. For chemicals that may result in cancer in humans, the condition is that no source in the category emit HAP in quantities that result in a lifetime cancer risk of greater than one in a million to the individual in the population who is most exposed. For chemicals that result in adverse health effects other than cancer or adverse environmental effects, the conditions are that no source in the category emit HAP that exceed a level "adequate to protect public health with an ample margin of safety" and that no source emit HAP in quantities to cause adverse environmental effects.

Section 112(d) of the CAA requires us to promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of HAP listed pursuant to CAA section 112(c). Section 112(d)(2) of the CAA specifies that emission standards promulgated under the section shall require the maximum degree of reductions in emissions of the HAP subject to CAA section 112 that are deemed achievable considering cost and any non-air quality health and environmental impacts and energy requirements.

Each of the NESHAP established reflects the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as maximum achievable control technology (MACT).

The CAA includes exceptions to the general statutory requirement to establish emission standards based on MACT. For pollutants for which a threshold has been established, CAA section 112(d)(4) allows us ". . . to consider such threshold level, with an ample margin of safety, when establishing emissions standards. . . ."

B. What Is the Source Category?

The chlorine production source category was initially listed as a category of major sources of HAP pursuant to section 112(c)(1) of the CAA

on July 16, 1992 (57 FR 31576). At the time of the initial listing, we defined the chlorine production source category as follows: "The Chlorine Production Source Category includes any facility engaged in the production of chlorine. The category includes, but is not limited to, facilities producing chlorine by the following production methods: diaphragm cell, mercury cell, membrane cell, hybrid fuel cell, Downs cell, potash manufacture, hydrochloric acid decomposition, nitrosyl chloride process, nitric acid/salt process, Kel-Chlor process, and sodium chloride/sulfuric acid process."

In our subsequent analysis of the chlorine production source category, we did not identify any facilities that produce chlorine using hybrid fuel cells, the nitrosyl chloride process, the Kel-Chlor process, the sodium chloride/sulfuric acid process, or as a by-product from potash manufacturing. The majority of the source category is made up of chlor-alkali plants that produce chlorine and caustic (sodium hydroxide) using mercury cells, diaphragm cells, or membrane cells. We also identified operating plants that produce chlorine as a by-product: one from the production of sodium metal in Down cells, another from the production of potassium nitrate fertilizer that uses the nitric acid/salt process, and a third that produces chlorine as a by-product from primary magnesium refining (magnesium refining is a separately listed source category, and is being addressed on its own in a separate rulemaking). In addition, at a site where a membrane cell process is located, we have identified a process that produces chlorine through the decomposition of HCl. Our analysis shows that the only HAP emitted from sources within the chlorine production source category are chlorine, HCl, and mercury, and mercury is only emitted from mercury cell chlor-alkali plants.

Because of the differences in the production methods and the HAP emitted, we decided to divide the chlorine production category into two subcategories: (1) Mercury cell chlor-alkali plants, and (2) chlorine production plants that do not rely upon mercury cells for chlorine production (diaphragm cell chlor-alkali plants, 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). This final action deletes the non-mercury cell chlorine production subcategory. Elsewhere in today's **Federal Register**, we are issuing a final rulemaking to regulate mercury emissions for mercury cell chlorine production subcategory sources to regulate mercury emissions, and we are utilizing our authority under CAA section 112(d)(4) not to regulate chlorine and HCl emissions from the mercury cell chlorine production source category.

In the non-mercury cell chlorine production subcategory, we identified 20 major source plant sites where diaphragm or membrane cell chlor-alkali chlorine production plants are located. None of the non-mercury cell chlorine production processes at these sites emit HAP greater than 10 tons per year (tpy) of one HAP or 25 tpy of all HAP (that is, they would not be major source if they were not collocated with other HAP emission sources), but the total emissions from the entire contiguous plant site make each a major source.

C. How Did the Public Participate in Developing This Final Action?

Prior to proposal, we met with industry representatives to discuss the data and information used to develop the proposed action. In addition, these and other potential stakeholders, including equipment vendors and environmental groups, had opportunity to comment on the proposed action.

The proposed action was published in the **Federal Register** on July 3, 2002 (67 FR 44713). The preamble to the proposed action discussed the availability of technical support documents, which described in detail the information gathered during the standards development process. Public comments were solicited at proposal.

We received eight public comment letters on the proposed action. The commenters represent the following affiliations: industry representatives, governmental entities, and environmental groups during the public comment. In the post-proposal period, we had discussions with commenters and other stakeholders to clarify comments and to assist in our analysis of the comments. Records of these contacts are found in Docket No. A-2002-09 or OAR-2002-0016.

II. Summary of Final Action

This final action deletes the subcategory of the Chlorine Production Source Category for facilities that do not utilize mercury cells to produce chlorine and caustic. This action is

being made under our authority in CAA section 112(c)(9)(B)(ii). This final action does not impact the other subcategory of the Chlorine Production Source Category: Mercury Cell Chlor-Alkali Plants. A final rulemaking addressing the Mercury Cell Chlor-alkali Plant subcategory is contained in a separate section of today's **Federal Register**.

III. Summary of Major Comments

On July 3, 2002 (67 FR 44713), we proposed not to regulate chlorine and HCl emissions from all chlorine production processes (mercury and non-mercury cell) under the authority of CAA section 112(d)(4). We based that decision on our determination that no further control is necessary because chlorine and HCl are health threshold pollutants, and chlorine and HCl levels emitted from chlorine production processes are below their threshold values within an ample margin of safety, and they do not result in adverse environmental effects.

For a complete summary of all the comments received on the proposed rule and our responses to them, refer to the "National Standards for Hazardous Air Pollutants: Chlorine and Hydrochloric Acid Emissions from Chlorine Production: Summary of Public Comments and Responses" in Docket No. A-2002-09 or OAR-2002-0016.

A. What Issues Were Raised Regarding the Statutory Authority for This Final Action?

Comment: Several comments were received related to our decision not to regulate chlorine and HCl emissions from chlorine production under the authority of CAA section 112(d)(4). Some commenters supported that decision and believed the interpretation of our authority under CAA section 112(d)(4) was appropriate. In contrast, other commenters disagreed with EPA's interpretation of CAA section 112(d)(4). Some of the commenters believed that EPA should use its authority under CAA section 112(c)(9)(B)(ii).

Several commenters supported the decision not to regulate chlorine and HCl emissions from chlorine production plants under the authority of CAA section 112(d)(4). One commenter stated that EPA conducted an appropriate analysis to determine that human exposures from ambient concentrations are well below threshold values with an ample margin of safety. According to another commenter, any further regulation of chlorine and HCl emissions from the chlorine production industry would have no environmental benefits, but would result in costs for

monitoring, recordkeeping, and reporting efforts to certify compliance with any requirements. The commenter was concerned that a rulemaking would also stretch EPA's limited resources in monitoring for compliance. Three commenters stated that EPA's interpretation of their authority under CAA section 112(d)(4) was supported by the legislative history, which emphasizes that Congress included section 112(d)(4) in the CAA to prevent unnecessary regulation of source categories. The commenter agreed that under CAA section 112(d)(4), once EPA establishes that a pollutant has a health threshold and that exposure to that pollutant's emissions are below the health threshold, EPA should refrain from setting MACT standards for that pollutant. The commenter further suggested that EPA should use CAA section 112(d)(4) whenever setting emission standards under CAA section 112(d).

Three commenters disagreed with EPA's interpretation of CAA section 112(d)(4). They did not believe that CAA section 112(d)(4) could be used as an alternative to setting MACT standards under CAA section 112(d)(3). One commenter noted that the phrase "in lieu of" was not included in the CAA section 112(d)(4) provisions, and that its absence was intentional. In support of their claim, the commenter pointed to CAA section 112(d)(5), which does contain the phrase "in lieu of." The commenter interpreted CAA section 112(d)(4) to mean that health based thresholds can be considered when establishing the degree of MACT requirements, but not in place of the requirement to establish a MACT floor pursuant to CAA section 112(d)(3).

The commenter also pointed to the provisions of CAA section 112(c)(2) which require the Administrator to establish NESHAP for listed source categories and subcategories. The commenter was concerned that EPA evaluated emissions from chlorine production plants and concluded that since they do not pose a threat to human health and the environment, the Administrator is relieved of her responsibilities to establish a MACT standard. The commenter maintained that this position is not supported by CAA section 112(c)(2).

The commenter also referred to CAA section 112(d)(1) which states ". . . the Administrator shall promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of hazardous air pollutants listed for regulation pursuant to subsection (c) of this section. . . ."

Thus, the commenter stated that EPA did not have the authority to "make a determination of no regulation for a listed source category or pollutant."

Finally, the commenter referred to CAA section 112(d)(3), which contains the MACT floor provisions. According to the commenter, the intent of the NESHAP program is to develop a MACT floor, and EPA is not fulfilling the requirements of the CAA by not performing such an analysis. The commenter stated that a majority of facilities identified in the analysis have adequate controls due to State regulations and these controls should be incorporated into the MACT floor evaluation. The commenter was particularly concerned that by not developing a MACT floor, no new source MACT standards were created. The commenter requested that EPA perform a MACT floor analysis, and develop a NESHAP for new sources.

Two commenters stated that they believe that EPA should support their decision not to regulate the chlorine production source category by citing the provisions of CAA section 112(c)(9)(B)(ii) in addition to the provisions of CAA section 112(d)(4). The commenters stated that the evaluation performed by EPA would also be sufficient for deleting sources under CAA section 112(c)(9)(B)(ii), and that EPA's proposal to not regulate chlorine production is similar to deleting a subcategory of the chlorine production source category (*i.e.*, all chlorine production sources other than those using the mercury-cell chlor-alkali production process). Therefore, in addition to using the authority under CAA section 112(d)(4), the commenters suggested that EPA delete the subcategory using the authority under CAA section 112(c)(9)(B)(ii) to avoid any uncertainty over the use of its authority under CAA section 112(d)(4).

Response: The chlorine production source category was initially listed as a category of major sources of HAP pursuant to section 112(c)(1) of the CAA on July 16, 1992 (57 FR 31576). Our analysis shows that the only HAP emitted in significant quantities from sources within the chlorine production source category are chlorine, HCl, and mercury, and mercury is only emitted from mercury cell chlor-alkali plants. Because of the differences in the production methods and the HAP emitted, we decided to divide the chlorine production category into two subcategories: (1) mercury cell chlor-alkali plants, and (2) chlorine production plants that do not rely upon mercury cells for chlorine production (diaphragm cell chlor-alkali plants,

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)

that EPA develop or finalize a threshold for a particular HAP in a certain manner. In fact, CAA section 112(c)(9)(B)(ii), the authority we are utilizing here, does not mention the term threshold (although the term is implied by the use of the phrase "a level which is adequate to protect public health with an ample margin of safety." The thresholds we have used for both HCl and chlorine are consistent with the statutory language in CAA section 112(c)(9)(B)(ii).

B. What Issues Were Raised Related to the Potential Overlap With the HCl Production NESHAP?

Comment: Four commenters supported EPA's decision to include direct synthesis HCl as a part of the non-mercury cell chlorine production process. However, a commenter requested that we clarify that chlorine and HCl emissions from the absorber vents and associated storage vessels and transfer racks of the direct synthesis HCl production units were included in the risk analyses. To clarify applicability to the HCl Production NESHAP (subpart NNNNN of 40 CFR part 63), a commenter suggested that EPA modify the applicability provisions of subpart NNNNN.

Two commenters requested that we reevaluate collocated chlorine and HCl production sources and provide guidance so that the facilities can easily determine to which source category they belong. According to the commenters, collocated chlorine and HCl production sources may share transfer operations and storage tanks, and where appropriate, we should remove all facilities from the HCl acid production source category that meet the logical test outlined in the proposed action. The commenters stated that they believe the collocated integrated chlorine and HCl acid production facilities should be placed in the non-mercury cell chlorine production source category and removed from the HCl production source category.

Response: The final rule for subpart NNNNN of 40 CFR part 63 (68 FR 19076, April 17, 2003) states, in § 63.8985(d), that an "HCl production facility is not subject to this subpart if it produces HCl through the direct synthesis of hydrogen and chlorine and is part of a chlor-alkali facility." The definition of "HCl production facility" in subpart NNNNN includes "all HCl storage tanks that contain liquid HCl product that is produced in the HCl production unit" (e.g., direct synthesis unit) as well as "all HCl transfer operations that load HCl product produced in the HCl production unit

into a tank truck, rail car, ship, or barge, along with the piping and other equipment in HCl service used to transfer liquid HCl product from the HCl production unit to the HCl storage tanks and/or HCl transfer operations." Therefore, we have clarified that chlorine and HCl emissions from the absorber vents of direct synthesis HCl production units at chlor-alkali facilities, as well as the associated storage tanks and transfer operations specified above, are included in the non-mercury cell chlorine production subcategory and are not regulated under subpart NNNNN.

The clarifications we made in subpart NNNNN provide guidance for sources to determine to which source category their operations belong. As stated above, all HCl production facilities at chlor-alkali plants that produce HCl through direct synthesis are part of the non-mercury cell chlorine production subcategory. All other HCl production facilities (e.g., those that produce HCl as a co-product of a chlorinated organic compound) at sites where chlor-alkali plants are located are part of the HCl Production source category and subject to subpart NNNNN. In the case of shared storage tanks and transfer operations, any storage tank that stores, and any transfer operation that loads, liquid HCl product which was produced in an HCl production facility that is subject to subpart NNNNN is subject to the provisions of that subpart.

C. What Issues Were Raised Regarding the Risk Assessment That Forms the Technical Basis for This Final Action?

Comment: In the analysis for the proposed action, we used the HCl RfC to determine the long-term health effects of chlorine emissions, since chlorine photolyzes very quickly to HCl in sunlight. Two comments supported that methodology and stated that our decision was based on sound scientific knowledge of the pollutants of concern.

In contrast, two other commenters did not agree with our use of the HCl RfC as a threshold level for chlorine. The commenters stated that not all of the annual chlorine emissions can be considered as HCl and, therefore, the chlorine exposure was underestimated. The commenters argued that chlorine emissions will not undergo photolysis to convert to HCl when there is not bright sunshine (i.e., at night or on cloudy days).

Response: The widely accepted fact that chlorine is photolyzed in sunlight formed the basis for the assumption in the original risk assessment that chronic exposure to chlorine would not occur. As a result of the comment, we re-

examined the literature on the atmospheric fate of chlorine in the atmosphere to validate our original assumption.

The additional information obtained from the literature confirmed our earlier information. There are several different pathways that molecular chlorine can take, including photolysis (reaction with light), reactions with hydroxyl radicals (OH), reactions with oxygen atoms (O), and reactions with water vapor (H₂O). Each pathway results in different amounts of Cl₂ being removed from the troposphere, and different pathways are predominant at different times of the day. However, photolysis is the primary pathway.

Therefore, this information did not fundamentally change the assumption made in the original risk assessment, which was that on a long-term basis, individuals will be exposed more to hydrochloric acid formed from the photolysis of chlorine than to chlorine. However, the commenters are correct that there will be situations where individuals will be exposed to chlorine. Therefore, in addition to the assessment where we considered only acute exposure to chlorine, we concluded that it was appropriate to consider the effects of chronic exposure to chlorine emissions from chlor-alkali plants. In order to provide an upper bound estimate of the chronic risks to compare with the lower bound estimates assuming that all chlorine was converted to HCl, we conducted modeling assuming that no chlorine is photolyzed.

In general, we consider an exposure concentration which is below the RfC concentration (what we call a hazard quotient of less than 1) to be safe. This is based on the definition of RfC. The RfC is a peer reviewed value defined as an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily inhalation exposure to the human population (including sensitive subgroups) that is likely to be without appreciable risk of deleterious noncancer effects during a life time (i.e., 70 years).

We conducted additional modeling for all facilities within the subcategory using the same model used for the proposed action (ISCST3) to estimate chronic chlorine exposure using the assumption that no chlorine is photolyzed to HCl. The hazard quotients resulting from this additional modeling defined the upper bound of our risk assessment. The highest upper-bound hazard quotient estimated by the model is just over 0.3. (For more details regarding this revised risk assessment, refer to table 2 of the responses to

comment document, available in the docket.) Given the health protective assumptions used in this analysis, the value of 0.3 represents a hypothetical exposure that is well above what we would expect actual exposures to be. This is because chlorine is converted to HCl in the presence of sunlight within a few minutes. In addition, the hazard quotient of 0.3, which results from this exposure scenario is well below the safe value of 1. Thus, we have concluded that, even assuming that some chronic exposure to chlorine may occur, none of the sources included in this subcategory will have emissions of chlorine or HCl that exceed a level of exposure which is adequate to protect public health and the environment with an ample margin of safety.

Comment: Two commenters did not support EPA's use of the AEGL2 for use as a short-term exposure limit for chlorine and HCl. One commenter stated that the AEGL2 values would not sufficiently protect public health because they would allow emissions at levels that cause discomfort, and according to the commenter, discomfort is an adverse health effect. The commenter also complained that EPA did not explain why it chose to use AEGL2 rather than AEGL1 or AEGL3. The commenter explained that although emissions from chlorine plants did not exceed AEGL2 values, the emissions may exceed AEGL1 values, and if they did, the proposed action would not meet the statutory requirements. Another commenter stated that AEGL limits are not appropriate for assessing daily human exposure scenarios because they were developed for emergency planning. The commenter recommended that EPA should use the American Conference of Governmental Industrial Hygienists (ACGIH), which has a 1-hour Short Term Exposure Limit (STEL) similar to the AEGL1 value of 1 parts per million (ppm) (for chlorine) and is used to protect against eye and mucous membrane irritation. The commenter's policy as a State agency is to add an additional safety factor of ten to ACGIH STEL values to protect for sensitive individuals, since ACGIH values were established for healthy workers. The commenter stressed that EPA must use conservative benchmarks before concluding that an ample margin of safety exists.

Response: The AEGL values represent short-term threshold or ceiling exposure values intended for the protection of the general public, including susceptible or sensitive individuals, but not hypersusceptible or hypersensitive individuals. The AEGL values represent biological reference values for this

defined human population and consist of three biological endpoints for each of four different exposure periods of 30 minutes, 1 hour, 4 hours, and 8 hours.

The AEGL2 level is defined as follows: AEGL2 is the airborne concentration of a substance at or above which it is predicted that the general population, including susceptible, but excluding hypersusceptible individuals, could experience irreversible or other serious, long-lasting effects or impaired ability to escape. Airborne concentrations below the AEGL2, but at or above AEGL1 represent exposure levels that may cause notable discomfort.

As utilized in the proposed action, the AEGL2 1-hour concentrations for chlorine and HCl are 5,800 $\mu\text{g}/\text{m}^3$ and 33,000 $\mu\text{g}/\text{m}^3$, respectively.

The AEGL1 level is defined as follows: AEGL-1 is the airborne concentration of a substance at or above which it is predicted that the general population, including "susceptible" but excluding "hypersusceptible" individuals, could experience notable discomfort. Airborne concentrations below AEGL-1 represent exposure levels that could produce mild odor, taste, or other sensory irritations.

The 1-hour AEGL1 concentration for chlorine is 2,900 $\mu\text{g}/\text{m}^3$ and the corresponding value for HCl is 2,700 $\mu\text{g}/\text{m}^3$. The ACGIH short term exposure limit for chlorine, which is 1 ppm is approximately equal to the AEGL1 value of 2,900 $\mu\text{g}/\text{m}^3$.

Although we stand by our original analysis, which used the AEGL2 level, we have referenced the commenter's suggested use of the AEGL1 values (possibly with a safety factor) for determining whether an ample margin of safety has been obtained. Therefore, we simply compared the short-term (1-hour average) modeling results from the original acute risk assessment to the AEGL1 values. These results were obtained by modeling the maximum allowable hourly emissions reported in the CAA section 114 responses for each of the sources. For plants that did not report fugitive emissions, fugitive emissions were estimated using worst-case emission factors.

The maximum modeled 1-hour chlorine concentration for 16 of the 20 plants is less than 5 percent of the AEGL-1 (and ACGIH) value for chlorine. Further, the highest modeled concentration for any plant, 346 $\mu\text{g}/\text{m}^3$, is less than 12 percent of the AEGL1 values. The highest modeled 1-hour HCl concentration for any plant, 120 $\mu\text{g}/\text{m}^3$, is less than 5 percent of the AEGL1 value for HCl.

Based on that comparison, we conclude that the chlorine and HCl emissions from non-mercury cell chlorine production plants do not represent an unsafe level of acute exposure. Further, we maintain, along with the chlorine exposure assessment, that proves that an ample margin of safety is provided with no additional control.

Comment: Two commenters supported EPA's method of selecting a risk assessment approach to meet the unique needs of the chlorine production industry. The commenters agreed that the risk assessment methodology should not be interpreted as a standardized approach that would set a precedent for how EPA will apply CAA section 112(d)(4) in future cases. Furthermore, the commenters stated that degree of conservatism built into all aspects of the risk assessment conducted for the chlorine production source category could vary greatly in future risk assessments for other source categories. The commenters stressed that they believe that the conservative assumptions made in the health effects assessment, emissions estimates, and exposure assessment were appropriate for the proposed action.

In contrast, one commenter stated that the risk assessment fell short of the Agency's prior practice. According to the commenter, whenever EPA has made determinations to regulate a specific pollutant based on health considerations (e.g., national ambient air quality standards (NAAQS) for ozone and particulate matter (PM)), the Agency evaluated health effects and exposure in great detail. The commenter contended that in that case, EPA appears to be content with "the bare and unsupported assumptions about what health levels are safe." The commenter argued that it was not appropriate for EPA to use a rigorous approach when setting standards and a more cursory approach when making a decision not to regulate.

Response: We disagree with the one commenter's characterization of the assessment that forms the basis for this decision, and we strongly dispute the characterization of the assessment as "bare and unsupported." We maintain that the RfC and AEGL values used as benchmarks for the assessment are scientifically sound and appropriate. The emissions data and other inputs used for this analysis, which were provided by the industry and checked by our staff, are representative of the industry.

In this assessment, the predicted health effects estimated, using very conservative inputs and assumptions, were well below the recognized health

thresholds. While our approach in this particular action may not be the same as an approach for a NAAQS, it has been certainly more than cursory. We have looked at emissions and exposure data for each of the sources in the subcategory. We have established hazard indices for chlorine and HCl for each source in the subcategory. We performed a qualitative ecological assessment. Moreover, in response to comment received, we have adjusted our analyses and taken into account comments that we have received when performing these re-assessments. We will base each risk assessment for this and future regulatory action on sound scientific principles.

Comment: In the proposed action, the risk assessment modeling was conducted by placing receptors at the geographic center of census blocks within 2 kilometers of the site and in the population-weighted centers of census block groups or census tracts out to 50 kilometers. Two commenters did not agree with that methodology for determining receptor location for threshold pollutants. One commenter stated that EPA's methodology would be more appropriate for cancer causing agent, where the risk is based on probabilities of health effects. The commenter argued that for non-cancer (*i.e.*, threshold pollutants) compounds, placing the receptors at the center of census tracts would not properly identify the highest impacts close to the facility. They felt that it was more appropriate to measure the exposure of the most exposed individual (*e.g.*, someone living at the fence line of a facility or directly downwind).

Response: We agree with the commenters that the greatest impacts will likely occur near the facility for this source category. However, we do not agree with the commenters that our approach fails to meet statutory requirements. We do not feel that considering an "ample margin of safety" means that we must demonstrate no risk or adverse health effects for a theoretical person living at the fence line. Rather, we feel it is appropriate to assess the risks at locations where people most likely reside. A census block is the smallest geographic unit for which the Census Bureau tabulates 100-percent data. While census blocks in rural areas may be larger, many blocks correspond to individual city blocks in more populated areas. The commenter is correct in that an individual could live closer to the plant than the center of the census block, and our approach would have slightly underestimated risk. It is just as likely, however, that the closest individual could live farther from the

plant than the center of the census block causing our risk estimates to be slightly overestimated. By placing receptors at the center of populated census blocks on all sides of a facility, we have evaluated people living downwind. In conclusion, we continue to feel that placing a receptor in the geographic center of populated census blocks near a facility is a well established approach to exposure modeling which results in a reasonable approximation of estimating the risks where people actually live, and we maintain that this methodology is appropriate for actions taken under the authority of either CAA section 112(d)(4) or CAA section 112(c)(9)(B)(ii).

Comment: One commenter stated that the total chlorine and HCl emissions from some of the facilities included in the risk assessment were grossly underestimated. In support of their argument, the commenter pointed out potential inconsistencies in the background emissions data contained in the docket. Specifically, the total chlorine emissions from the Dow Chemicals, Freeport, Texas facility were reported in the risk assessment document to be 22 pounds per year (lb/yr), but in the 1996 Chlorine Production Summary Report, chlorine emissions from only one production process located at the Dow Chemicals facility (the diaphragm cell process) were reported to be 9,800 lb/yr. The commenter stated that since emissions from other processes at the Dow facility were not included in the summary report, the emissions were likely to be much higher. The commenter also noted that the Dow facility had the lowest emissions (22 lb/yr) of facilities reported in the risk assessment document and the highest chlorine production volume (1.8 million lb Cl₂/yr), which also indicates that the emissions from the Dow facility were underestimated.

According to the commenter, the inconsistencies between the reports undermine the credibility of the risk assessment to support a decision to not regulate this source category. Furthermore, the commenter stated that they believe that the emission inventory information provides justification for a need to establish a MACT floor. The commenter concluded that the risk assessment was flawed because the potential impacts on health and the environment were underestimated.

Response: The primary sources of the emission estimates used in the risk assessment for this source category were responses submitted directly by the facilities in response to a request for information under our authority in section 114 of the Clean Air Act. A

review of the data was conducted as they were received, and follow-up questions asked of the industry representatives to clarify the information submitted. After the analysis, we were satisfied with the quality of the data, with one exception. Only one-half of the facilities submitted chlorine emission estimates from fugitive sources. One of the areas of focus in the follow-up questions was to verify the fugitive emission estimates for those facilities that did submit such estimates. Our conclusion was that fugitive emissions are to be expected from every non-mercury cell chlorine production plant, so we estimated fugitive emissions for those that did not submit estimates. That was done using the highest emission factor calculated from the plants that did report fugitives. The use of the "worst-case" factor was appropriately conservative for this assessment.

The commenter compared the emissions used in the assessment to 1991/1992 base year emissions in an earlier report on this industry, the 1996 Chlorine Production Summary Report, and correctly noted that there is a large discrepancy between the emissions levels for Dow Chemical's plant in Freeport, Texas. As a result of that comment, we made a comparison of the emissions from all plants between these two sources of information.

The comparison revealed that the Dow Freeport facility is only one of only two plants whose emissions used in the risk assessment were lower than the 1991/1992 base year emissions in the 1996 summary report. In fact, the 2000/2001 emissions used in the risk assessment for the other facilities with reported emissions in both documents averaged five times HIGHER than those reported in the 1996 summary document. Clearly, the comparison does not lead to the conclusion that the risk assessment was based on grossly underestimated emissions. A review of the data submitted by the two facilities whose 2000/2001 emissions were substantially lower than their 1991/1992 emissions did not result in any obvious errors or questionable assumptions that could be disputed with the available information. Furthermore, according to the facility, the chlorine and HCl emissions reported in the 1996 summary document included emissions from processes within the plant not related to chlorine production. That was corrected for the 2000/2001 emissions data submittal. Therefore, no changes were made as a result of the review of the reported emissions data.

The comparison did result in the concern that the emissions, particularly

the fugitive emissions estimated using the worst-case factor, had been overestimated. As a point of comparison, we obtained the 2001 chlorine releases from the Toxic Release Inventory (TRI) for all ten sites for which fugitive emissions were estimated using the worst-case factor. We found that nine of the ten plants had total chlorine fugitive releases reported in TRI that were less than the those used in the risk assessment. For instance, the PPG facility in Lake Charles, Louisiana, reported 8,000 lb/yr of fugitive chlorine releases for the entire site (a very large chemical complex). We estimated 31,178 lb/yr using the worst-case emission factor. We concluded that it was overly conservative to use these estimates in light of the TRI information and in fact, we likely overestimated the fugitive emissions for these plants. Therefore, in the revised modeling for this final action for chronic chlorine exposures, we used the total chlorine fugitive releases from TRI in the revised assessment for eight plants. That is still conservative as these TRI values represent chlorine fugitive releases from all processes at the site, not just the non-mercury cell chlorine production processes. For two plants, company representatives provided a breakdown of the portion of the TRI emissions that were from the non-mercury cell chlorine production processes, and those values were used in the re-assessment.

Comment: One commenter stated that all chlorine emissions from non-mercury chlorine production facilities that are collocated with other source categories need to be reviewed as a whole when evaluating public health risk, adverse environmental effects, and possible control strategies. The commenter stressed that other sources of chlorine and HCl should be included in the risk assessment under CAA section 112(d)(4). The commenter was concerned that not accounting for all chlorine and HCl emissions from a facility would provide the community with a false sense of assurance of protection, and is not consistent with the legislative intent of the CAA to consider cumulative HAP exposure issues through an integrated approach under CAA sections 112(d), 112(f), and 112(k). Therefore, the commenter requested that EPA evaluate the potential for adverse health and environmental impacts using conservative risk assessment methodology that incorporates all known chlorine and HCl emissions from a contiguous facility.

Response: Section 112 of the CAA requires us to list categories and subcategories of major sources and area

sources of HAP, and to establish NESHAP for the listed source categories and subcategories. In directing us how to establish MACT emission limits, section 112(d)(3) of the CAA requires us to set the emission limitation at a level that assures that all major sources achieve the level of control at least as stringent as that already achieved by the better-controlled and lower-emitting sources in each source category or subcategory. Therefore, the entire MACT program is structured on a source category-specific basis. All MACT standards developed to date have addressed emissions from specific source categories.

There are instances where non-mercury chlorine production facilities are collocated with other source categories. However, based on the risk assessment for chlorine and HCl emissions from chlor-alkali plants, the predicted impacts from chlorine and HCl at these chlor-alkali plants are extremely low. We believe that the human health and environmental impacts from all sources in the category even when collocated with other chlorine and HCl emissions will still be within an ample margin of safety to protect the public health, and will not cause adverse environmental effects. Moreover, as indicated in the preamble to the proposed rule, most major processes at the sites where non-mercury cell chlorine production facilities are located are subject to, or will be subject to, NESHAP to reduce HAP emissions (67 FR 44714, July 3, 2002). Therefore, it would not be appropriate to include emissions from those sources in an assessment for the non-mercury cell chlorine production source category conducted under the authority of CAA section 112(d)(4).

Comment: Two commenters stated that the environmental effects analysis was not adequate. One commenter stated that potential ecological effects of HCl emissions have not been properly referenced. One commenter stated that EPA's proposed action falls short of its obligation to protect against environmental effects. According to the commenter, EPA has understated its statutory obligation in the proposed action. The commenter referred to the legislative history, which indicates that CAA section 112(d)(4) requires standards that "would not result in adverse environmental effects which would otherwise be reduced or eliminated." The commenter listed the several shortcomings in the EPA's environmental assessment.

The commenter concluded that although EPA acknowledged that it had an obligation to ensure that any

standards set under CAA section 112(d)(4) did not have any adverse environmental effects, the Agency did not properly consider the issue. Therefore, commenter stated that they believed that EPA could not promulgate standards under CAA section 112(d)(4) without contravening the CAA.

Response: While CAA section 112(d)(4) makes no mention of environmental effects, we took the potential of such adverse effects into account when we issued our proposed action. In addition, CAA section 112(c)(9)(B)(ii), which is the authority we are citing in today's final action to delete this subcategory, does require that we show there are no adverse environmental effects from emissions from the subcategory.

The level of our analysis at proposal was adequate to satisfy the requirements of CAA section 112(c)(9)(B)(ii). The commenters did not suggest that they believed there was the potential for adverse environmental effects from HCl or chlorine emissions from non-mercury cell chlorine production plants. Were there any evidence that such adverse effects were likely, or even possible, we would have conducted a more intensive ecological risk assessment.

The commenters are correct, however, that we did not discuss the ecological effects of chlorine. That was because, as was stated in the proposal preamble, we did not perform a separate evaluation of chronic chlorine exposure because chlorine is converted to HCl in the atmosphere so rapidly. Following is a brief summary of the environmental effect of chlorine.

Atmospheric exposure is the primary pathway for environmental effects from chlorine emissions. However, since most chlorine is converted to HCl, studies have focused on the effects of HCl on vegetation. Although plant exposures to elevated levels of chlorine can cause plant injury, it tends to be converted to other, less toxic forms rather rapidly in plants, and may not result in the direct accumulation of toxic pollutant residuals important in the food chain.

Plant studies have found foliar damage due to chlorine emissions and foliar damage, decreased levels of chlorophyll a and b, decreased leaf areas, obvious chlorosis, and a decline in fruit production due to chlorine emissions.

There is evidence of effects to animals due to accidental and/or catastrophic exposures, but the chlorine concentrations of these exposures are unknown. However, there is no data on exposure to historic or atmospheric concentrations.

More information is available on the effects of chlorine from aquatic exposures. However, there is no evidence that suggests that emissions of chlorine from industrial sources in the air contribute significantly to aquatic concentrations of chlorine.

One study reported a significant decrease in phytoplankton activity following exposure to 0.1 ppm chlorine in cooling tower water. Additional laboratory studies showed that continuous exposure to 0.002 milligram per liter (mg/L) total residual chlorine (TRC) resulted in depressed algal biomass in naturally-derived microcosms.

When exposed continuously for 96 hours to 0.05 mg/L TRC, the Eurasian water milfoil showed a significant reduction in shoot and dry weights, shoot length, and chlorophyll content.

Aquatic invertebrates are very sensitive to chlorine and reaction products of chlorine, with early life stages showing the most sensitivity. For example, free chlorine, monochloramine, and dichloroamine have been shown to reduce the rate of oyster larvae survival. Many studies have been performed, and the results are highly variable depending on the chlorine species, the lifestage of the invertebrate, and other factors such as salinity. The most sensitive aquatic species appears to be molluscan larvae, with LC₅₀ concentrations of 0.005 mg/L. Sublethal effects have also been studied, including reduced growth, reduced motility, and reproductive failure.

The effects on fish also vary depending on the life stage and fish species, and environmental factors, such as the pH, temperature, and type of chlorine species. Larval stages are more susceptible to effects, and freshwater species are more sensitive than marine species. Free chlorine is generally more toxic than residual chlorine; where the form of chlorine is dependent on the pH of the water. Sublethal effects such as avoidance, reduction of diversity in chlorinated effluents, reduction or elimination of spawning, abnormal larvae, reduced oxygen consumption, and gill damage have been noted. Many LC₅₀ values were reported, ranging from 0.08 mg/L after 24 hours of exposure to TRC to 2.4 mg/L after 0.5 hours of exposure to TRC.

Acute and chronic exposures to predicted chlorine and HCl concentrations around the sources are not expected to result in adverse toxicity effects. These pollutants are not persistent in the environment. The chlorine and HCl emitted should not significantly contribute to aquatic chlorine concentrations, and are not

likely to accumulate in the soil. Chlorine rapidly converts to HCl in the atmosphere, and chlorine and HCl are not believed to result in biomagnification or bioaccumulation in the environment. Therefore, we do not believe there will be adverse ecological effects due to chlorine and HCl emissions from non-mercury cell chlorine production plants.

IV. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993) the Agency must determine whether the regulatory action is "significant" and, therefore, subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

- (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;
- (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

It has been determined that this final action is not a "significant regulatory action" under the terms of Executive Order 12866 and is, therefore, not subject to OMB review.

B. Paperwork Reduction Act

Since there is no rule associated with this final action, there are no information collection requirements.

C. Regulatory Flexibility Act

The RFA generally requires that an agency conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administrations' regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This final action deletes the subcategory of sources that do not utilize mercury cells to produce chlorine and caustic. We conclude that no further control or regulation is necessary.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and Tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and Tribal governments, in aggregate, or to the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires us to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows us to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if we publish with the final rule an explanation as to why that alternative was not adopted.

Before we establish any regulatory requirements that may significantly or uniquely affect small governments, including Tribal governments, we must have developed under section 203 of the UMRA, a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the

development of our regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

We have determined that this final action does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and Tribal governments, in the aggregate, or the private sector in any 1 year. Thus, today's final action is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, this final action contains no regulatory requirements. Therefore, the final action is not subject to the requirements of section 203 of the UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132 (64 FR 43255, August 10, 1999) requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of Government."

The final action does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of Government, as specified in Executive Order 13132. Thus, Executive Order 13132 does not apply to the final action.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175 (65 FR 67249, November 6, 2000) requires EPA to develop an accountable process to

ensure "meaningful and timely input by Tribal officials in the development of regulatory policies that have tribal implications." "Policies that have Tribal implications" is defined in the Executive Order to include regulations that have "substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes."

The final action does not have Tribal implications. It will not have substantial direct effects on Tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to the final action.

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

The Executive Order 13045 applies to any rule (1) that OMB determines is "economically significant," as defined under Executive Order 12866, and (2) the EPA determines that the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental, health, or safety aspects relevant to children and explain why the rule is preferable to other potentially effective and reasonably feasible alternatives considered by the EPA. Since there is no rule associated with this final action, Executive Order 13045 does not apply.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

The final action is not subject to Executive Order 13211 (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer Advancement Act (NTTAA) of 1995 (Public Law 104-113; 15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in their regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. The NTTAA directs EPA to provide Congress, through annual reports to the Office of Management and Budget (OMB), with explanations when an agency does not use available and applicable voluntary consensus standards.

The final action does not involve technical standards, therefore, the NTTAA does not apply.

J. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Today's final action is not a rule, therefore, the Congressional Review Act does not apply.

List of Subjects in 40 CFR Part 63

Environmental protection, Air emissions control, Hazardous air pollutants.

Dated: August 29, 2003.

Marianne L. Horinko,

Acting Administrator.

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