

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 60

[EPA-HQ-OAR-2005-00475; FRL-]

RIN 2060-AK14

**National Emission Standards for Organic Hazardous Air
Pollutants From the Synthetic Organic Chemical Manufacturing
Industry**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: In 1994, EPA promulgated national emission standards for hazardous air pollutants (NESHAP) for the synthetic organic chemical manufacturing industry. This rule is commonly known as the hazardous organic NESHAP (HON) and established maximum achievable control technology standards to regulate the emissions of hazardous air pollutants from production processes that are located at major sources.

The Clean Air Act directs EPA to assess the risk remaining (residual risk) after the application of the maximum achievable control technology standards and to promulgate additional standards if required to provide an ample margin of safety to protect public health or prevent an adverse environmental effect. The Clean Air Act also requires us to review and revise maximum achievable control technology standards, as necessary, every 8 years, taking

into account developments in practices, processes, and control technologies that have occurred during that time.

On June 14, 2006, EPA proposed two options regarding whether to amend the current emission standards for synthetic organic chemical manufacturing industry units. This action finalizes one of those options, and reflects our decision not to impose further controls and not to revise the existing standards based on the residual risk and technology review. It also amends the existing regulations in certain aspects.

DATES: This final rule is effective on [INSERT DATE OF PUBLICATION].

ADDRESSES: Docket: EPA has established a docket for the final rule under Docket ID No. EPA-HQ-OAR-2005-0475. All documents in the docket are listed on the www.regulations.gov web site. Although listed in the index, some information is not publicly available, e.g., confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically at www.regulations.gov or in hard copy at the Air and Radiation Docket, EPA West, Room B-102, 1301

Constitution Ave., NW, Washington, DC. The 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 Public Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket is (202) 566-1742.

NOTE: The EPA Docket Center suffered damage due to flooding during the last week of June 2006. The Docket Center is continuing to operate. However, during the cleanup, there will be temporary changes to Docket Center telephone numbers, addresses, and hours of operation for people who wish to make hand deliveries or visit the Public Reading Room to view documents. Consult EPA's Federal Register notice at 71 FR 38147 (July 5, 2006) or the EPA website at www.epa.gov/epahome/dockets.htm for current information on docket operations, locations, and telephone numbers. The Docket Center's mailing address for U.S. mail and the procedure for submitting comments to www.regulations.gov are not affected by the flooding and will remain the same.

FOR FURTHER INFORMATION CONTACT: For further information contact Mr. Randy McDonald, U.S. EPA, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, Coatings and Chemicals Group (E143-01), Research Triangle Park, NC 27711, telephone (919)541-5402, fax (919) 541-0246, e-mail mcdonald.randy@epa.gov.

SUPPLEMENTARY INFORMATION: Regulated Entities. Categories and entities potentially regulated by the final rule are synthetic organic chemical manufacturing industry (SOCMI) facilities that are major sources of hazardous air pollutant (HAP) emissions. The final rule affects the following categories of sources:

Category	NAICS* Code	Examples of potentially regulated entities
Industry	325	Chemical manufacturing facilities

* North American Industry Classification System

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by the final rule.

Worldwide Web (WWW). In addition to being available in the docket, electronic copies of the final rule are available on the WWW through the Technology Transfer Network Web site (TTN). Following signature, EPA posted a copy of the final rule on the TTN's policy and guidance page for newly proposed or promulgated rules at www.epa.gov/ttn/oarpg. The TTN provides information and technology exchange in various areas of air pollution control.

Judicial Review. Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final rulemaking is

available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by [INSERT DATE 60 DAYS FROM DATE OF PUBLICATION]. Under CAA section 307(d)(7)(B), only an objection to the final rulemaking that was raised with reasonable specificity during the period for public comment may be raised during judicial review. Moreover, under CAA section 307(b)(2), the rule's requirements may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce these requirements.

Section 307(d)(7)(B) of the CAA further provides a mechanism for us to convene a proceeding for reconsideration, "[i]f the person raising an objection can demonstrate to the EPA that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule." Any person seeking to make such a demonstration to us should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, Ariel Rios Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding FOR FURTHER INFORMATION CONTACT section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code

2344A), U.S. EPA, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

Organization of this Document. This preamble is organized as follows:

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I. Background Information

- A. What is the statutory authority for these actions?

Section 112 of the CAA establishes a two-stage regulatory process to address emissions of HAP from stationary sources. In the first stage, after EPA has

identified categories of sources emitting one or more of the HAP listed in CAA section 112(b), CAA section 112(d) calls for us to promulgate national performance or technology-based emission standards for those sources. For "major sources" that emit or have the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year, these technology-based standards must reflect the maximum reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts) and are commonly referred to as maximum achievable control technology (MACT) standards. We first published the MACT standard for SO₂ on April 22, 1994, at 59 FR 19402 (codified at 40 CFR part 63, subparts F, G, H, and I). EPA is then required to review these technology-based standards and to revise them "as necessary, taking into account developments in practices, processes, and control technologies," no less frequently than every 8 years, under CAA section 112(d)(6).

The second stage in standard-setting is described in CAA section 112(f). This provision requires, first, that EPA prepare a Report to Congress discussing (among other things) methods of calculating risk posed (or potentially posed) by sources after implementation of the MACT

standards, the public health significance of those risks, the means and costs of controlling them, actual health effects to persons in proximity to emitting sources, and recommendations as to legislation regarding such remaining risk. EPA prepared and submitted this report (Residual Risk Report to Congress, EPA-453/R-99-001) in March 1999. The Congress did not act on any of the recommendations in the report, thereby triggering the second stage of the standard-setting process, the residual risk phase.

CAA Section 112(f)(2) requires us to determine, for each CAA section 112(d) source category, whether the MACT standards protect public health with an ample margin of safety. If the MACT standards for HAP "classified as a known, probable, or possible human carcinogen do not reduce lifetime cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than 1-in-1 million," EPA must promulgate residual risk standards for the source category (or subcategory) as necessary to provide an ample margin of safety to protect public health. EPA may also adopt more stringent standards, if necessary, to prevent an adverse environmental effect (defined in CAA section 112(a)(7) as "any significant and widespread adverse effect * * * to wildlife, aquatic life, or natural resources * * *."), after considering cost,

energy, safety, and other relevant factors.

B. What did we propose?

On June 14, 2006 (71 FR 34422), we proposed two options regarding whether to revise the current emission standards for new and existing SOCOMI process units. The first proposed option would have imposed no further controls, based on a proposed finding that the existing standards protect public health with an ample margin of safety and prevent adverse environmental effects. Moreover, under the first option, we proposed that no further tightening of current standards was "necessary" in light of developments in practices, processes, and control technologies.

The second proposed option would have required further reductions of organic HAP at certain process units, based on a proposed finding that additional controls were reasonable in order to protect public health with an ample margin of safety. This option was also based on a proposed finding that, in order to further reduce risks, tightening of current standards was "necessary" after taking into account developments in practices, processes, and control technologies. The second option would have applied additional controls for equipment leaks and controlled some storage vessels and process vents that are not required to be controlled under the current rule. The proposed changes

under Option 2 are summarized in the table below:

Emission Source	Proposed Changes to Standards
Storage vessels	A Group 1 storage vessel also includes storage vessels that store one or more HAP listed in table 38 to subpart G of part 63, and has a combined HAP emission rate greater than 4.54 megagrams per year (5.0 tons HAP per year) on a rolling 12-month average.
Process vents	A Group 1 process vent also includes process vents for which the vent stream emits one or more HAP listed in table 38 to subpart G of part 63, and the total resource effectiveness index value is less than or equal to 4.0.
Equipment leaks	For chemical manufacturing process units (CMPU) containing at least one HAP listed in table 38 to subpart G of part 63, monthly monitoring of equipment components is required until the process unit has fewer than 0.5 percent leaking valves in gas/vapor service and in light liquid service.

II. Risk and Technology Review

A. Final Decision

We conclude in this rulemaking that there is no need to revise the HON rule under the provisions of either section 112(f) or 112(d)(6) of the CAA. This conclusion essentially reflects our decision to select Option 1 from the proposal, except for certain minor technical amendments we are adopting that are discussed later.

We are adopting no changes to the current HON rule under CAA section 112(f) because the current level of control called for by the existing MACT both reduces HAP emissions to levels that present an acceptable level of risk

and protects public health with an ample margin of safety. The finding regarding an "ample margin of safety" is based on a consideration of the additional costs of further control (as represented by Option 2) and the relatively small reductions in health risks that are achieved by that alternative.

As explained at proposal, we judge that the level of risk from the current HON rule is acceptable for the following reasons. The maximum individual lifetime cancer risk is estimated to be 100-in-1 million, and this level of risk occurs at only two facilities. There are no people with estimated cancer risks greater than 100-in-1 million resulting from exposure to HON HAP emissions, which is the presumptively acceptable level of maximum individual lifetime cancer risk under the 1989 Benzene NESHAP criteria.

The HON process units at 32 facilities are estimated to pose cancer risks greater than 10-in-1 million, with 9,000 people estimated to be exposed in this risk range. The HON process units at the remaining 206 facilities are estimated to pose cancer risks of 10-in-1 million or less. For the exposed population, total annual cancer incidence is estimated at 0.14 cases per year. The Hazard Index (HI) values (representing long-term noncancer public health risks) barely exceed 1, with only 20 people estimated to be

exposed to HI levels greater than 1. We also found minimal concern for noncancer effects from short-term inhalation exposures from HAP. The lifetime cancer risk and noncancer adverse health effects estimated from multipathway exposure are also well below levels generally held to be of concern.

Finally, after considering costs, energy, safety, and other relevant factors, it is not necessary to tighten HON requirements in order to prevent adverse environmental effects, or to account for developments in practices, processes, and control technologies.

In determining that the current HON rule protects public health with an ample margin of safety, we have determined that the estimated annual costs of Option 2 (\$6 million per year) would be unreasonable given the minor associated improvements in health risks. Baseline cancer incidence under the current HON rule is estimated at 0.14 cases per year. Proposed Option 2 would reduce incidence by about 0.05 cases per year. Statistically, this level of risk reduction means that Option 2 would prevent one cancer case every 20 years. At proposal we estimated costs to be \$13 million per year for Option 2. Based on public comments, we revised one of the Option 2 control requirements and the costing procedure for equipment leaks and this resulted in a revised cost estimate \$6 million per

year. Even at the \$6 million per year cost, we consider the cost of Option 2 to be unreasonable given the level of incidence reduction achieved. The changes in the distribution of risks do not warrant the additional costs. The maximum individual cancer risk under Option 2 would be reduced from 100-in-1 million to 60-in-1 million. The cancer risks for 450,000 people would be shifted to levels below 1-in-1 million. Further, changes in the distribution of risk - that is, the aggregate change in risk across the population - reduces risk by only 0.05 cancer cases per year. This result suggests that Option 2 would yield very small changes in individual risk for most of the affected population. For this reason, the estimates of the shift in risk distribution do not serve as particularly effective measures of the change in health risk. Finally, the maximum HI is barely above 1.0 and would be reduced from above 1.0 to below 1.0 for only 20 people. We conclude that this degree of additional public health protection is not warranted in light of the costs to industry of compliance with proposed Option 2. Consequently, we have determined that it is not reasonable to impose any additional controls to provide an ample margin of safety to protect public health.

In the technology review, we did not identify any

significant developments in practices, processes, or control technologies since promulgation of the original standards in 1994. We concluded that imposing additional controls under proposed Option 2 would achieve, at best, minimal emission and risk reductions. Option 2 would reduce organic HAP emissions by 1,700 tons per year, reduce cancer incidence by 0.05 cases per year, and reduce HI below 1 for about 20 individuals. We estimate that no one is currently exposed to emissions from HON sources causing cancer risks exceeding 100-in-1 million, the presumptively acceptable level for individual lifetime cancer risk under the Benzene NESHAP. (The relationship between residual risk and the CAA section 112(d)(6) review is explained in our proposal at 72 FR 34436.) Thus, because of the lack of any significant developments in practices, processes, or technologies, and the limited effect in reducing public health risk, we find that additional controls are not warranted under CAA section 112(d)(6).

B. Summary of Changes to the Rule

While we are making no changes to the control requirements of the existing standards based on the residual risk and technology review, we are publishing three technical amendments under CAA section 112(d)(2) designed to clarify provisions of the existing rule and provide for

effective implementation. At proposal, we solicited comments on a list of rule clarifications. After considering public comments, we have decided not to adopt some of the proposed changes at this time. We may consider some of these proposed changes again in the future, in which case we intend to provide an additional opportunity to comment on them. However, we are finalizing one minor change on which we solicited comments. We are also making two minor changes for which we did not solicit comments but which were recommended by commenters. We are also clarifying in this preamble that liquid streams generated from control devices (e.g., scrubber effluent) are wastewater. No rule changes are necessary for this clarification.

1. Group Status Changes for Wastewater

The revised rule clarifies the requirement to re-determine Group status for wastewater streams if process or operational changes occur that could reasonably be expected to change the wastewater stream from a Group 2 to a Group 1 stream. Examples of such process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or catalyst type; or whenever there is replacement, removal, or addition of recovery equipment. Although 40 CFR 63.100(m) generally applies to Group 2

wastewater streams becoming Group 1, this change clarifies requirements for re-determining group status for wastewater by including provisions analogous to those in 40 CFR 63.115(e), which requires re-determination of total resource effectiveness index value (TRE) for process vents due to process or operational changes.

2. Removal of Methyl Ethyl Ketone (MEK) from HON Tables

In the final rule we have removed MEK from Tables 2 and 4 of 40 CFR Part 63, subpart F and Tables 9, 34, and 36 of 40 CFR Part 63, subpart G. MEK was removed from the HAP list on December 19, 2005 (70 FR 75047). At that time, MEK was not removed from various applicability tables in the HON, 40 CFR part 63, subparts F and G.

3. Vapor Balancing for Storage Tanks

In the final rule we have decided to waive all notification and reporting requirements for owners or operators of facilities where railcars, tank trucks, or barges, which are part of the vapor balancing control option, are reloaded or cleaned. We are also allowing off-site reloading and cleaning operations to comply with monitoring, recordkeeping, and reporting provisions of any other applicable 40 CFR part 63 standards in lieu of the monitoring, recordkeeping, and reporting in the HON. These provisions have been added to other MACT standards because

the vapor balancing provisions provide owners and operators flexibility in meeting the requirements of the MACT standards without sacrificing the level of emission reductions being achieved. Further, making these changes provide consistency between similar emission sources being controlled under similar rules.

These amendments reflect a logical outgrowth of our proposed rule, and are reasonable decisions made in response to public comments we received regarding these issues.

III. Responses to Significant Comments

The proposal provided a 60-day comment period ending August 14, 2006. We received comments from 34 commenters. Commenters included State agencies, industry, industry trade groups, environmental groups, and individuals. We have summarized the significant comments below. A complete summary of comments and our responses can be found in the public docket for the promulgated rule, EPA-HQ-OAR-2005-0475.

A. Data Collection

Comment: One commenter stated that a major flaw in the risk assessment is that EPA failed to use its CAA section 114 authority to collect data for the risk assessment and, instead, used "voluntary, fragmentary, 7-year-old industry-submitted data from well under half of the affected

facilities." The commenter stated that the 1999 Residual Risk Report to Congress emphasizes the need for site-specific data for more refined assessments, and that EPA has not collected such data in the risk assessment for the HON. The commenter stated that the purpose of the risk assessment was to determine the residual risk from SOCOMI facilities, and that the data EPA used to perform the assessment was not of the type and quality to achieve that objective.

Response: The CAA does not specify the type of data, or the method of acquiring it, that EPA must use for conducting residual risk assessments under CAA section 112(f). EPA can use data other than those gained through its CAA section 114 authority, if doing so enables the agency to determine the remaining risks presented after application of MACT standards. At the time EPA was considering options for data collection, the industry trade association (American Chemistry Council) volunteered and prepared questionnaires to member companies. EPA reviewed the questionnaire and determined that the information requested by it would greatly facilitate our conducting a residual risk assessment. The data received through the questionnaire represented a significant fraction of the facilities in the source category (approximately 44 percent), and include site-specific data on emissions

sources, locations, and release parameters. Where emission release parameter data were missing, EPA used environmentally protective defaults in the modeling. While it is true that the data are now 7 years old, a significant amount of time was needed to collect and analyze the data, run the models, analyze the results, and prepare the rulemaking package. Moreover, the mere age of the data does not necessarily affect its utility for assessing whether sources that have achieved compliance with MACT continue to present risks of concern, given that the essential question addressed by our assessment is whether the MACT controls themselves are adequately protective of public health with an ample margin of safety.

Comment: One commenter stated that EPA has performed no analysis to determine that the industry data used in the risk assessment are representative of the source category as a whole. The commenter stated that for EPA to adequately satisfy CAA section 112(f), it must be able to accurately identify the risk associated with the most exposed individual and accurately estimate risk more generally from sources within the source category. The commenter stated that, to do this, EPA must have sufficient data regarding all of the important factors for estimating risk (including size, quantity of emissions, the specific characteristics of

emission points, proximity, and population density of surrounding communities, important meteorological and topological data, co-located emission sources, ambient background levels, etc.). The commenter stated that the factor of 2.3 that EPA used to scale up the population risk from the assessed facilities to the entire source category is arbitrary and unreasonable because it assumes constant population density.

Response: The data used in the assessment were obtained from all responses to the industry questionnaire, and include site-specific data on emissions sources, locations, and release parameters. The data represent a significant fraction of the category (approximately 44 percent), and include sources with high and low emissions, sources that are geographically proportional to the entire source category, and sources that emit nearly all organic HAP thought to be emitted from the category.

While the emissions data obtained through the industry questionnaire cannot be proven to be proportional to the emissions from the entire source category, EPA does have whole-facility emissions data for 226 facilities (the entire source category is estimated at 238 facilities) in the National Emissions Inventory (NEI), and we performed a screening-level risk assessment using these data to

determine if there were HON facilities posing greater public health risks than those included in the industry data. Although the NEI data were for the whole facility (and not just the HON emission points), we used NEI data codes (MACT codes, Standard Industrial Classification codes, and Source Classification Codes) to judge whether risks estimated using the NEI data could be attributed to the HON source category. We found that the highest risks from using the NEI data were of the same order of magnitude as those estimated using the industry data. Based on this general corroboration with the NEI data, we concluded that the industry data were the most detailed and comprehensive data available that were specific to the source category, and that the data were appropriate for use in conducting the residual risk assessment.

EPA did use a factor of 2.3 to estimate population risk associated with facilities not included in the industry data. This factor is simply the ratio of the total number of HON facilities to the number of facilities in the industry data, and reflects our expectation, based on further comparison to the NEI data, that on average, the population densities around the facilities not in the industry data are similar to the densities around the facilities that were in the industry data. We estimate that there are 61.6 million people living within the 50-kilometer

modeling radius of the 105 HON facilities included in the industry data. An estimated 82.8 million people live within the 50-kilometer modeling radius of the 226 HON facilities modeled using the NEI data. Accordingly, the sources in the industry-supplied data are located near 75 percent of the total exposed population, but represent 44 percent of the total number of facilities in the industry. This comparison indicates that many of the facilities not in the industry data are located in less densely populated areas or in the same areas as the facilities included in the industry data. Therefore, the population densities around the modeled facilities appear to be representative.

In the risk assessment, EPA showed that facilities with overlapping modeling domains (facility "clusters") did not lead to significantly higher estimated risks to the individual most exposed because such risks are generally driven by the nearest facility. However, facility clusters did increase the numbers of individuals within certain cancer risk ranges. Although the total population around all facilities in the source category is not a factor of 2.3 greater than the total population around the facilities in the industry data, the additional facilities would increase the risks to some of the same segments of the population, resulting in higher risk to individuals in the population.

B. Risk Determination

Comment: One commenter believed that EPA has misinterpreted the CAA by adopting the 1989 Benzene two-step framework to set residual risk standards under the 1990 CAA. The commenter concluded that the proper interpretation is that CAA section 112(f)(2)(A) specifies 1-in-1 million as a bright line and mandates promulgation of standards to reach at least this level of health protection. The commenter believed that CAA section 112(f)(2)(B) merely leaves standing, those relevant rules that were promulgated under section 112 as it existed prior to the 1990 CAA. The commenter disagreed with EPA's position that Congressional inaction ratifies EPA's interpretation of CAA section 112(f)(2)(B). The commenter believed that Congressional failure to respond to the EPA Report to Congress, which provided notification of the intent to utilize the 1989 Benzene two-step approach, does not justify overriding the plain statutory language of CAA section 112(f).

Response: We disagree with the commenter. Our policy on using the Benzene NESHAP for implementing CAA section 112(f) has been fully explained in the Coke Oven Batteries NESHAP (see 70 FR 19992, April 15, 2005) and the Residual Risk Report to Congress, and our approach here is fully consistent with our prior practice. The commenter's

argument that the statute requires CAA section 112(f) residual risk standards to reduce cancer risk to the most exposed individual to less than 1-in-1 million lacks a basis in the statutory text or in policy. CAA Section 112(f)(2)(A), in stating that EPA is to conduct residual risk rulemaking if the "lifetime excess cancer risk to the individual most exposed to emissions from a source in a category or subcategory" is greater than 1-in-1 million, does not establish what the level of the standard must be other than to require them to "provide an ample margin of safety to protect public health in accordance with this section (as in effect before the date of enactment of the CAA Amendments of 1990) [...]." Read in light of CAA section 112(f)(2)(B)'s express preservation of EPA's pre-enactment interpretation of CAA section 112, Congress clearly preserved EPA's ability to apply the same two-step formulation established by the Benzene NESHAP in making future "ample margin of safety" determinations under CAA section 112(f)(2).

Under that test, there is no single risk level establishing what constitutes an ample margin of safety. Rather, the Benzene NESHAP approach codified in CAA sections 112(f)(2)(A) and (B) is deliberately flexible, requiring consideration of a range of factors (among them estimates of

quantitative risk, incidence, and numbers of exposed persons within various risk ranges; scientific uncertainties; and weight of evidence) when determining acceptability of risk (the first step in the ample margin of safety determination (54 FR 38045, September 14, 1989). Determination of an ample margin of safety, the second step in the process, requires further consideration of these factors, plus consideration of technical feasibility, cost, economic impact, and other factors (54 FR 38046, September 14, 1989).

As we stated in our "Residual Risk Report to Congress" (EPA-453/R-99-001) issued under CAA section 112(f)(1), we do not consider the 1-in-1 million individual cancer risk level as a "bright line" mandated level of protection for establishing residual risk standards, but rather as a trigger point to evaluate whether additional reductions are necessary to provide an ample margin of safety to protect public health. This interpretation is supported by the language in the preamble to the Benzene NESHAP, which was incorporated by Congress in CAA sections 112(f)(2)(A) and (B).

The Report to Congress was intended, among other things, to explain how EPA would implement CAA section 112(f) by investigating the methods available for assessing public health risks after the technology-based standards

were applied and explaining any uncertainties in the methods. Congress also asked us to make recommendations for changes to the CAA section 112(f) as a result of the investigation. A plain reading of the CAA section 112(f)(2)(A) indicates that if, based on the report, Congress judged that residual risk standards were unnecessary or that the analytical methods for implementing the provisions were inadequate, then Congress would enact revisions to CAA section 112(f). The choice by Congress not to respond to the report clearly indicates that we should proceed with our general approach as explained in our Report to Congress.

We consequently believe that the commenter's bright line approach is not supported by the statute, and is incorrect as a matter of law. It is true that the Senate version of CAA section 112(f) mandated elimination of lifetime risks of carcinogenic effects greater than 1-in-10 thousand to the individual in the population most exposed to emissions of a carcinogen. (See "A Legislative History of the Clean Air Act Amendments of 1990," pages 7598 and 8518.) However, this version of the legislation was not adopted. We believe that the rejected Senate version of CAA section 112(f) shows that Congress considered mandating a level of risk reduction and chose not to do so.

In any event, EPA has concluded that the flexible approach to risk acceptability and ample margin of safety set forth in the Benzene NESHAP is reasonable and appropriate in light of the complex judgments EPA must make under CAA section 112(f).

Comment: One commenter argued that CAA section 112(f)(2)(A) very clearly prohibits using cost as a consideration for standards promulgated to provide an ample margin of safety to protect public health. CAA Section 112(f)(2)(A) directs EPA to promulgate standards in order to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. The commenter maintained that this construction allows cost as a consideration only for standards designed to prevent an adverse environmental effect where such standards are more stringent than necessary to protect human health with an ample margin of safety. As part of their argument, the commenter cited the Supreme Court decision in American Trucking Associations v. Whitman (2001), which addressed ambient air quality standards established under section 109 of the CAA, as providing precedent that cost cannot be considered in developing regulations to protect public health with a margin of safety. The commenter

claimed that this court decision abrogated the District of Columbia Circuit decision on Vinyl Chloride, upon which the Benzene two-step policy is based. They also pointed out that the 1990 CAA removed the statutory language that Vinyl Chloride relied upon heavily. The commenter pointed out that unlike the previous CAA, section 112 (f) of the 1990 CAA does not contain the phrase "...set the standard at the level which in [the Administrator's] judgment provides an ample margin of safety to protect public health." The commenter claimed that exclusion of the specific requirement to use judgment invalidates the basis of Vinyl Chloride.

Response: The clear reading of CAA section 112(f) allows us to take cost into consideration within the context of the two-step policy of the 1989 Benzene NESHAP. The stipulation in CAA section 112(f)(2)(A) that costs, energy, safety, and other factors can be taken into consideration in setting standards to prevent an adverse environmental effect does not mean that costs cannot be taken into consideration in determining standards to protect public health. To the contrary, CAA section 112(f)(2)(A) states that residual risk standards are to provide an ample margin of safety to protect public health "in accordance with this section (as in effect before the date of enactment of the Clean Air Act Amendments of 1990)." This formulation, coupled with CAA

section 112(f)(2)(B), which states that nothing in CAA section 112(f)(2)(A) or any other part of CAA section 112 shall be construed as affecting the EPA's interpretation of this section as set forth in the preamble to the 1989 Benzene NESHAP, reflects Congress' endorsement of the Benzene NESHAP approach, including the use of costs in determining an ample margin of safety.

The court decision cited by the commenter, American Trucking Association v. Whitman, has no relevance to decisions on ample margin of safety made under section 112 of the CAA. That case addressed the consideration of cost in the context of setting national ambient air quality standards under CAA section 109. The American Trucking Association v. Whitman decision does not specifically address, nor does it apply (nor could it have, as a matter of jurisdiction, since the court was not faced with an issue requiring a ruling on an interpretation of CAA section 112), to the different statutory requirements for regulating HAP under CAA section 112 or to any prior judicial precedent interpreting CAA section 112. Also, we do not read the 1990 CAA as overturning or otherwise disapproving of the court's decision in Vinyl Chloride. By directing us under CAA sections 112(f)(2)(A) and (B) to follow the 1989 Benzene NESHAP policy, the 1990 CAA requires the Administrator to

use judgment both in establishing risk levels that constitute a safe level of exposure and in balancing costs against remaining risks for determining an ample margin of safety. Therefore, by eliminating the wording in CAA section 112(f)(2)(A) to use "judgment," Congress eliminated a redundant specification and did not remove the legal basis of the Vinyl Chloride decision.

Comment: Several commenters contended that revising the HON pursuant to CAA section 112(d)(6) is not necessary and not justified. The commenters stated that EPA's Option 2 would revise the MACT beyond-the-floor decisions, that emission reductions to be gained from Option 2 are significantly overstated, and that the emission reduction does not justify the cost. Several commenters noted that Option 2 alternatives do not represent any "developments in practices, processes, and control technologies" but rather simply reflect an apparent decision by EPA that higher cost options that were rejected in the original beyond-the-floor analysis are now somehow acceptable.

Response: We do not agree that in reviewing a standard under CAA section 112(d)(6), the CAA mandates that only the question of whether newly developed emission control measures have been identified since the publication of the MACT standards be addressed. CAA Section 112(d)(6) requires

that EPA review and revise standards "as necessary." As we explain later, the instruction to revise "as necessary" indicates that EPA should use judgment in this regulatory decision, and is not precluded from considering additional relevant factors, such as risk and the evolution of costs of previously considered measures. At the time of a MACT determination, the beyond-the-floor decision is made without knowledge of the level of risks posed by an industry. In the subsequent reviews of the standards, we have substantial discretion in weighing all of the relevant factors, including all available control measures that are more stringent than that required by the current NESHAP, emission reductions, public health risk impacts, costs, and any other relevant factors to determine what further controls, if any, are necessary.

Comment: Several commenters contended that the application of CAA section 112(d)(6) should incorporate the framework of CAA section 112(f)(2) because this approach would require the Administrator to weigh the potential for future risk reduction under CAA section 112(d)(6) against the cost of that reduction in the same manner as set forth in the second step of the 1989 Benzene NESHAP rule. One commenter added that technology reviews that focus solely on the cost-per-ton of additional emission controls and do not

consider the risk reduction potential could result in the imposition of technology controls that yield very little, if any, benefit. Another commenter stated that when a MACT standard achieves protection of public health with an ample margin of safety and prevents adverse environmental effects, as is the case with the HON, no further revisions are "necessary" even if there have been developments in control technologies. The commenter believed that a determination of ample margin of safety and no adverse environmental effects alone is sufficient to determine that revision of the standard is not necessary under CAA section 112(d)(6). The commenter supported EPA's position that risk benefits are appropriate to consider under the CAA section 112(d)(6) decision.

Another commenter rejected EPA's interpretation that the term "revise as necessary" allows EPA to import into its 8-year evaluation the consideration of cost and risk. The commenter maintained that emission standards adopted under CAA section 112(d)(2) themselves were the product of a technology-driven evaluation that did not incorporate cost as a factor in the initial stages, and did not permit consideration of risk at all. The commenter continued that EPA has illegally substituted a risk/cost analysis for the requirement to perform an analysis of the technical

feasibility of emission controls to establish the level of control of the best performing HON sources.

Response: We have addressed the relationship between CAA sections 112(f) and 112(d) in other recent rulemakings, as well as in the proposal for today's final rule. See, e.g., our response to comments document for the Dry Cleaning Facilities Residual Risk Rule (71 FR 42727, July 27, 2006) (EPA's Summary of Public Comments and Responses to the Proposed Rule is located at docket no. EPA-HQ-OAR-2005-0155). As we explained in our proposal (see 71 FR 34436, June 14, 2006), the findings that underlie a CAA section 112(f) risk determination will often be key factors in making any subsequent CAA section 112(d)(6) technology review determinations. While our action today makes no changes to control requirements under the HON and it is, therefore, not necessary to respond to their individual points, we disagree with the commenters who state that a determination under CAA section 112(f) of an ample margin of safety and no adverse environmental effects alone will, in all cases, necessarily cause us to determine that a revision is not necessary under CAA section 112(d)(6). Our decision today should not be viewed as a departure from our general view, articulated in the proposal, that in some cases, even if risk factors remain the same from one round of CAA

section 112(d)(6) review to another, changes in costs of or in the availability of control technology may be sufficient to alter a previous conclusion about whether to impose further controls.

In response to the commenter who claimed we may not consider risks or costs at all under CAA section 112(d)(6), we continue to interpret the use of the phrase "as necessary" in that section as conferring discretion on the agency to exercise its judgment as to what factors may drive an evaluation of available practices, processes, and control technologies. The ambiguous term "as necessary" inherently requires an EPA comparison between control measures and some goal or end. As the first rounds of both CAA section 112(f) residual risk and CAA section 112(d) technology review occur 8 years following MACT, it is reasonable to interpret these duties as being compatible with and informative of each other, and for the ultimate goal of revising standards as needed to protect public health with an ample margin of safety as influencing what we determine is generally "necessary," in terms of whether to impose further technological controls under CAA section 112(d)(6).

Comment: One commenter contended that, for residual risk assessments, EPA may not rely on actual emissions, which represents "over-control" of emissions, with no

comparison to allowable emissions. The commenter stated that if sources are being over-controlled as EPA suggests, then EPA's analysis of risk underestimates the risk remaining after implementation of the HON. The commenter added that the assessment required in CAA section 112(f)(2)(A) is of the "standards" adopted under CAA section 112(d). If the current "standards" are not adequate to protect public health with an ample margin of safety, more stringent standards are necessary. The commenter claimed that, if sources are over-controlling, but nothing in the CAA section 112(d) standards would prevent backsliding, the statute requires EPA to adopt more stringent limits to maintain that over-control. If the over-control occurs because State or local agencies have adopted tighter limits, the commenter concluded that more stringent limits are feasible, and EPA must either (a) adopt those limits nationally to provide uniform protection or (b) explain why such standards would be infeasible.

Several commenters agreed with EPA that, for this source category, the use of 1999 actual emissions data rather than allowable emissions do not lead to an underestimating of risk. The commenters pointed out that the conservatism of the health benchmark values and the exposure estimates outweigh any potential underestimation of

emission levels based on using actual emissions, and added that EPA emission data based on actual emissions is conservatively high since the Toxics Release Inventory shows a reduction in emissions since 1999.

Response: EPA's position on the use of both allowable and actual emissions is fully discussed in the final Coke Oven Batteries NESHAP (70 FR 19998-19999, April 15, 2005). There we explained that modeling the allowable levels of emissions is inherently reasonable since they reflect the maximum level sources could emit and still comply with national emission standards. But we also explained that it is reasonable to consider actual emissions, where data on them is available, in both steps of the Benzene NESHAP analysis in order to avoid overestimating emissions and their risks (including incidence) and to account for how sources typically strive to perform better than required by standards to allow for process variability and not exceed standards due to emissions increases on individual days. Failure to consider these data in risk assessments, we said, would unrealistically inflate risk levels.

The preamble to the proposed HON residual risk standards included a discussion of actual versus allowable emissions from HON emission points (71 FR 34428). We explained that, for this source category, using available

data on actual emissions enabled us to approximate allowable emissions, and that basing the analysis on actual emissions here provided an acceptable method for determining the remaining risks to public health and the environment after application of the MACT standards. In the HON proposal preamble, we acknowledged that there is some uncertainty regarding the differences between actual and allowable emissions. For some emission points, it was not possible to estimate allowable emissions from available information. A requirement to determine the applicability of controls for some emission points was intentionally not included in the HON because it was seen as an unnecessary burden for points that would be controlled anyway. For these emission points there is no readily available data that can be used to determine the applicability of control requirements. Without such data, there is no accurate way to determine allowable emissions under the current rule. However, for equipment leaks which represent the most significant impact on the cancer risk at the HON facilities, the standards are work practice standards and the actual emissions and allowable emissions are likely the same for equipment in the leak detection and repair program required by the HON. More frequent monitoring of equipment components (for example, monthly instead of quarterly) could result in actual

emissions being lower than allowable emissions, but few, if any, sources monitor more frequently than required by the HON.

We concluded that there is no reason to believe that there is either a substantial amount of overcontrol of Group 1 sources or voluntary control of Group 2 sources such that actual emissions are not a reasonable approximation of allowable emissions. Rather, actual emissions appear to reflect the results of our prior application of MACT (allowing for process variability), and no evidence in the record suggests that sources could make changes that significantly increase their emissions and risks but still comply with MACT control requirements. Consequently, basing the risk analysis on actual emissions in this case enabled us to determine the remaining risks to public health and the environment after application of the specific MACT standards applicable to HON sources.

Comment: One commenter argued that EPA must address inorganic HAP. The Risk Assessment acknowledges that inorganic HAP, such as hydrochloric acid and chlorine, may be emitted from HON sources, but that these compounds were not considered because data were not available to characterize emissions. The commenter argued that EPA cannot rely on the circular justification that the original

HON regulated only organic HAP. The commenter argued that the residual risk provisions of CAA section 112(f) direct EPA to estimate the remaining risk for the regulated categories, whatever chemicals that risk may encompass. The commenter added that EPA's attempt to screen out inorganic HAP from further risk assessment by looking at these emissions in isolation is invalid. The commenter contended that EPA must look at the combined target organ specific HI from all emissions allowed under the current standards, including inorganic emissions, to determine if the residual risk is acceptable. Moreover, the commenter stated that EPA cannot avoid the consideration of emission controls for inorganics based only on a screening analysis; such control decisions for both the residual risk and the CAA section 112(d)(6) determination must consider other factors such as costs and feasibility.

Response: We acknowledge that inorganic HAP (such as hydrochloric acid and chlorine) are emitted from some HON sources and that these pollutants require consideration even though they were not regulated HAP in the existing NESHAP. We stated in the preamble to the proposed rule that inorganic HAP were not considered in the primary assessment because data were not available to characterize emissions. However, we conducted an additional analysis using

information in the NEI to estimate the risk from the entire plant site at which the HON processes are located. The NEI contains information on both organic and inorganic HAP emitted from each facility. EPA estimated hazard indices (total, not target organ specific) for each of the 226 HON facilities for which NEI data were available. There were many instances where inorganic HAP were responsible for hazard indices exceeding 1, but there were no instances where the inorganic HAP were associated with HON processes. Therefore, EPA concluded that not including inorganic HAP in the primary risk assessment did not affect the results of the analysis, and that no further assessment of inorganic HAP emissions was necessary in order to determine whether remaining risks from HON sources after application of MACT are at acceptable levels. Furthermore, as discussed earlier in the preamble, it is not reasonable to impose any additional controls to provide an ample margin of safety to protect public health.

C. Administrative Requirements

Comment: One commenter argued that EPA has not appropriately addressed impacts on children and other sensitive receptors. The commenter stated that even though EPA acknowledged in the risk assessment that children face greater exposure and are more susceptible to the adverse

health effects from airborne contaminants, these factors were not addressed. The commenter stated that EPA determined that "[t]he proposed rule is not subject to the Executive Order (13045: Protection of Children From Environmental Health Risks and Safety Risks) . . . because the Agency does not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children." This commenter contended that this conclusion is based on our assessment of the information on the effects on human health and exposures associated with SOCFI operations. The commenter could not find such an assessment referenced in the Risk Assessment. The commenter also stated that EPA ignored the effects on other sensitive receptors, e.g., active adults.

Response: First, since this rulemaking is not economically significant under Executive Order 12866, Executive Order 13045 does not apply to this matter.

EPA acknowledges that population subgroups, including children, may have the potential for risk greater than the general population due to greater relative exposure and/or greater susceptibility to the toxicant. With respect to exposure, the risk assessment implicitly accounts for this greater potential for exposure by assuming lifetime (rather than simply childhood) exposure, which would tend to yield

higher estimates of risks. The exposure assessment described the maximum modeled lifetime exposure of residents near HON facilities. The exposed population was conservatively presumed to be exposed to airborne concentrations at their residence continuously, 24 hours per day for a full lifetime, including childhood.

With regard to children's potentially greater susceptibility to non-cancer toxicants emitted by HON facilities, the assessment relied on Agency (or comparable) hazard identification and dose-response values which have been developed to be protective for all subgroups of the general population, including children. For example, a review¹ of the chronic reference value process concluded that the Agency's reference concentration (RfC) derivation processes adequately considered potential susceptibility of different subgroups with specific consideration of children, such that the resultant RfC values pertain to the full human population "including sensitive subgroups," a phrase which is inclusive of childhood.

On the issue of cancer dose-response values, our revised cancer guidelines and new supplemental guidance recommend applying default adjustment factors to account for

1 A Review of the Reference Dose and Reference Concentration Process. U.S. Environmental Protection Agency. Risk Assessment Forum. EPA/630/P-02/002F. December 2002.

exposures occurring during early-life exposure to those chemicals thought to cause cancer via a mutagenic mode of action. For these chemicals, the supplemental guidance indicates that, in lieu of chemical-specific data on which age or life-stage specific risk estimates or potencies can be determined, default "age dependent adjustment factors" can be applied when assessing cancer risk for early-life exposures to chemicals which cause cancer through a mutagenic mode². However, at the present time, we have not determined whether any of the HAP emitted by the HON source category cause cancer via a mutagenic mode of action. While several of the HON pollutants may be carcinogenic by such a mechanism, our policy is not to apply these adjustment factors unless we have completed a peer-reviewed assessment

2 The "Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens" recommends applying default adjustment factors to early life stage exposures to carcinogens acting through a mutagenic mode of action. The Supplemental Guidance recommends an integrative approach that can be used to assess total lifetime risk resulting from lifetime or less-than-lifetime exposure during a specific portion of a lifetime. The following adjustments represent the approach suggested in the Supplemental Guidance: (1) for exposures before 2 years of age (i.e., spanning a 2-year time interval from the first day of birth up until a child's second birthday), a 10-fold adjustment; (2) for exposures between 2 and less than 16 years of age (i.e., spanning a 14-year time interval from a child's second birthday up until their sixteenth birthday), a 3-fold adjustment; and (3) for exposures after turning 16 years of age, no adjustment. Assuming a constant lifetime exposure, incorporation of these adjustment factors would increase the estimate of lifetime cancer risk by roughly 60 percent (factor of 1.6). If exposures were from 3 years to 73 years, the adjustment factor would be less than 1.6. If exposures were from 16 years to 86 years, no

that explicitly makes this determination after consideration of the full scientific literature.

Although we are not yet certain whether or not a childhood potency adjustment is needed, the estimated risks must also be considered in the context of the full set of assumptions used for this risk assessment. For example, we used a health-protective assumption of a 70-year exposure duration in our risk estimates; however, using the national average residency time of 12 years would reduce the estimate of risk by roughly a factor of 6. Our unit risk estimates for HAP are considered a plausible upper-bound estimate; actual potency is likely to be lower and some of which could be as low as zero. After considering these and other factors, we continue to consider the risks from emissions after application of the current HON rule to be acceptable (within the meaning of the Benzene NESHAP decision framework discussed at 69 FR 48339-48340, 48347-48348, August 9, 2004). As mentioned in the recently published cancer guidelines, we will continue to develop and present, to the extent practicable, an appropriate central estimate and appropriate lower and upper-bound estimates of cancer potency. Development of new methods or estimates is a process that will require independent peer review.

adjustment would be necessary.

Comment: One commenter argued that EPA failed to adequately address environmental effects or to comply with the requirements of the Endangered Species Act (ESA). The commenter objected to EPA's assumption in the ecological assessment that the aquatic and terrestrial communities surrounding HON sources were healthy and unaffected by other stressors. Additionally, the commenter claimed that EPA is on record acknowledging its obligation to comply with the ESA during the residual risk phase of the air toxics program, and yet EPA failed to do so.

Response: The commenter is correct that EPA has publicly agreed that the consultation requirements of the ESA potentially apply to CAA section 112(f) residual risk rulemakings. See Sierra Club v. EPA. 353 F.3d 976 (District of Columbia Circuit, 2004). This is because CAA section 112(f)(2)(A) provides us with authority to tighten NESHAP, after consideration of costs and other relevant factors, to prevent an "adverse environmental effect." CAA section 112(a)(7) defines this term to mean "any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species or significant degradation of environmental quality over broad areas" (emphasis added).

Therefore, CAA section 112(f) clearly provides EPA discretion to promulgate a residual risk rule in a manner that inures to the benefit of listed species (see 50 CFR 402.03), at least in cases where adverse environmental effects are of a significant magnitude.

However, under section 7(a)(2) of the ESA and the implementing regulations promulgated by the Fish and Wildlife Service and the National Marine Fisheries Service (collectively, the Services), an action agency such as EPA has a duty to initiate consultation with the services only where it determines that its action may have an impact (either beneficial or adverse) on listed threatened or endangered species or on their designated critical habitat. Where the action agency determines that its action will have no such effect, the consultation duty is not triggered. For the HON residual risk rulemaking, based on the ecological risk analysis we discuss below, EPA has determined that its action has no effect, either adverse or beneficial, on listed species or their critical habitat.

We conducted a screening-level ecological risk analysis to assess the affects of persistent and bioaccumulative toxic HAP emissions on aquatic and terrestrial receptors. Only two HAP, hexachlorobenzene and anthracene, were estimated to pose any potential for exposures via routes

beyond direct inhalation. All ecological hazard quotient (HQ) values are well below levels of concern, with the highest HQ being 0.05 from benthic/sediment exposure by aquatic life to anthracene. The highest hexachlorobenzene HQ is 0.02 from surface water exposure by aquatic life. HQ values of equal to or less than 1.0 are indicative of no effect. EPA concluded that these levels are not high enough to constitute "significant and widespread" adverse environmental effects as defined in CAA section 112(a)(7), and that there is not an effect on threatened or endangered species or on their critical habitat within the meaning of the ESA, as implemented at 50 CFR 402.14(a). Therefore, EPA concluded that a consultation with the Services regarding endangered species was not necessary. The statement regarding communities being unaffected by other toxic chemicals or environmental stressors was meant to convey that the assessment considered only the contribution of HON emissions to media concentrations.

D. Impacts Estimation

Comment: One commenter contended that EPA overestimated the costs for controlling process vents, equipment leaks, and storage vessels. The commenter also contended that EPA should have selected more stringent control options for these sources, such as lower leak

definitions for equipment leaks. Other commenters expressed their view that EPA underestimated costs of controlling each of the sources by using outdated costs and inappropriate assumptions.

Response: Cost algorithms and information used for the cost impacts analysis were based on previous EPA studies and rulemaking actions and are well documented and accepted. Costs from previous years were scaled to 2001 dollars using engineering cost indices to account for inflation. We consider the cost information that we used to estimate impacts to be appropriate for this analysis and are not underestimated. We would also like to clarify that we analyzed control options with more stringent requirements for each source (e.g., requiring lower equipment leak percent leakers and leak definitions), but determined the emission reductions and risk reductions did not warrant the costs.

However, in response to the comments, we re-evaluated Option 2. Before rejecting the option overall, we decided to modify Option 2 to eliminate the high cost sources. We also re-evaluated the assumptions used in the cost analysis to reflect a range of likely costs rather than the most costly results.

At proposal, we estimated that sources having any

amount of Table 38 HAP would be required to meet Option 2. We re-analyzed the costs of controlling process vents and equipment leaks assuming a trigger level of 5 percent Table 38 HAP. Additionally, we analyzed the impacts of reducing the TRE from a value of 4 from proposal to a value of 2. At proposal we calculated repair costs for leaking valves on a monthly basis. For the re-analysis, we assumed there would be no additional costs of repairing leaking valves because the frequency of repair would not change from the current HON when sources successfully repair valves on their existing schedule. At proposal, we calculated the annual cost of valve monitoring assuming all sources would have to monitor monthly. This assumption would provide the highest cost estimates. For the re-analysis, we calculated the annual cost of valve monitoring assuming that half of the sources would be able to conduct quarterly monitoring and half would still conduct monthly monitoring.

The resulting total annual cost for a re-evaluated Option 2 was estimated to be \$6 million, less than half the \$13 million annual cost of Option 2, as proposed. After considering these lower annual costs, EPA decided that the cost of further control still was not justified considering the small reduction in health risk resulting from HAP emission reductions achieved by Option 2.

E. Clarification Changes

Comment: Several commenters argued that many of EPA's proposed clarifications in the solicitation of public comments are significant, will result in additional costs and burdens with no identified environmental benefit, and are inconsistent, in some cases, with current rule language and 12 years of HON implementation. These commenters maintained these changes must be adopted through a formal rulemaking process.

Response: We have decided not to adopt some of the proposed clarifying changes at this time. If we further consider them, we will provide another opportunity to collect public comments on the specific regulatory language. However, we have decided that one of the proposed minor changes will not have any impact on costs of compliance, and are therefore adopting it in this final rule: re-determining the group status of wastewater streams whenever process or operational changes occur. We are also making two minor changes not specifically discussed in the proposal but for which we received comments urging their adoption: removal of MEK from tables in subparts F and G to 40 CFR part 63, and waiving recordkeeping requirements for off-site reloading or cleaning operations that take part in the vapor balancing compliance option for storage tanks. These

changes are discussed in Section II.B of this preamble.

We are also clarifying in this preamble that liquid streams generated from control devices (e.g., scrubber effluent) are wastewater. We notified the public at proposal that we intended to incorporate this clarification in the rule. However, commenters affirmed that the regulatory text already clarifies this and additional rule language is unnecessary. Therefore, no rule clarification language was added.

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 Office of Management and Budget (OMB) deems the final rule to be a "significant regulatory action" because it raises novel legal and policy issues. Accordingly, EPA submitted the final rule to OMB for review. Changes made in response to OMB recommendations have been documented in the docket.

B. Paperwork Reduction Act

This action does not impose any new information collection burden. The action does not require any further control of sources and the amendatory changes are estimated to have at most minor costs. However, OMB has previously approved the information collection requirements contained

in the existing regulations, 40 CFR part 63, subparts F, G, and H, under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501, et seq., and has assigned OMB control number 2060-0443, EPA ICR number 1854.04. A copy of the OMB approved Information Collection Request (ICR) may be obtained from Susan Auby, Collection Strategies Division; U.S. Environmental Protection Agency (2822T); 1200 Pennsylvania Ave., NW, Washington, DC 20460, or by calling (202) 566-1672.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is

not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act generally requires an agency to prepare 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 the final rule on small entities, small entity is defined as: (1) a small business as defined by the Small Business Administration; (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 that is independently owned and operated and is not dominant in its field.

For sources subject to the final rule, the relevant NAICS and associated employee sizes are as follows:

NAICS 32511--Petrochemical Manufacturing--1,000 employees or fewer.

NAICS 325192--Cyclic Crudes and Intermediates Manufacturing--750 employees or fewer.

NAICS 325199--All Other Organic Chemical Manufacturing--1,000 employees or fewer.

After considering the economic impacts of the final rule on small entities, EPA has determined that this action will not have a significant economic impact on a substantial number of small entities. This action finalizes our decision not to impose further controls and not to revise the existing rule. Consequently, there are no impacts on any small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act (UMRA) of 1995, 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, 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 the aggregate, or to the private sector, of \$100 million or more in any one year. Before

promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA 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 EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if EPA publishes with the final rule an explanation why that alternative was not adopted.

Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it 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 EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

EPA has determined that the final rule 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 one year. Thus, the final rule is not subject to the requirements of sections 202 and 205 of the UMRA. This action finalizes our decision not to impose further controls and not to revise the existing rule. Consequently, there are not costs associated with this action. In addition, today's final decision does not significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's final decision is not subject to section 203 of 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 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 rule 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. None of the affected SOCFI facilities are owned or operated by State governments. Thus, Executive Order 13132 does not apply to the final rule.

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

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 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." The final rule does not have tribal implications, as specified in Executive Order 13175. No tribal governments own SOCFI facilities subject to the HON. Thus, Executive Order 13175 does not apply to the final rule.

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

Executive Order 13045 (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be

"economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

The final rule is not subject to the Executive Order because it is not economically significant as defined in Executive Order 12866, and because the Agency does not have reason to believe the environmental health or safety risks addressed by the final rule present a disproportionate risk to children. This conclusion is based on our assessment of the information on the effects on human health and exposures associated with SOCFI operations.

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

The final rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse

effect on the supply, distribution, or use of energy. Further, we have concluded that this final decision is not likely to have any adverse energy impacts.

I. National Technology Transfer and Advancement Act

As noted in the proposed rule, section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995, Public Law No. 104-113; 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. VCS are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by VCS bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency does not use available and applicable VCS.

The final rule does not involve technical standards beyond those already provided under the current rule. Therefore, EPA did not consider the use of any VCS.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires Federal agencies to consider the

impact of programs, policies, and activities on minority populations and low-income populations. According to EPA guidance, agencies are to assess whether minority or low-income populations face risks or a rate of exposure to hazards that are significant and that "appreciably exceed or is likely to appreciably exceed the risk or rate to the general population or to the appropriate comparison group" (EPA, 1998).

The Agency has recently reaffirmed its commitment to ensuring environmental justice for all people, regardless of race, color, national origin, or income level. To ensure environmental justice, we assert that we shall integrate environmental justice considerations into all of our programs and policies, and, to this end, have identified eight national environmental justice priorities. One of the priorities is to reduce exposure to air toxics. At proposal, EPA requested comment on the implications of environmental justice concerns relative to the two options proposed since some HON facilities are located near minority and low-income populations. We received one comment regarding environmental justice concerns that is addressed in the response to comments document.

K. 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. EPA will submit a report containing the final rule and other required information to the United States Senate, the United States House of Representatives, and the Comptroller General of the United States prior to publication of the final rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. The final rule is not a "major rule" as defined by 5 U.S.C. 804(2). The final rule is effective [INSERT DATE OF PUBLICATION].

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and
procedure, Air pollution control, Intergovernmental
relations, Reporting and recordkeeping requirements.

Dated:

Stephen L. Johnson,
Administrator.

For the reasons stated in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 63-[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401, et seq.

Subpart F--[AMENDED]

Table 2--[AMENDED]

2. Table 2 to subpart F of part 63 is amended by removing the entry for "Methyl ethyl ketone (2-Butanone)."

* * * * *

Table 4--[AMENDED]

3. Table 4 to subpart F of part 63 is amended by removing the entry for "Methyl ethyl ketone (2-Butanone)."

Subpart G--[AMENDED]

- 4. Section 63.119 is amended by:
 - a. Revising paragraph (g)(7)(ii); and
 - b. Adding paragraph (g)(7)(iv) to read as follows:

§63.119 Storage vessel provisions-reference control technology.

* * * * *

(g) * * *

(7) * * *

(ii) If complying with paragraph (g)(6)(i) of this section, comply with the requirements for closed vent system and control device specified in §§63.119 through 63.123. The notification and reporting requirements in §63.122 do not apply to the owner or operator of the offsite cleaning or reloading facility.

* * * * *

(iv) After the compliance dates specified in §63.100(k) at an offsite reloading or cleaning facility subject to paragraph (g) of this section, compliance with the monitoring, recordkeeping, and reporting provisions of any other subpart of this part 63 constitutes compliance with the monitoring, recordkeeping, and reporting provisions of paragraph (g)(7)(ii) or paragraph (g)(7)(iii) of this section. You must identify in your Notification of Compliance Status report required by §63.152(b), the subpart to the part 63 with which the owner or operator of the reloading or cleaning facility complies.

5. Section 63.132 is amended by adding paragraphs (c)(3) and (d)(3) to read as follows:

§63.132 Process wastewater provisions-general.

* * * * *

(c) * * *

(3) The owner or operator of a Group 2 wastewater shall re-determine group status for each Group 2 stream, as necessary, to determine whether the stream is Group 1 or Group 2 whenever process changes are made that could reasonably be expected to change the stream to a Group 1 stream. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or whenever there is a replacement, removal, or addition of recovery or control equipment. For purposes of this paragraph (c)(3), process changes do not include: Process upsets; unintentional, temporary process changes; and changes that are within the range on which the original determination was based.

(d) * * *

(3) The owner or operator of a Group 2 wastewater shall re-determine group status for each Group 2 stream, as necessary, to determine whether the stream is Group 1 or Group 2 whenever process changes are made that could reasonably be expected to change the stream to a Group 1 stream. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or whenever there is a replacement, removal, or addition of recovery or control equipment. For purposes of this paragraph (d)(3), process changes do not include:

Process upsets; unintentional, temporary process changes; and changes that are within the range on which the original determination was based.

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Table 9--[AMENDED]

6. Table 9 to subpart G of part 63 is amended by removing the entry for "Methyl ethyl ketone (2-Butanone)."

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Table 34--[AMENDED]

7. Table 34 to subpart G of part 63 is amended by removing the entry for "Methyl ethyl ketone (2-Butanone)."

* * * * *

Table 36--[AMENDED]

8. Table 36 to subpart G of Part 63 is amended by removing the entry for "Methyl ethyl ketone (2-Butanone)."