

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 63****[EPA-HQ-OAR-2007-0211; FRL-8505-1]****RIN 2060-A016**

National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins (Polysulfide Rubber Production, Ethylene Propylene Rubber Production, Butyl Rubber Production, Neoprene Production); National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production; National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards (Acetal Resins Production and Hydrogen Fluoride Production)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: This proposed rule requests public comment on the residual risk and technology reviews for eight industrial source categories regulated by four national emission standards for hazardous air pollutants (HAP). The eight industrial source categories and the four national emission standards are listed in Table 3 of this preamble. The underlying national emission standards that are under review in this action limit and control HAP.

We are proposing that no revisions to the national emission standards regulating the eight source categories listed in Table 3 of this preamble are required at this time under section 112(f)(2) or 112(d)(6) of the Clean Air Act.

DATES: Comments. Comments must be received on or before [INSERT DATE 60 DAYS FROM DATE OF PUBLICATION].

Public Hearing. If anyone contacts EPA requesting to speak at a public hearing by [INSERT DATE 15 DAYS FROM DATE OF PUBLICATION], a public hearing will be held on [INSERT DATE 30 DAYS FROM DATE OF PUBLICATION].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2007-0211, by one of the following methods:

- www.regulations.gov. Follow the on-line instructions for submitting comments.
- E-mail: a-and-r-Docket@epa.gov.
- Fax: (202) 566-1741.
- Mail: U.S. Postal Service, send comments to: EPA Docket Center (2822T), Docket ID No. EPA-HQ-OAR-2007-0211, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Please include a total of two copies.
- Hand Delivery: In person or by courier, deliver comments to: EPA Docket Center (2822T), EPA West Building, Room 3334, 1301 Constitution Ave., NW, Washington, DC 20004. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information. Please include a total of two copies.

Instructions: Direct your comments to Docket ID No. EPA-HQ-OAR-2007-0211. If commenting on the data in the Risk and Technology Review (RTR) database, please format your comments as described in section III and IV of this preamble. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or e-mail. The www.regulations.gov website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files

should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

Docket: All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the EPA Docket Center, Docket ID No. EPA-HQ-OAR-2007-0211, EPA West Building, Room 3334, 1301 Constitution Avenue, 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 EPA Docket Center is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: For questions about this proposed action, contact Ms. Mary Tom Kissell, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, Coatings and Chemicals Group (E143-01), U.S. Environmental Protection Agency, Research Triangle Park, NC

27711; telephone number: (919) 541-4516; fax number: (919) 685-3219; and e-mail address: kissell.mary@epa.gov. For specific information regarding the modeling methodology, contact Ms. Elaine Manning, Office and Air Quality Planning and Standards, Health and Environmental Impacts Division, Sector Based Assessment Group (C539-02), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711; telephone number: (919) 541-5499; fax number: (919) 541-0840; and e-mail address: manning.elaine@epa.gov. For information about the applicability of these four national emission standards for hazardous air pollutants (NESHAP) to a particular entity, contact the appropriate person listed in Table 1 to this preamble.

Table 1. List of EPA Contacts for Group I Polymers and Resins, Group II Polymers and Resins, Acetal Resins Production, and Hydrogen Fluoride Production.

NESHAP for:	OECA Contact¹	OAQPS Contact²
Polymers and Resins, Group I	Scott Throwe (202) 564-7013 throwe.scott@epa.gov	David Markwordt (919) 541-0837 markwordt.david@epa.gov
Polymers and Resins, Group II	Scott Throwe (202) 564-7013 throwe.scott@epa.gov	Randy McDonald (919) 541-5402 mcdonald.randy@epa.gov
Acetal Resins Production	Marcia Mia (202) 564-7042 mia.marcia@epa.gov	David Markwordt (919) 541-0837 markwordt.david@epa.gov
Hydrogen Fluoride Production	Marcia Mia (202) 564-7042 mia.marcia@epa.gov	Bill Neuffer (919) 541-5435 neuffer.bill@epa.gov

¹ OECA stands for the EPA's Office of Enforcement and Compliance Assurance.

² OAQPS stands for EPA's Office of Air Quality Planning and Standards.

SUPPLEMENTARY INFORMATION:

Regulated Entities. The eight regulated industrial source categories that are the subject of today's proposal are listed in Table 2 to this preamble. Table 2 is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by the proposed action for the source categories listed. These standards, and any changes considered in this rulemaking, would be directly applicable to sources as a Federal program. Thus, Federal, State, local, and tribal government entities are not affected by this proposed rule. The regulated categories affected by this action include:

Table 2. NESHAP for Eight Industrial Source Categories

Category	NAICS ¹ Code	MACT ² Code
Butyl Rubber Production	325212	1307
Ethylene-Propylene Rubber Production	325212	1313
Polysulfide Rubber Production	325212	1332
Neoprene Production	325212	1320
Epoxy Resins Production	325211	1312
Non-nylon Polyamides Production	325211	1322
Acetal Resins Production	325211	1301
Hydrogen Fluoride Production	325120	1409

¹ North American Industry Classification System

² Maximum Achievable Control Technology

To determine whether your facility would be affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any of these NESHAP, please contact the appropriate person listed in Table 1 of this preamble in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Submitting Comments/CBI. Direct your comments to Docket ID No. EPA-HQ-OAR-2007-0211. If commenting on changes to the RTR database, please submit your comments in the format described in sections III and IV of this preamble. Do not submit CBI to EPA through www.regulations.gov or e-mail. Instead, send or deliver information identified as CBI only to the following address:
Mr. Roberto Morales, OAQPS Document Control Officer (C404-02),
U.S. Environmental Protection Agency, Office of Air Quality
Planning and Standards, Research Triangle Park, NC 27711,
Attention Docket ID No. EPA-HQ-OAR-2007-0211. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on a disk or CD ROM that you mail to Mr. Morales, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI.

In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be

submitted for inclusion in the public docket. If you submit a CD-ROM or disc that does not contain CBI, mark the outside of the disk or CD-ROM clearly that it does not contain CBI.

Information not marked as CBI will be included in the public docket and EPA's electronic public docket without prior notice.

If you have any questions about CBI or the procedures for claiming CBI, please consult the person identified in the **FOR FURTHER INFORMATION CONTACT** section. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

Worldwide Web (WWW). In addition to being available in the docket, an electronic copy of today's proposed action will also be available on the WWW through the Technology Transfer Network (TTN). Following signature, a copy of the proposed action will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at the following address:

<http://www.epa.gov/ttn/oarpg/>. The TTN provides information and technology exchange in various areas of air pollution control.

As discussed in more detail in sections III and IV of this preamble, additional information is available on the Risk and Technology Review Phase II webpage at <http://www.epa.gov/ttn/atw/rrisk/rtrpg.html>. This information includes source category descriptions and detailed emissions and other data that were used as inputs to the risk assessments.

Public Hearing. If a public hearing is held, it will begin at 10:00 a.m. and will be held at EPA's campus in Research Triangle Park, North Carolina, or at an alternate facility nearby.

Persons interested in presenting oral testimony or inquiring as to whether a public hearing is to be held should contact Ms.

Mary Tom Kissell, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, Coatings and Chemicals Group (E143-01), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711; telephone number: (919) 541-4516.

Outline. The information presented in this preamble is

organized as follows:

- I. Background
 - A. What is the statutory authority for this action?
 - B. Overview of the Four NESHAP
 - C. How did we estimate risk posed by the eight source categories?
 - D. What are the conclusions of the risk review?
 - E. What are the conclusions of the technology review?
- II. Proposed Action
- III. How do I access and review the facility-specific data?
- IV. How do I submit suggested data corrections?
- V. Statutory and Executive Order Reviews
 - A. Executive Order 12866, Regulatory Planning and Review
 - B. Paperwork Reduction Act
 - C. Regulatory Flexibility Act
 - D. Unfunded Mandates Reform Act
 - E. Executive Order 13132, Federalism
 - F. Executive Order 13175, Consultation and Coordination with Indian Tribal Governments
 - G. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks
 - H. Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
 - I. National Technology Transfer and Advancement Act
 - J. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income

Populations

I. Background

A. What is the statutory authority for this action?

Section 112 of the Clean Air Act (CAA) establishes a comprehensive regulatory process to address emissions of hazardous air pollutants (HAP) from stationary sources. In accordance with CAA section 112(c), EPA identifies categories and subcategories of major sources that emit one or more of the HAP listed in CAA section 112(b). CAA section 112(d) then calls for EPA to promulgate national technology-based emission standards for each listed category or subcategory of 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 health and environmental impacts) and are commonly referred to as maximum achievable control technology (MACT) standards. The source categories listed in Table 3 to this preamble are eight source categories for which we have promulgated MACT standards.

In what we refer to as the technology review, CAA section 112(d)(6) then requires EPA to review the CAA section 112(d) 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. If we conclude a revision is necessary, we must revise the standards.

The residual risk review is described in section 112(f) of the CAA. CAA section 112(f)(2) requires us to promulgate standards for each category or subcategory of CAA section 112(d) sources "if promulgation of such standards is required 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 effect¹. If standards promulgated pursuant to CAA section 112(d) and applicable to a category or subcategory of source emitting a pollutant (or pollutants) classified as a known, probable or possible human carcinogen do not reduce lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than 1-in-1 million, the Administrator shall promulgate standards under this subsection" for the source category (or subcategory). EPA's framework for making ample margin of safety determinations under CAA section 112(f)(2) is provided in the Benzene NESHAP (54 FR 38044,

¹Adverse environmental effect is defined in CAA section 112(a)(7) as 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.

September 14, 1989) and was codified by Congress in CAA section 112(f)(2)(B).

B. Overview of the Four NESHAP

The eight industrial source categories and four NESHAP that are the subject of today's proposal are listed in Table 3 to this preamble. NESHAP limit and control HAP that are known or suspected to cause cancer or have other serious human health or environmental effects. The NESHAP for these eight source categories generally required implementation of technologies such as steam strippers and incineration.

Table 3. List of National Emission Standards for Hazardous Air Pollutants (NESHAP) and Industrial Source Categories Affected by Today's Proposal

Title of NESHAP:	Source Categories Affected by Today's Proposal	Promulgated Rule Reference	Compliance Date	NESHAP as Referred to in this Preamble
NESHAP for Group I Polymers and Resins ¹	Polysulfide Rubber Production Ethylene Propylene Rubber Production Butyl Rubber Production Neoprene Production	61 FR 46905 (09/05/1996)	07/31/1997	Polymers and Resins I

NESHAP for Epoxy Resins Production and Non-nylon Polyamides Production	Epoxy Resins Production Non-nylon Polyamides Production	60 FR 12670 (03/08/1995)	03/03/1998	Polymers and Resins II
NESHAP for GMACT ²	Acetal Resins Production Hydrogen Fluoride Production	64 FR 34853 (06/29/1999)	06/29/2002	GMACT

¹ The Polymers and Resins I NESHAP regulates nine source categories. We are performing the residual risk and technology review for four of them in this proposal. We will address the remaining five source categories in a separate risk and technology review rulemaking.

² The source categories subject to the standards in the GMACT NESHAP are Acetal Resins Production and Hydrogen Fluoride Production.

1. Polymers and Resins I

The Polymers and Resins I NESHAP applies to major sources and regulates HAP emissions from nine source categories. In today's proposal, we address four of the Polymer and Resins I sources categories - Polysulfide Rubber Production, Ethylene Propylene Rubber Production, Butyl Rubber Production, and Neoprene Production. HAP emissions from these processes can be released from storage tanks, process vents, equipment leaks, and wastewater operations.

These four source categories involve the production of elastomers (i.e., synthetic rubber). An elastomer is a synthetic polymeric material that can stretch at least twice its

original length and then return rapidly to approximately its original length when released. Elastomers have long, flexible, chainlike molecules that are able to undergo rapid rotation (i.e., flex) as a result of thermal agitation. Elastomers are produced via a polymerization process, in which monomers undergo intermolecular chemical bonds to form an insoluble, three-dimensional network (i.e., a polymer). Generally, the production of elastomers entails four processes: (1) raw material (i.e., solvent) storage and refining; (2) polymer formation in a reactor (either via the solution process, where monomers are dissolved in an organic solvent, or the emulsion process, where monomers are dispersed in water using a soap solution); (3) stripping and material recovery; and (4) finishing (i.e., blending, aging, coagulation, washing, and drying processes).

a. Polysulfide Rubber Production. Polysulfide rubber is a synthetic rubber produced by the reaction of sodium sulfide and p-dichlorobenzene (1,4-dichlorobenzene) at an elevated temperature in a polar solvent. Polysulfide rubber is resilient, resistant to solvents, and has low temperature flexibility, facilitating its use in seals, caulks, automotive parts, rubber molds for casting sculpture, and other products.

During the development of the NESHAP, we identified one polysulfide rubber production facility as a major source and

subject to the Polymers and Resins I NESHAP. This facility consisted of raw material storage vessels and was designated as a major source because it was co-located with another source. This polysulfide facility has been dismantled and we are not aware of any other facilities currently subject to the NESHAP. (Even though no polysulfide rubber facilities are currently in operation, we completed a risk analysis based on the available information on this facility as of 2002.) The only HAP reported for this category in the 2002 National Emissions Inventory (NEI) was methylene diphenyl diisocyanate.

b. Ethylene Propylene Rubber Production. Ethylene propylene elastomer is an elastomer prepared from ethylene and propylene monomers. Common uses for these elastomers include radiator and heater hoses, weather stripping, door and window seals for cars, construction plastics blending, wire and cable insulation and jackets, and single-ply roofing membranes.

We believe five ethylene propylene rubber production facilities are currently subject to the Polymers and Resins I NESHAP. Hexane, which is the HAP used as the solvent at three of the plants, accounts for the majority of the HAP emissions from these facilities (over 95 percent of the total HAP emissions by mass). These facilities also reported relatively small emissions of ethyl chloride, ethylene glycol, and hydrogen chloride. Two facilities do not use hexane in their processes.

One facility uses toluene instead of hexane as a solvent and the other facility uses a gas-phase process where methanol is the only HAP emitted.

c. Butyl Rubber Production. The Butyl Rubber Production source category includes any facility that manufactures copolymers of isobutylene and isoprene. Butyl rubber is very impermeable to common gases and resists oxidation. A specialty group of butyl rubbers are halogenated butyl rubbers, which are produced commercially by dissolving butyl rubber in hydrocarbon solvent and contacting the solution with gaseous or liquid elemental halogens such as chlorine or bromine. Halogenated butyl rubber resists aging to a higher degree than the nonhalogenated type and is more compatible with other types of rubber. Uses for butyl rubber include tires, tubes, and tire products; automotive mechanical goods; adhesives, caulks, and sealants; and pharmaceutical uses.

We believe two butyl rubber production facilities are currently subject to the Polymers and Resins I NESHAP. The primary HAP emitted from butyl rubber production facilities are methyl chloride (53 percent of the total HAP emissions by mass) and hydrochloric acid (34 percent). Hexane is also emitted from the production of halobutyl rubber, and it makes up around 13 percent of the total HAP emissions from the category.

d. Neoprene Production. Neoprene is a polymer of chloroprene. Neoprene was originally developed as an oil-resistant substitute for natural rubber, and its properties allow its use in a wide variety of applications including wetsuits, gaskets and seals, hoses and tubing, plumbing fixtures, adhesives, and other products.

We believe that one neoprene production facility is currently subject to the Polymers and Resins I NESHAP. The primary HAP emitted by production are chloroprene and toluene, with chloroprene accounting for over 80 percent of the total emissions.

2. Polymers and Resins II

The Polymers and Resins II NESHAP applies to major sources and regulates HAP emissions from two source categories - epoxy resins production and non-nylon polyamides production. HAP emissions from these source categories can be released from storage tanks, process vents, equipment leaks, and wastewater operations.

a. Epoxy Resins Production. The Epoxy Resins Production source category generates HAP emissions from the manufacture of basic liquid epoxy resins used in the production of glues, adhesives, plastic parts, and surface coatings. This source category does not include specialty or modified epoxy resins.

We believe three epoxy resins production facilities are currently subject to the Polymers and Resins II NESHAP. The HAP emitted in the greatest quantity by mass from these facilities are epichlorohydrin (referred to by its synonym 1-chloro-2,3-epoxypropane in the NEI and in the accompanying emissions summary table) and chlorobenzene. The total emissions for these two HAP account for approximately 87 percent of the total HAP mass emitted by the facilities regulated by the NESHAP.

Epichlorohydrin is emitted in the greatest quantity and is reported as an emission of all three facilities. Other HAP such as phenol, xylenes, ethyl benzene, propylene dichloride, allyl chloride, 1,3-dichloropropene, glycol ethers, methyl chloride, toluene, acrolein, benzyl chloride, and ethyl acrylate are emitted in smaller quantities. All the other HAP are reported as emissions by only one or two of the facilities.

b. Non-nylon Polyamides Production. The Non-nylon Polyamides Production source category generates HAP emissions from the manufacture of epichlorohydrin cross-linked non-nylon polyamides used primarily by the paper industry as an additive to paper products. Natural polymers, such as those contained in paper products, have little cross-linking, which allows their fibers to change position or separate completely when in contact with water. The addition of epichlorohydrin cross-linked non-nylon polyamides to these polymers causes the formation of a stable

polymeric web among the natural fibers. Because the polymeric web holds the fibers in place even in the presence of water, epichlorohydrin cross-linked non-nylon polyamides are also referred to as wet-strength resins.

We believe four non-nylon polyamides production facilities are currently subject to the Polymers and Resins II NESHAP. Epichlorohydrin (64 percent) and hydrochloric acid (36 percent) are the only HAP emitted from this category.

3. GMACT - Acetal Resins Production

The GMACT set national emission standards for certain source categories consisting of five or fewer facilities. The basic purpose of the GMACT approach was to use public and private sector resources efficiently, and to promote regulatory consistency and predictability in the MACT standards development.

Emission sources from acetal resin production include storage vessels that hold process feed materials, process vents, process wastewater treatment systems, and equipment leaks from compressors, agitators, pressure relief devices, sampling connection systems, valves, connectors, and instrumentation systems. The storage vessels associated with acetal resin production are primarily used for storage of solvents. Back end process vent emissions occur from reactor units, mixing vessels, solvent recovery operations, and other operations.

Acetal resins are characterized by the use of formaldehyde in the polymerization process to manufacture homopolymers or copolymers of alternating oxymethylene units. Acetal resins, also known as polyoxymethylenes, polyacetals, or aldehyde resins, are a type of plastic possessing relatively high strength and rigidity without being brittle. They have good frictional properties and are resistant to moisture, heat, fatigue, and solvents. Acetal resins are used as parts in a variety of industrial applications, e.g., gears, bearings, bushings, and various other moving parts in appliances and machines, and in a range of consumer products, e.g., automotive door handles, seat belt components, plumbing fixtures, shaver cartridges, zippers, and gas tank caps.

We believe three facilities are currently subject to the acetal resins production provisions in the GMACT. The primary HAP emitted by acetal resin production are formaldehyde and methanol, which make up 92 percent of the total HAP emissions by mass.

4. GMACT - Hydrogen Fluoride Production

The Hydrogen Fluoride Production source category includes any facility engaged in the production and recovery of hydrogen fluoride by reacting calcium fluoride with sulfuric acid. Potential sources of HAP emissions at hydrogen fluoride production facilities include: process vents on hydrogen

fluoride recovery and refining equipment, storage vessels used to store hydrogen fluoride, bulk loading of tank trucks and tank rail cars, leaks from hydrogen fluoride handling equipment, and reaction kiln seal leaks. The only HAP emitted from the processes in this source category is hydrogen fluoride. We believe two facilities are currently subject to the hydrogen fluoride production provisions in the GMACT.

C. How did we estimate risk posed by the eight source categories?

To support the proposed decisions presented in today's notice, EPA conducted an inhalation risk assessment² that provided estimates of maximum individual cancer risk, cancer risk distribution within the exposed populations, cancer incidence, hazard indices for chronic exposures to HAP with non-cancer health effects, and hazard quotients (HQ) for acute exposures to HAP with non-cancer health effects. The risk assessment consisted of six primary activities: (1) establishing the nature and magnitude of emissions from the sources of interest, (2) identifying the emissions release characteristics (e.g., stack parameters), (3) conducting dispersion modeling to estimate the concentrations of HAP in ambient air, (4) estimating long-term and short-term inhalation

²For more information on the risk assessment inputs and models, see "Residual Risk Assessment for Eight Source Categories," available in the docket.

exposures to individuals residing within 50 km of the modeled sources, (5) estimating individual and population-level risks using the exposure estimates and quantitative dose-response information, and (6) characterizing risk. In general the risk assessment followed a tiered, iterative approach, beginning with a conservative screening-level analysis and, where the screening analysis indicated the potential for non-negligible risks, following that with more refined analyses. The following sections summarize the results of these efforts.

1. Emissions Data

For the Ethylene Propylene Rubber Production, Butyl Rubber Production, Neoprene Production, Epoxy Resins Production, and Non-nylon Polyamides Production source categories, we relied primarily on emissions data and emissions release characteristic data we collected directly from industry. We reviewed these data and consider them to be the best emissions and emissions release characteristic data available for these five source categories.

For the remaining three source categories, Polysulfide Rubber Production, Acetal Resins Production, and Hydrogen Fluoride Production, we relied primarily on data in the 2002 NEI

Final Inventory³, Version 1 (made publicly available on February 26, 2006). For the Polysulfide Rubber source category, the data in the 2002 NEI were used without further investigation because the only facility in the source category closed in 2002. For the Acetal Resins and Hydrogen Fluoride source categories, the 2002 NEI data were supplemented with information from industry and, for one hydrogen fluoride facility, with information from the State permitting agency.

In response to an advanced notice of proposed rulemaking⁴ we published on March 29, 2007, we received comments on emissions data and emissions release characteristics data for an acetal resins production facility, two ethylene propylene production facilities, and a neoprene production facility. We will include these comments in the docket for this proposal (docket ID EPA-HQ-OAR-2007-0211) and will evaluate them with other comments we receive in response to today's proposal. The data files for the eight source categories, which are posted on the RTR webpage and are described in Section III of this preamble, will include the new data provided by the commenters.

³ The National Emission Inventory (NEI) is a database that contains information about sources that emit criteria air pollutants and their precursors, and HAP. The database includes estimates of annual air pollutant emissions from point, nonpoint, and mobile sources in the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands. EPA collects this information and releases an updated version of the NEI database every 3 years.

⁴ Risk and Technology Review, Phase II, Group 2 at 72 FR 29287.

Emissions data and emissions release characteristics data for these eight source categories are documented in the docket in "Documentation of Emissions Data and Emissions Release Characteristics Data Used for the RTR Group 1." We specifically request comment on whether the facilities listed in our emissions data set accurately reflect the universe of sources within the source categories. For example, are there records remaining in the data set that are not part of the relevant source category or any missing emissions data that should be included for the relevant source category?

2. Risk Assessment

Both long-term and short-term inhalation exposure concentrations and health risk from each of the eight source categories addressed in today's proposal were estimated using the Human Exposure Model (Community and Sector HEM-3 version 1.1.0). The HEM-3 model performs three main operations: dispersion modeling, estimation of population exposure, and estimation of human health risks. The dispersion model used by HEM-3 is AERMOD, which is one of EPA's preferred models for assessing pollutant concentrations from industrial facilities⁵.

To perform the dispersion modeling and to develop the preliminary risk estimates, HEM-3 draws on three data libraries.

⁵ Environmental Protection Agency. Revision to the Guideline on Air Quality Models: Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions (70 FR 68218). November 9, 2005.

The first is a library of meteorological data, which are used for dispersion calculations. This library includes 1 year of hourly surface and upper air observations for 130 meteorological stations, selected to provide thorough coverage of the U.S. and Puerto Rico. A second library of U.S. Census Bureau census block internal point locations and populations provides the basis of human exposure calculations (Census, 2000). In addition, the census library includes the elevation and controlling hill height for each census block, which are also used in dispersion calculations. A third library of pollutant unit risk factors and other health benchmarks is used to estimate health risks. These risk factors and health benchmarks are the latest values recommended by EPA for HAP and other toxic air pollutants, and are discussed in more detail below. These values are available at <http://www.epa.gov/ttn/atw/toxsource/summary.html>.

The risk assessment for chronic exposures used the estimated annual average ambient air concentration of each HAP emitted by each source for which we have emissions data in the source category at each nearby census block⁶ centroid as a surrogate for the chronic inhalation exposure concentration for all the people who reside in that census block. We calculated

⁶ A typical census block is comprised of approximately 40 people or about 10 households.

the maximum individual risk for each facility as the risk associated with a lifetime (70-year) exposure to the maximum concentration at the centroid of an inhabited census block. Individual cancer risks were calculated as the lifetime exposure to the ambient concentration of each HAP multiplied by its Unit Risk Estimate (URE); total cancer risks were the sum of the risks of each carcinogenic HAP (including known, probable, and possible carcinogens) emitted by the modeled source. Air concentrations of HAP from sources other than the modeled source were not estimated. Total cancer incidence and the distribution of individual cancer risks across the population within 50 kilometers of any source were also estimated as part of these assessments by summing individual risks. We are using 50 kilometers to be consistent with both the analysis supporting the 1989 Benzene NESHAP (54 FR 38044) and the limitations of Gaussian dispersion modeling.

To assess risk of noncancer health effects from chronic exposures, we summed the HQ for each HAP that affects a common target organ system to obtain the hazard index (HI) for that target organ system (or target organ-specific hazard index, TOSHI), where the HQ is the estimated exposure divided by the chronic reference level (e.g., the U.S. EPA Reference Concentration (RfC) which is provided through the Integrated Risk Information System (IRIS)).

Health protective screening estimates of acute exposures and risks were also evaluated for each HAP at any location off-site of each facility (i.e., not just the census block centroids) assuming the combination of a peak (hourly) emission rate and hourly dispersion conditions for the 1991 calendar year that would tend to maximize exposure. In each case, acute HQ were calculated using best available short-term health indices. We assumed that 10 times the average annual hourly emission rate represented a health protective emissions estimate to evaluate acute exposures and risks for these initial screens. The factor of 10 is intended to cover routinely variable emissions and startup, shutdown, and malfunction emissions. We chose to use a factor of 10 based on: (1) engineering judgment, and (2) a review of short-term emissions data that compared hourly and annual emissions data for volatile organic compounds for all facilities in a heavily-industrialized 4-county area (Harris, Galveston, Chambers, and Brazoria Counties, TX) over an 11-month time period in 2001⁷. Most peak emission events were less than twice the annual average hourly emission rate and the highest peak emission event was 8.5 times the annual average hourly emission rate. We request comment on the interpretation of these data and the appropriateness of using a factor of 10 times

⁷ See http://www.tceq.state.tx.us/compliance/field_ops/eer/index.html or docket to access the source of these data.

the average annual hourly emission rate in these acute exposure screening assessments.

In cases where acute HQ values from the screening step were less than or equal to one, acute impacts were deemed negligible and no further analysis was performed. In the cases where an acute HQ from the screening step was greater than one, site-specific data were sought to develop a more refined estimate of the potential for acute impacts of concern. These data refinements included using a better representation of the peak-to-mean hourly emissions ratio (instead of using the default factor of 10) and using the site-specific facility layout to distinguish facility property from an area where the public could be exposed. The screening analysis resulted in an HQ less than or equal to one for all of the source categories except Acetal Resins Production and Hydrogen Fluoride Production. The specific refinements used for acetal resins production and hydrogen fluoride production are described in the results section for the two source categories.

We engaged in a consultation with a panel from the Science Advisory Board (SAB) on the "Risk and Technology Review (RTR) Assessment Plan" in December of 2006. The results of this consultation were transmitted to us in June 2007 in a letter from the SAB which also contained a summary listing of the key messages from the panel. The letter is available from the

docket and from http://www.epa.gov/sab/pdf/sab-07-003_response_04-20-07.pdf. In developing the risk assessments for the eight source categories covered by this proposal, we followed the RTR Assessment Plan, addressing the key recommendations from the panel, where appropriate and relevant to these assessments, but not the individual recommendations from each panel member. Our responses to each of the SAB's key recommendations are summarized in an appendix to the "Residual Risk Assessment for Eight Source Categories," available in the docket.

3. Noncancer Inhalation Reference Values

The most appropriate noncancer inhalation reference values for chronic durations in the Residual Risk Program are in order of preference: (1) the RfC which is provided through the IRIS; (2) the Agency for Toxic Substances and Disease Registry Chronic Minimal Risk Levels; or (3) California Office of Environment and Human Health Assessment's chronic Reference Exposure Level (REL).

No such hierarchy was developed for acute noncancer reference values. Instead, we use acute inhalation values from multiple sources because the various assessments are based on methods that are different enough to render them not directly comparable, nor does any one set of reference values provide coverage across the majority of chemicals. We looked to reference values developed for other purposes, such as Reference

Exposure Levels (REL), Acute Exposure Guideline Levels (AEGLs), and Emergency Response Planning Guideline (ERPGs).

The acute REL (<http://www.oehha.ca.gov/air/pdf/acuterel.pdf>) is defined as the concentration level at or below which no adverse health effects are anticipated for a specified exposure duration. The REL incorporates factors to address data gaps, uncertainty, and to protect the most sensitive individuals in the population, and exceeding the REL does not automatically indicate an adverse health impact.

The AEGL-1 is "the airborne concentration (expressed as ppm or mg/m³) of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects." The AEGL values are designed to be applicable to the general population, including sensitive subgroups; however, as stated in the AEGL guidelines and the definitions, "it is recognized that certain individuals, subject to unique and idiosyncratic responses, could experience effects at concentrations below the corresponding AEGL." The National Research Council states that "[t]he primary purpose of the AEGL program and the NAC/AEGL Committee is to develop guideline levels for once-in-a-lifetime, short-term exposures to airborne concentrations of acutely toxic, high-priority chemicals."⁸

⁸ See Standing Operating Procedures for Developing Acute Exposure Guideline Levels for Hazardous Chemicals (2001, National Academies Press, Washington, DC, page 21, PURPOSE AND OBJECTIVES OF THE AEGL PROGRAM AND THE NAC/AEGL COMMITTEE; http://books.nap.edu/openbook.php?record_id=10122&page=21).

The ERPG-1, developed specifically for emergency response situations, is the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to 1 hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined, objectionable odor. The ERPG documentation also states that "in all populations there are hypersensitive individuals who will show adverse responses at exposure concentrations far below levels where most individuals normally would respond."

The AEGL and ERPG values include three levels of severity generally referred to as mild, severe, and lethal. In contrast, the REL represents an exposure at which no adverse effects are expected. For many chemicals (e.g., ethylene oxide and phosgene) the available information does not allow development of a mild effect AEGL or ERPG. AEGL and ERPG values are usually established at higher exposure levels than Acute California REL reference values. Exceedances of REL, AEGL, or ERPG values in the context of a residual risk assessment should be interpreted on a case-by-case basis.

4. Consideration of Actual and Allowable Emissions

Generally, the emissions values in our data set represent actual emission levels. We discussed the use of both allowable and actual emissions in the final Coke Oven Batteries residual risk rule (70 FR 19998-19999, April 15, 2005) and in the proposed and final Hazardous Organic NESHAP (HON) residual risk

rules (71 FR 34428, June 14, 2006, and 71 FR 76603, December 21, 2006, respectively). In those previous actions, we noted that modeling the allowable levels of emissions (i.e., the highest emission levels that could be emitted while still complying with the MACT requirements) 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 such data are available, in both steps of the Benzene NESHAP analysis. Doing so avoids overestimating emissions and their associated health risks and accounts for how sources typically strive to perform better than required by standards to allow for process variability and to prevent exceeding standards due to emissions increases on individual days. Failure to consider these data in risk assessments, we said, would unrealistically inflate actual risk levels. 71 FR at 76609.

For the eight source categories addressed in this package, we do not have information regarding allowable emissions. This is similar to the circumstance we faced in the HON. In the preamble to the HON proposed rule, we acknowledged that there is some uncertainty regarding the difference between actual and allowable emissions. We also explained in the HON preamble that it was not possible to estimate allowable emissions for all emission points from the available information, but that for

equipment leaks, which represent the most significant impact on cancer risk at HON facilities, the actual and allowable emissions are likely the same. We further concluded that there was no evidence of substantial overcontrol, such that actual emissions would not be a reasonable approximation of allowable emissions, and that there was no evidence that the sources subject to the HON could make changes that would result in a substantial increase of emissions, and thus risk, while still complying with the MACT. Therefore, we concluded for the HON final rule that basing the analysis on actual emissions provided an acceptable method for determining the remaining risks to public health and the environment after application of the MACT standards.

The production processes for polymers and resins use the same process equipment and air pollution control equipment as HON processes. Thus, we believe we can draw the same conclusions for polysulfide rubber production, ethylene propylene rubber production, butyl rubber production, neoprene rubber production, epoxy resins production, non-nylon polyamides production, and acetal resins as we did for the HON - that estimating risk using actual emissions will reasonably reflect the risk after application of the relevant MACT standards.

For the Hydrogen Fluoride Production source category, we expect actual and allowable emissions to be similar, if not the

same. Hydrogen fluoride facilities employed stringent controls prior to the development of the MACT standards (we based the MACT standards on these pre-MACT controls) and we have no reason to believe control performance will decline.

We believe the differences between actual and allowable emissions are likely insignificant for these eight source categories and that using the actual emission levels results in a reasonable approximation of the allowable emissions.

Therefore, we conclude that the risk assessment results using actual emissions closely approximate those for an assessment using allowable emissions and that the difference would not be likely to substantially affect the estimated risk associated with exposure to HAP emitted by any of the eight source categories. Nevertheless, if commenters have data that demonstrate that allowable emissions could be higher or lower than actual emissions for these eight source categories we request the submission of this data.

5. Adverse Environmental Effects Assessment

None of the eight source categories emit persistent or bioaccumulative HAP; therefore, EPA's assessment of environmental effects evaluated only non-persistent and non-bioaccumulative HAP⁹. For animal populations, the potential for significant direct adverse environmental effects due to non-

⁹ Persistent and bioaccumulative HAP are those which persist in the environment and which also may bioaccumulate or biomagnify in food chains.

persistent and non-bioaccumulative HAP was evaluated implicitly by checking for exceedances of any human health inhalation dose-response limit values near the assessed facilities¹⁰. Because these values generally reflect the inclusion of uncertainty factors¹¹ (often 100 or 1,000), the human threshold values are generally believed to be significantly lower than any levels which have been shown to cause an adverse effect in an exposed animal. Therefore, if the maximum inhalation hazard in an ecosystem is below the level of concern for humans, we have concluded that, in general, environmental receptors should be at little risk of adverse effects due to airborne exposures.

One possible exception is pollutants that may directly impact various species of vegetation. For the seven polymers and resins production source categories affected by today's proposal, we have no scientific data, informal observations or other information that would indicate any concern for adverse environmental effects of HAP on vegetation at the expected air concentrations.

For the two facilities in the Hydrogen Fluoride Production source category (both of which emit hydrogen fluoride), we have some general information on the possible effects of hydrogen fluoride on vegetation at ambient concentrations well below the California chronic REL value of 14 microgram per cubic meter ($\mu\text{g}/\text{m}^3$). In separate and unrelated studies, air concentrations

¹⁰ While environmental effects thresholds are often available for HAP in water and soil, very few are available for direct airborne exposures.

¹¹ The uncertainty factors account for various data methodological uncertainties, for example, most inhalation dose-response limit values are derived from studies of laboratory animals.

of hydrogen fluoride greater than about $1 \mu\text{g}/\text{m}^3$ have been shown to adversely affect specific sensitive plant species¹². We note that responses to hydrogen fluoride are highly variable among plant species and responses may be influenced by co-exposures to other air pollutants. In this particular case, the maximum chronic ambient concentration estimated in the vicinity of the hydrogen fluoride production facilities was about $1.5 \mu\text{g}/\text{m}^3$, meaning that concentrations of hydrogen fluoride in all areas other than the maximum point are lower than $1.5 \mu\text{g}/\text{m}^3$, and perhaps substantially lower as the distance from the point of release increases. Because the spatially-averaged hydrogen fluoride concentration within several kilometers of each facility is likely well below $1 \mu\text{g}/\text{m}^3$, we are led to the conclusion that any significant and widespread adverse environmental effects on plants due to hydrogen fluoride emissions are unlikely. Further, we have no information suggesting that there are currently observed adverse impacts of hydrogen fluoride emissions on plants surrounding the two facilities.

6. Uncertainties in Risk Assessments

Uncertainty and the potential for bias are inherent in all risk assessments, including those performed for the eight source categories affected by today's proposal. We reduced some of

¹² $1 \mu\text{g}/\text{m}^3$ was the lowest concentration for which adverse effects were observed in the most sensitive flora for which data exists. We note that the studies were limited to certain species and $1 \mu\text{g}/\text{m}^3$ cannot be interpreted as an appropriate or definitive concentration level for all plant species. (See "List of References for Effects of Hydrogen Fluoride on Vegetation" in docket.)

these uncertainties by developing a new emissions data set, the RTR database, that is based on the NEI, but that includes more accurate replacement or supplemental data for the specific facilities in these eight source categories.

Although uncertainty exists, we believe the risk assessments performed for the eight source categories most likely overestimate the potential for risks due to the conservative (i.e., health-protective) assessment approach. Because these health protective risk assessments indicate little, if any, potential for significant risk, we believe they support our proposed decision not to issue residual risk standards for these eight source categories. A brief discussion of the uncertainties in the emissions data set, dispersion modeling, inhalation exposure estimates, and dose-response relationships is presented in this section of the preamble. A fuller discussion of these uncertainties is discussed in both the "Residual Risk Assessment for Eight Source Categories" (July 2007) and the "Risk and Technology Review (RTR) Assessment Plan" (November 2006), both of which are available in the docket.

a. Uncertainties in the RTR Emissions Database. Although the development of the RTR database involved quality assurance/quality control processes, the accuracy of emissions values will vary depending on the source of the data present, incomplete or missing data, errors in estimating emissions values, and other factors. The emission values considered in

this analysis are annual totals that do not reflect actual fluctuations during the course of a year (2002) or variations from year to year. These annual emissions estimates do not consider operations such as startup/shutdown and malfunctions. The estimates of health protective short-term emission rates for the screening assessment were based on a health-protective default assumption applicable to these source categories (10 times the annual rate). More refined estimates were used for source categories where the screening estimates did not "screen out" all sources and more specific information was available.

Facilities in some of the seven polymers and resins source categories emit chlorinated compounds and use incineration devices, creating the possibility for the formation of polychlorinated dioxins. However, we have no test reports or measurements, conducted by manufacturers or anyone else, indicating the presence of dioxins in the emissions from any of these source categories and EPA's dioxins inventory¹³ does not specifically link dioxins emissions to any of these source categories. Furthermore, in our judgment, it is improbable that dioxins are emitted in measurable amounts from the seven

¹³ An Inventory of Sources and Environmental Releases of Dioxin-Like Compounds in the United States for the Years 1987, 1995, and 2000. (EPA/600/P-03/002f, Final Report, November 2006). The dioxins inventory (<http://cfpub.epa.gov/ncea/cfm/recorddisplay.cfm?deid=159286>) classifies "rubber manufacturing" as an unquantifiable dioxins emission source. A source was defined as unquantifiable if dioxins releases were possible, but the data were inadequate to support even rudimentary calculations of emissions. Furthermore, the process could be very different from the polymers and resins processes of concern in this proposal.

polymers and resins source categories, especially given the low quantity of particulate matter present. Therefore, we did not consider dioxins in our assessment of the seven polymers and resins production source categories. Because no chlorinated compounds are emitted from the hydrogen fluoride production source category, we believe there is no possibility for dioxins to be emitted and we did not consider dioxins in our assessment of the source category.

Overall we believe that the emissions data considered in this assessment are the most accurate available representation of the eight source categories for the stated purpose. Nevertheless, we request comment on our emissions data set in general, and specifically on our approach to short-term emissions estimates and on the potential for dioxins emissions from the facilities in the seven polymers and resins production source categories affected by today's proposal.

b. Uncertainties in Dispersion Modeling. While the analysis employed EPA's suggested regulatory dispersion model, AERMOD, there is uncertainty in ambient concentration estimates associated with EPA's choice and application of the model. Where possible, model options (e.g., rural/urban, plume depletion, chemistry) were selected as to provide an overestimate of ambient air concentrations. However, because of practicality and data limitation reasons, some factors (e.g.,

meteorology, building downwash) have the potential in some situations to overestimate or underestimate ambient impacts. For example, meteorological data were taken from a single year (1991), and facility locations can be a significant distance from the site where these data were taken. Despite these uncertainties, we believe that at off-site locations and census block centroids, the approach considered in the dispersion modeling analysis should generally yield overestimates of ambient concentrations.

c. Uncertainties in Inhalation Exposure. The effects of human mobility on exposures were not included in the assessment. Specifically, short-term mobility and long-term mobility¹⁴ between census blocks in the modeling domain was not considered. As a result, this simplification will likely bias the assessment toward overestimating the highest exposures. In addition, the assessment predicted the chronic exposures at the centroid of each populated census block as surrogates for the exposure concentrations for all people living in that block. (On average census blocks are populated by approximately 40 people.) Using the census block centroid to predict chronic exposures tends to overpredict exposures for people in the census block who live further from the facility and underpredict exposures for people in the census block who live closer to the facility. Thus, in general, using the census block centroid to predict chronic exposures leads to a potential understatement or overstatement

¹⁴ Short-term mobility is movement from one microenvironment to another over the course of hours or days. Long-term mobility is movement from one residence to another over the course of a lifetime.

of maximum impact and an unbiased estimate of average risk and incidence.

The assessments evaluate the cancer inhalation risks associated with pollutant exposures over a 70-year period, the assumed lifetime of individuals. In reality, both the length of time that modeled emissions sources at facilities actually operate (i.e., more or less than 70 years), and the domestic growth or decline of the modeled industry (i.e., the increase or decrease in the number or size of U.S. facilities), will influence the risks posed by a given source category. Depending on the characteristics of the industry, these factors may result in an overestimate (or possibly an underestimate in the extreme case where a facility maintains or increases its emission levels beyond 70 years and residents live beyond 70 years at the same location) both in individual risk levels and in the total estimated number of cancer cases. Annual cancer incidence estimates from exposures to emissions from these sources would not be affected by uncertainty in the length of time emissions sources operate.

The exposure estimates used in these analyses assume chronic exposures to ambient levels of pollutants. Because most people spend the majority of their time indoors, actual exposures may not be the same, depending on characteristics of the pollutants modeled. For many HAP, indoor levels are roughly equivalent to ambient levels, but for very reactive pollutants or larger particles, these levels are typically lower. This

factor has the potential to result in an overstatement of 25 to 30 percent of exposures.¹⁵

In addition to the uncertainties highlighted above, there are several factors specific to the acute exposure assessment that need to be highlighted. The accuracy of an acute inhalation exposure assessment depends on the joint occurrence of independent factors that may vary greatly, such as hourly emissions rates, meteorology, and human activity patterns. In this assessment, we assume that individuals remain for one hour at the point of maximum ambient concentration as determined by the co-occurrence of peak emissions and worst-case meteorological conditions. These assumptions would tend to overestimate actual exposures since it is unlikely that a person would be located at the point of maximum exposure during the time of worst-case impact.

d. Uncertainties in Dose-Response Relationships. These assessments use toxicological dose-response values typically extrapolated from high-dose animal exposure or occupational exposures, to estimate risk. Consistent with EPA guidance, RfCs are developed by using order-of-magnitude factors to account for uncertainties in developing values protective of sensitive subpopulations. Most of the URE in this assessment were developed using linear low-dose extrapolation. Risks could be

¹⁵ National-Scale Air Toxics Assessment for 1996. (EPA 453/R-01-003; January 2001; page 85.)

overestimated if the true dose-response relationship (which is usually unknown) is sublinear and underestimated when the dose-response curve is actually superlinear. Impacts have been extrapolated from short-duration, high-dose animal or occupational exposures to longer durations and lower doses, using uncertain interspecies scaling methods. In general, EPA considers these URE's to be upper bound estimates based on the method of extrapolation, meaning they represent a plausible upper limit to the true value. (Note that this is usually not a true statistical confidence limit.) The true risk is therefore likely to be less, could be as low as zero, but also could be greater. As previously noted, benzene cancer risks were estimated from the reported URE range, which is considered to be based on maximum likelihood exposure and risk estimates.

Some HAP have no dose-response values for cancer, chronic non-cancer, and/or acute effects. Therefore, an understatement of risk for certain HAP at environmental exposure levels is possible if there are no health effects reference values available on which to base an assessment of health risk. Additionally, some chronic dose-response values used in the assessments for these 8 source categories are currently under EPA IRIS review (e.g., formaldehyde and methanol) and revised assessments may determine that these HAP are more or less potent than currently thought. We will consider the outcome of new assessments and reevaluate residual risk if application of new

dose-response values indicates the potential for unacceptable risks to human health and/or the environment.

e. Uncertainties in the Adverse Environmental Effects

Assessment. As previously discussed, we generally believe that when exposure levels are not anticipated to adversely affect human health, they also are not anticipated to adversely affect the environment. However, we recognize that this may not be the case for all HAP. Hydrogen fluoride in the air has the potential to adversely affect plant tissues, having been associated with necrosis (lesions) in plants and reduced plant growth and productivity. Determining the effects of hydrogen fluoride on vegetation is complicated by the high degree of variability among plant species in the extent of uptake and response to atmospheric hydrogen fluoride, and by co-exposure to other atmospheric pollutants, such as sulfur dioxide, that influences the impacts of hydrogen fluoride. (For references concerning the effects of hydrogen fluoride on plants, see docket item "List of References for Effects of Hydrogen Fluoride on Vegetation".)

EPA requests comment on this issue, including: submissions of any data that should be considered; observations, if any, of impacts on vegetation near the two facilities in the hydrogen fluoride production source category; and suggestions of how EPA should assess the potential for adverse environmental effects as defined in CAA section 112(a)(7).¹⁶

¹⁶ CAA section 112(a)(7) defines "adverse environmental effect" as meaning "any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including

D. What are the conclusions of the risk review?

The human health risks estimated for the eight source categories are summarized in this section of the preamble. Details of the assessment are located in the docket, especially see "How to Reproduce Modeling of Group 1 Source Categories" (May 2007). We believe that our assessment covers all potential health risks associated with HAP emissions from the eight source categories affected by today's proposal. We further believe that the reported emissions are consistent with the expected constituents and amounts for these source categories. The sections below provide more detailed discussions about the human health risk assessment results for each of the eight source categories.

Table 4. Summary of Estimated Inhalation Risks for the Eight Source Categories

Source Category	No. of Facilities¹	Maximum Individual Cancer Risk (in a million)² and HAP of Most Concern	Estimated Annual Cancer Incidence and HAP of Most Concern	Max. HI³ and HAP of Most Concern	Maximum Off-site Acute HQ and HAP of Most⁴ Concern
Polysulfide Rubber Production	1	0 ⁶	0 ⁶	<0.01 (MDI ⁵)	0.0004 ^{AEGL-1} (MDI ⁴)
Ethylene Propylene Rubber Production	5	0 ⁶	0 ⁶	0.5 (hexane)	0.3 ^{REL} (toluene)
Butyl Rubber Production	2	0 ⁶	0 ⁶	0.2 (methyl chloride)	0.1 ^{AEGL-2} (methyl chloride ⁷)
Neoprene Production	1	0 ⁶	0 ⁶	0.8 (chloroprene)	0.4 ^{REL} (toluene)
Epoxy Resins Production	3	0.1 (epichlorohydrin)	0.00002 (epichlorohydrin)	0.1 (epichlorohydrin)	0.6 ^{REL} (epichlorohydrin)
Non-nylon Polyamides Production	4	0.4 (epichlorohydrin)	0.00003 (epichlorohydrin)	0.3 (epichlorohydrin)	0.2 ^{REL} (epichlorohydrin)
Acetal Resins Production	3	0.3 (allyl chloride)	0.00004 (allyl chloride)	0.2 (chlorine)	1.7 ^{REL} (formaldehyde)
Hydrogen Fluoride Production	2	0 ⁶	0 ⁶	<0.01 (hydrofluoric acid)	0.3 ^{REL} (hydrofluoric acid)

¹ Number of facilities believed to be in the source category and used in the risk analysis.

² Maximum individual excess lifetime cancer risk.

³ Maximum hazard index (HI) is maximum respiratory HI for all except two source categories. Maximum HI for butyl rubber production is based on neurological effects. Maximum HI for hydrogen fluoride production is based on skeletal effects.

⁴ The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop an array of hazard quotient (HQ) values. These include RELs and AEGL-1 and AEGL-2 values. The acute REL is an exposure that is not likely to cause adverse effects in a human population, including sensitive subgroups, exposed to that concentration for one hour on an intermittent basis. AEGL-1 is the airborne concentration (expressed as ppm or mg/m³) of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure. AEGL-2 is the airborne concentration (expressed as ppm or mg/m³) of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

⁵ MDI is methylene diphenyl diisocyanate.

⁶ No HAP which are known, probable, or possible human carcinogens.

⁷ For methyl chloride, REL and AEGL-1 were not available.

As shown in Table 4, we estimate that the residual risk remaining from HAP emissions from these eight source categories affected by today's proposal do not pose cancer risks equal to or greater than 1-in-1 million to the individual most exposed, do not result in meaningful rates of cancer incidence, and do not result in a concern regarding either chronic or acute noncancer health effects for the individual most exposed.

No chronic inhalation human health thresholds were exceeded at ecological receptors for any of the eight source categories; therefore, we believe there is low potential for adverse environmental effects due to direct airborne exposures. We also believe that there is no potential for an adverse effect on threatened or endangered species or on their critical habitat within the meaning of 50 CFR 402.13(a) because our screening analyses indicate no potential for any adverse ecological impacts. Thus, we conclude that a consultation with the Fish and Wildlife Service is not necessary for any of the eight source categories.

Human health multipathway risks were determined not to be a concern for the eight source categories addressed in today's proposal due to the absence of persistent and bioaccumulative (PB)¹⁷ HAP emissions at all of these sources. The lack of PB HAP

¹⁷ Persistent and bioaccumulative (PB) HAP are the list of 14 HAP that have the ability to persist in the environment for long periods of time and may

emissions also provides assurance that there will be no potential for adverse ecological effects due to indirect ecological exposures (i.e., exposures resulting from the deposition of PB HAP from the atmosphere).

1. Polymers and Resins I - Polysulfide Rubber Production

The only HAP emitted by the Polysulfide Rubber Production source category in 2002 was 4,4'-methylene diphenyl diisocyanate (MDI), whose carcinogenic potential was evaluated in EPA's IRIS in 1998, and characterized as "cannot be determined, but for which there is suggestive evidence that raises concern for carcinogenic effects."

The maximum chronic noncancer TOSHI associated with emissions from polysulfide rubber production is less than 0.01, indicating that chronic noncancer risks are negligible. Further, our analysis, based on available information, indicates this source category poses no potential for adverse environmental impacts. Combining these results with the lack of information on potential cancer risks and the additional fact that no sources in this category are currently in operation, we conclude that there is no reason to modify the existing standard.

also have the ability to build up in the food chain to levels that are harmful to human health and the environment.

2. Polymers and Resins I - Ethylene Propylene Rubber Production

Because none of the HAP emitted are known, probable, or possible human carcinogens, we currently believe there are no cancer risks associated with exposures to the HAP emissions from this source category. The maximum chronic noncancer TOSHI value associated with emissions from ethylene propylene rubber production is 0.5. No adverse noncancer health effects associated with the modeled acute or chronic inhalation exposures are expected from the Ethylene Propylene Rubber Production source category. Our analysis, based on available information, indicates this source category poses no potential for adverse environmental impacts.

3. Polymers and Resins I - Butyl Rubber Production

Because none of the HAP emitted are known, probable, or possible human carcinogens, we currently believe there are no cancer risks associated with exposures to the HAP emissions from this source category. The maximum chronic noncancer TOSHI value associated with emissions from butyl rubber production is 0.2. We saw no exceedances of any available acute thresholds. Our analysis, based on available information, indicates this source category poses no potential for adverse environmental impacts.

A source of uncertainty unique to this source category is the lack of certain acute dose-response values (REL and AEGL) for methyl chloride. Since the only acute dose-response value

available is for methyl chloride is the ERPG2¹⁸ value which doesn't account for possible mild transient effects, there is some uncertainty regarding the conclusion that there are no possible acute impacts of concern.

4. Polymers and Resins I - Neoprene Production

Because none of the HAP emitted are known, probable, or possible human carcinogens, we currently believe there are no cancer risks associated with exposures to the HAP emissions from this source category. The maximum chronic noncancer TOSHI value associated with emissions from neoprene production is 0.8. There are no expected adverse noncancer health effects associated with the modeled acute or chronic inhalation exposures from the Neoprene Production source category. Our analysis, based on available information, indicates this source category poses no potential for adverse environmental impacts.

5. Polymers and Resins II - Epoxy Resins Production

All lifetime cancer risks associated with emissions from the three epoxy resins production facilities are estimated to be less than 1-in-1 million. The highest maximum lifetime individual cancer risk was estimated at 0.1-in-1 million. The total estimated cancer incidence from these facilities is 0.00002 excess cancer cases per year. The maximum chronic

¹⁸ ERPG-2 is the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to 1 hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action.

noncancer TOSHI value associated with emissions from epoxy resins production is 0.1. We saw no exceedances of any available acute thresholds. Our analysis, based on available information, indicates this source category poses no potential for adverse environmental impacts.

6. Polymers and Resins II - Non-nylon Polyamides Production

All lifetime cancer risks associated with emissions from the four non-nylon polyamides production facilities are estimated to be less than 1-in-1 million. The highest maximum lifetime individual cancer risk was estimated at 0.4-in-1 million. The total estimated cancer incidence from these facilities is 0.00003 excess cancer cases per year. The maximum chronic noncancer TOSHI value associated with emissions from non-nylon polyamides production is 0.3. There are no expected adverse noncancer health effects associated with the modeled acute or chronic exposures from the neoprene production source category. Our analysis, based on available information, indicates this source category poses no potential for adverse environmental impacts.

7. GMACT - Acetal Resins Production

All lifetime cancer risks associated with emissions from the three acetal resins production facilities are estimated to be less than 1-in-1 million. The highest maximum lifetime individual cancer risk was estimated at 0.3-in-1 million. The

total estimated cancer incidence from these facilities is 0.00004 excess cancer cases per year. The maximum chronic noncancer TOSHI value associated with emissions from acetal resins production is 0.2. Our analysis, based on available information, indicates this source category poses no potential for adverse environmental impacts.

The initial screening assessment for acute impacts suggested that short-term formaldehyde concentrations at the three modeled facilities could exceed acute thresholds if worst-case meteorological conditions are present and if maximum hourly emissions of formaldehyde exceed the average hourly emission rate by a factor of 10. One of the facilities showed potential exceedances of the REL only, and two facilities showed potential exceedances of both the REL and the AEGL-1. Therefore, we performed further site-specific analysis and mapped the screening results as a series of concentration isopleths overlaid against the aerial photograph of the facility in question. The results of this exercise for the first facility were that the isopleths that exceeded the REL did not extend off the facility site. Therefore, acute exposures to HAP emitted by this facility are not expected to pose any public health concerns. We further refined the assessments using better site-specific data for the other two facilities. Discussions with a plant engineer for one facility revealed that the acetal

resins processes operate continuously and that a reasonable worst-case emissions multiplier would be 1.5 instead of our default multiplier of 10. We performed more refined modeling (AERMOD) for these two facilities using the emissions multiplier of 1.5. The results for the second facility indicated no potential for exceeding the AEGL-1 and showed that the potential for exceedances of the REL did not extend off-site, except for a small extension over a river to the north of the facility. The maximum off-site REL HQ corresponding to these locations is 1.7 (HQ = 0.14 using the AEGL-1). The analysis showed that meteorological conditions resulting in exceedances of the REL may occur up to 2 hours per year along the river. We believe the potential for adverse acute health effects surrounding this facility is low. The results for the third facility showed potential for exceeding the REL in an area immediately adjacent to the facility along a roadway. The maximum off-site HQ for this facility is 1.6 for the REL (HQ = 0.13 using the AEGL-1). The analysis showed that meteorological conditions resulting in exceedances of the REL may occur up to 46 hours per year along the roadway. Additionally, the third facility reports that current actual emissions for this facility are significantly less than those used for this assessment because one of the higher emission sources listed for this facility in the 2002 NEI data has been shut down. Based on this new information, we

believe that the actual projected maximum off-site HQ for this facility is less than 1.0. We request interpretation and comment on this as well as any additional data regarding the potential acute impacts of these facilities.

A source of uncertainty that is unique to this source category is associated with annual emissions of HAP and the relationship between annual emissions and maximum hourly emissions. One facility reports emissions of benzene and allyl chloride, which are two relatively toxic HAP not expected to be emitted from this source category. Since the risk assessment shows allyl chloride to be the cancer risk driver for the source category, this indicates a potential overestimate of the cancer risks

8. GMACT - Hydrogen Fluoride Production

Because hydrogen fluoride, the only HAP emitted from the source category, is not a known, probable, or possible human carcinogen, we currently believe there are no cancer risks associated with exposures to the HAP emissions from this source category. The maximum chronic noncancer TOSHI value associated with emissions from hydrogen fluoride production is less than 0.01.

The initial screening assessment for acute impacts suggests that short-term hydrofluoric acid concentrations at the two modeled facilities could exceed acute thresholds if worst-case

meteorological conditions are present and if maximum hourly emissions of hydrofluoric acid exceed the average hourly emission rate by a factor of 10. Since one of the facilities showed potential exceedances of the REL only, and one facility showed potential exceedances of both the REL and the AEGL-1, we performed additional site specific assessments. We contacted the permitting agency and a process engineer at one of the facilities to gather additional source specific information. Based on discussions with the permitting agency and the process engineer, we determined that these facilities operate continuously and that the peak hourly emissions are not expected to exceed twice the hourly average. By adjusting the short-term emission rate to more accurately represent the true facility operating conditions (from 10 to 2), no offsite impacts above the REL were predicted from the first facility. For the second facility that exceeded both the REL and AEGL-1, we remodeled using the AERMOD model to more accurately predict the worst case acute impacts. By adjusting the short-term emission rate to more accurately represent facility operating conditions (from 10 to 2), exceedances of the REL and AEGL-1 were predicted to occur within the facility property boundary, but not offsite.

A source of uncertainty unique to this source category involves the adequacy of our screening for potential adverse environmental effects for the pollutant hydrogen fluoride, as

discussed in section I.C.6.e of this preamble. Indeed, there is a significant lack of scientific understanding and assessment methodologies for such potential adverse environmental effects. However, we believe acute and chronic noncancer assessment results (maximum chronic TOSHI less than 0.01 and maximum acute HQ of 0.3 for REL and 0.09 for AGEL-1) support our conclusion that no adverse environmental impacts are expected for this source category.

E. What are the conclusions of the technology review?

For seven of the source categories affected by today's proposal (all except the Hydrogen Fluoride Production source category), we relied on the technology review conducted for the HON, which did not identify any significant developments in practices, processes, or control technologies since promulgation of the original HON standards in 1994.¹⁹ These seven source categories are similar to those under the HON because they use the same kinds of process and pollution control equipment and are subject to similar control requirements.²⁰ For the seven HON-like source categories affected by today's proposal, we conclude that imposing additional controls under any control option would achieve, at best, minimal emission and risk reductions. Furthermore, elimination of all HAP, if it were

¹⁹ Discussed in the proposed and final HON residual risk preambles (71 FR 34428, June 14, 2006, and 71 FR 76603, December 21, 2006, respectively).

²⁰ Process equipment, pollution control equipment, and control requirements are summarized in the proposal BID.

possible, from all seven of these source categories combined would reduce estimated cancer incidence by less than 0.0002 cases per year. For HAP with available dose-response values, the maximum HI for these facilities are all below one and the cancer risks are all below 1-in-1 million.

Elimination of all HAP²¹ emissions from the Hydrogen Fluoride source category, if it were possible, would reduce HAP emissions by 8 tons per year and would not affect cancer incidence, which is 0 (hydrogen fluoride is not a known, probable, or possible human carcinogens). The noncancer risk is low (the maximum HI is less than 0.01 with the current level of emissions achieved by the GMACT) and further emissions reductions would provide insignificant, if any, health benefits. In addition, all hydrogen fluoride emissions are from control device vents equipped with control devices that achieve 99 percent reductions. Improvements in hydrogen fluoride controls are not feasible.

We conclude that the existing MACT standards effectively address HAP emissions for all eight source categories: cancer risks and incidence to humans, chronic and acute exposure noncancer risks to humans, and adverse environmental effects from these facilities are insignificant based on available

²¹ Hydrogen fluoride is the only HAP emitted from the Hydrogen Fluoride source category.

health benchmarks, and no advancements in practices, processes, or control technology that make additional controls cost-effective are known.

II. Proposed Action

Section 112(f) of the CAA requires that EPA promulgate standards for a category if promulgation of such standards is required 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 approach we use is that set forth in the preamble to the Benzene NESHAP. First we exclusively evaluate health risk measures and information in determining whether risks are acceptable. Second, we may consider costs and other factors in deciding whether further emission reductions are necessary to protect public health with an ample margin of safety. The Benzene NESHAP preamble explained that in protecting public health with an ample margin of safety under CAA section 112, EPA strives to provide maximum feasible protection against risks to health from HAP by protecting the greatest number of persons possible to an individual lifetime risk level no higher than approximately 1-in-1 million.

EPA is not required to promulgate standards for a source category under section 112(f) if public health is protected with an ample margin of safety and adverse environmental effects are

prevented. For the eight source categories that are the subject of today's notice, we have concluded (based on the results of risk assessments) that the existing MACT standards protect public health with an ample margin of safety and prevent an adverse environmental effect. In making this conclusion, we determined that the source categories addressed in today's proposal that emit one or more HAP which are known or potential carcinogens pose cancer risks less than or equal to 1-in-1 million to the individual most exposed. In addition, we also determined that emissions from these source categories result in chronic noncancer target organ-specific HI less than or equal to 1 for the individual most exposed, are unlikely to result in health effects under acute scenarios and are not anticipated to pose any significant and widespread adverse environmental effects. In reaching this conclusion, we did not consider costs.

Furthermore, as explained in section I.E. of this preamble, there have been no significant developments in practices, processes, or control technologies since promulgation of the MACT standards. Because there have been no such significant developments and because public health is protected with an ample margin of safety, we conclude that no further revisions to the standards affected by today's proposal are needed under section 112(d)(6) of the CAA.

Therefore, we propose no revisions to the standards for the eight source categories: Butyl Rubber Production, Ethylene-Propylene Rubber Production, Polysulfide Rubber Production, Neoprene Production, Epoxy Resins Production, Ethylene-Propylene Rubber Production, Acetal Resins Production, and Hydrogen Fluoride Production.

III. How do I access and review the facility-specific data?

The facility-specific data for each source category are available for download on the RTR webpage at <http://www.epa.gov/ttn/atw/rrisk/rtrpg.html>. The eight source categories affected by today's proposal are referred to as Group 1 of RTR Phase 2. These data files include detailed information for each emissions release point at each facility in the source category. For large integrated facilities with multiple processes representing multiple source categories, it is often difficult to clearly distinguish the source category to which

each emission point belongs. For this reason, the data available for download for each source category include all emission points for each facility in the source category, though only the emission points marked as belonging to the specific source category in question were included in the analysis for that source category.

The data files for each source category must be downloaded from the RTR webpage to be viewed (<http://www.epa.gov/ttn/atw/rrisk/rtrpg.html>). These are Microsoft® Access files, which require Microsoft® Access to be viewed (if you do not have Microsoft® Access, contact us by e-mail at RTR@epa.gov). Each file contains the following information from the NEI for each facility in the source category:

Facility Data	Emissions Data
EPA Region	Pollutant Code
Tribal Code	Pollutant Code Description
Tribe Name	HAP Category Name
State Abbreviation	Emissions (TPY)
County Name	MACT Code
State County FIPS	MACT Source Category Name
NEI Site ID	MACT Flag
Facility Name	MACT Compliance Status Code
Location Address	SCC Code
City Name	SCC Code Description
State Name	Emission Unit ID
Zip Code	Process ID
Facility Registry	Emission Release Point ID

State Facility Identifier	Emission Release Point Type Code
SIC Code	Emission Release Point Type
SIC Code Description	Stack Default Flag
NAICS Code	Stack Default Flag Description
Facility Category Code	Stack height
Facility Category	Exit Gas Temperature
	Stack Diameter
	Exit Gas Velocity
	Exit Gas Flow Rate
	Fugitive Length
	Fugitive Width
	Fugitive Angle
	Longitude
	Latitude
	Location Default Flag
	Data Source Code
	Data Source Description
	HAP Emissions Performance Level Code
	HAP Emissions Performance Level Description
	Start Date
	End Date

More information on these NEI data fields can be found in the NEI documentation at

<http://www.epa.gov/ttn/chief/net/2002inventory.html#documentation>.

IV. How do I submit suggested data corrections?

If you believe that the data are not representative or are inaccurate, please identify the data in question, provide your reason for concern, and provide improved data if available.

When submitting data, we ask that you provide documentation of the basis for the revised values to support any suggested changes.

To submit comments on the data downloaded from the RTR webpage, complete the following steps:

1. Within this downloaded file, enter suggested revisions in the data fields appropriate for that information. The data fields that may be revised include the following:

Facility Data

REVISED Tribal Code
 REVISED County Name
 REVISED Facility Name
 REVISED Location Address
 REVISED City Name
 REVISED State Name
 REVISED Zip Code
 REVISED Facility Registry Identifier
 REVISED Facility Category Code

Emissions Data

REVISED Emissions (TPY)
 Emissions Calculation Method Code
 REVISED MACT Code
 REVISED SCC Code
 REVISED Emission Release Point Type
 REVISED Start Date
 REVISED End Date
 Revised Pollutant Code
 REVISED Stack height
 REVISED Exit Gas Temperature
 REVISED Stack Diameter
 REVISED Exit Gas Velocity
 REVISED Exit Gas Flow Rate
 REVISED Longitude
 REVISED Latitude
 REVISED HAP Emissions
 Performance Level

2. Fill in the following commenter information fields for each suggested revision:

- Commenter Name
- Commenter Organization
- Commenter E-Mail Address
- Commenter Phone Number
- Revision Comments

3. Gather documentation for any suggested emissions revisions (e.g., performance test reports, material balance calculations, etc.).

4. Send the entire downloaded file with suggested revisions in Microsoft® Access format and all accompanying documentation to Docket ID No. EPA-HQ-OAR-2007-0211 (through one of the methods described in the ADDRESSES section of this preamble). To answer questions on navigating through the data and to help expedite review of the revisions, it would also be helpful to submit revisions to EPA directly at RTR@epa.gov in addition to submitting them to the docket.

5. If you are providing comments on a facility with multiple source categories, you need only submit one file for that facility, which should contain all suggested changes for all source categories at that facility.

We strongly urge that all data revision comments be submitted in the form of updated Microsoft® Access files, which

are provided on the <http://www.epa.gov/ttn/atw/rrisk/rtrp.html> webpage. Data in the form of written descriptions or other electronic file formats will be difficult for EPA to translate into the necessary format in a timely manner.

V. Statutory and Executive Order Reviews

A. Executive Order 12866, Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action." This action is a significant regulatory action because it raises novel legal and policy issues. Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Order 12866 and any changes made in response to OMB recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

This action does not impose any new information collection burden. This action is proposing no changes to the existing regulations affecting the eight source categories affected by today's proposal and will impose no additional information collection burden.

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 (RFA) 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 impact of today's proposed action on small entities, small entity is defined as: (1) a

small business whose parent company has fewer than 750 to 1,000 employees, depending on the size definition for the affected NAICS code (as defined by Small Business Administration size standards); (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 impact of today's proposed action on small entities, we certify that this action will not have a significant economic impact on a substantial number of small entities. The proposed action will not impose any requirements on small entities. We are proposing no further action at this time to revise the NESHAP. Today's proposed action requests public comments on the residual risk and technology review.

We continue to be interested in the potential impacts of the proposed action on small entities and welcome comments on issues related to such impacts.

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 effect 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 to 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 the Administrator 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 proposed 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 to the private sector in any one year. The rule imposes no enforceable duty on State, local, or tribal governments, or the private sector. Thus, today's proposed action is not subject to the requirements of sections 202 and 205 of the UMRA.

In addition, EPA has determined that the proposed action contains no regulatory requirements that might significantly or uniquely affect small governments, because it contains no requirements that apply to such governments or impose obligations upon them.

E. Executive Order 13132, Federalism

Executive Order 13132, entitled "Federalism" (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.”

This proposed 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 this proposed action.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this proposed action from State and local officials.

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.” This proposed action does not have tribal implications as specified in Executive Order 13175. It will not have substantial direct effect 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 this proposed action.

EPA specifically solicits additional comment on this proposed rule from tribal officials.

G. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (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, the Agency 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.

This proposed 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 this action present a disproportionate risk to children because EPA's risk assessment demonstrates that the existing regulations are health protective.

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

This proposed rule is not a "significant energy action" as defined in Executive Order 13211 (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 proposed rule is not likely to have any adverse energy effects.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), 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 decides not to use available and applicable VCS.

The proposed action does not involve technical standards. Therefore, EPA is not considering the use of any VCS. EPA welcomes comments on this aspect of the proposed rulemaking and, specifically, invites the public to identify potentially applicable VCS and to explain why such standards should be used in this proposed action.

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

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this proposed rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment. This proposed rule would not relax the control measures on sources regulated by the rule and,

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therefore, would not cause emissions increases from these sources.

List of Subjects for 40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: December 6, 2007.

Stephen L. Johnson,
Administrator.