mutual interests of all the major stakeholders in the air toxics program.

For many source categories for which MACT standards are required, State and local agency personnel have the expertise, information and desire to provide technical assistance for the development of MACT standards. Industry personnel are also invaluable sources of technical expertise and data needed to develop MACT standards. In addition, environmental groups have a thorough understanding of the interests of the public and can assist in the development of as many MACT standards as practical.

III. Streamlined MACT Development Approach

The MACT Partnerships program, as currently envisioned, involves two phases for each MACT standard. The first phase involves development of a ''presumptive MACT''. A ''presumptive MACT'' is not an emission standard; but it serves as a statement of current knowledge of maximum available control technologies and a basis for a decision on how to develop the emission standard for the source category involved. The second phase is the formal standard development process, which results in a promulgated MACT standard for the source category.

In the first phase of the MACT Partnerships program, the development of a ''presumptive MACT'', begins with two main steps: (1) A meeting between EPA and State and local agencies, known as the presumptive MACT meeting and (2) consultations with industry, environmental and other interest groups. In the presumptive-MACT meeting, EPA, and States review available information to estimate what MACT would be if only this information were used in the determination. This draft presumptive MACT then goes through a consultation stage where industry and environmental groups are invited to comment on the selected presumptive MACT. After this consultation, EPA and the State/local agencies determine a final presumptive MACT and how best to complete the development of a standard, with the normal opportunities for public comment. This determination of a presumptive MACT and a decision on how to complete development of a standard are the two products of the first phase.

For the second phase of MACT Partnerships, EPA envisions the use of one of three basic regulatory development paths: Adopt-a-MACT, share-a-MACT, or a streamlined-traditional approach. In all cases, EPA would eventually propose and then promulgate the MACT standard. The ''Adopt-a-MACT'' path allows EPA to enter into an agreement with a State wherein the State would accept primary responsibility for data collection and analysis. Alternatively, a ''share-a-MACT'' path allows states, industry or both to share with EPA the responsibility for developing the underlying data and analysis from which EPA would determine the MACT emission limitation. When no suitable partners can be found, a ''streamlined-traditional'' path is the last alternative. In the ''streamlined-traditional'' path, EPA would go through a streamlined process of the traditional rule development, with a presumptive MACT specification as an intermediate stage. No matter what path is chosen, almost all standards would go through phase one, namely, the presumptive MACT meeting and the second consultative stage.

The EPA has successfully worked with States and industry in the development of presumptive MACT in two pilot projects. One project concerned the MACT standard primary aluminum manufacturing. The States of Washington and New York worked with EPA in the development of a presumptive MACT. In addition, the Aluminum Manufacturers Association and its member companies participated. For the second project, EPA worked with the States of Wisconsin and Maryland to develop a presumptive MACT for bakers yeast manufacturing. Both EPA and State partners have worked with the industry to move from the presumptive MACT to develop a MACT standard that is scheduled to be proposed in the fall of 1995.

Currently, EPA is beginning more than 25 projects within the MACT Partnerships program. Presumptive MACT meetings are scheduled over the next several months. For the information of the public, EPA has developed a table of these projects and has added it to the Technology Transfer Network bulletin board system (TTN BBS) See **ADDRESSES** section above for information on how to access the TTN BBS. The list can be found under the Clean Air Act (Rules/Guidance/Policy) section, Tittle III: Hazardous Air Pollutants subsection and then the Status of Rules/Projects portion of the TTN BBS.

In summary, the MACT Partnerships program is one way to pursue new, assertive ways to develop MACT standards. MACT Partnerships is characterized by EPA and State/localities working together with industry and environmentalists to fulfill the mandate to set MACT standards for sources of hazardous air pollutants. Given the mutual interest of all the stakeholders and EPA's current ''budgetary'' situation within the air toxics program, EPA has begun redefining its role in selected areas of MACT standard development for many MACT standards as a coordinator and facilitator.

IV. Request for Comments

With this notice the EPA is requesting comments on:

(1) The concept of MACT Partnerships as an approach for streamlining the development of MACT standards,

(2) How to improve the MACT Partnership approach,

(3) Alternative ways to streamline the MACT development process, and

(4) Using presumptive MACT as a starting point for case-by-case MACT determinations.

V. Administrative Requirement

A. Paperwork Reduction Act

The request for comments detailed in this notice seeks voluntary responses and does not affect information collection burdens.

B. Executive Order 12866 Review

This notice is a request for comments and, therefore, was not reviewed by the Office of Management and Budget under Executive Order 12866. It was not considered significant.

Dated: March 14, 1995.

Mary D. Nichols,

Assistant Administrator for Air and Radiation.

[FR Doc. 95–7492 Filed 3–28–95; 8:45 am]

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40 CFR Part 63

[AD-FRL–5175–9]

RIN 2060–AE37

National Emission Standards for Hazardous Air Pollutant Emissions From the Production of Acrylonitrile Butadiene Styrene (ABS) Resin, Styrene Acrylonitrile (SAN) Resin, Methyl Methacrylate Acrylonitrile Butadiene Styrene (MABS) Resin, Methyl Methacrylate Butadiene Styrene (MBS) Resin, Polystyrene Resin, Poly (Ethylene Terephthalate) (PET) Resin, and Nitrile Resin (Group IV Polymers and Resins)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule and notice of public hearing.

SUMMARY: The proposed rule would reduce emissions of organic hazardous air pollutants (HAP) from existing and new facilities that manufacture one or more of the following Group IV polymers and resins: Acrylonitrile butadiene styrene (ABS) resin, styrene acrylonitrile (SAN) resin, methyl methacrylate acrylonitrile butadiene styrene (MABS) resin, methyl methacrylate butadiene styrene (MBS) resin, polystyrene resin, poly (ethylene terephthalate) (PET) resin, and nitrile resin. The EPA is in the process of developing standards for a wide range of types of polymer and resin production facilities. The polymers and resins covered by this proposed rule are thermoplastics, and with two exceptions, use styrene as the dominant feedstock. These thermoplastics are basically intermediate products used to produce automotive plastic parts, appliances and appliance parts, housewares, polyester fibers, packing and containers, soft drink bottles, and toys. In the production of thermoplastics, a variety of organic HAP are used as monomers or are created as by-products. The organic HAP emitted by the facilities covered by this proposed rule include styrene, acrylonitrile, butadiene, ethylene glycol, methanol, acetaldehyde, and dioxane. Some of these pollutants are considered to be mutagens and carcinogens, and all can cause reversible or irreversible toxic effects following exposure. The proposed rule is estimated to reduce organic HAP emissions from existing facilities by 11,750 megagrams per year (Mg/yr). The emission reductions achieved by these standards, when combined with the emission reductions achieved by other similar standards, will achieve the primary goal of the Clean Air Act (Act) as amended in 1990, which is to ''enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population''.

The proposed rule implements section 112(d) of the Act, which requires the Administrator or Administrator's designee, hereafter referred to as Administrator, to regulate emissions of HAP listed in section 112(b) of the Act. The intent of this rule is to protect the public by requiring the maximum degree of reduction in emissions of organic HAP from new and existing major sources, taking into consideration the cost of achieving such emission reduction, and any non-air quality, health and environmental impacts, and energy requirements.

Under today's action, the EPA is also proposing to revise subpart DDD of 40 CFR part 60 by removing all references to polystyrene and PET facilities contained therein. This proposed action is being taken because today's proposed rule would supersede the requirements specified in subpart DDD of 40 CFR part 60 for polystyrene and PET facilities.

Finally, under today's action, the EPA is proposing to add nitrile resin production to the source category list under section 112(c) of the Act and to the source category schedule under section 112(e) of the Act with a promulgation date no later than November 15, 2000.

DATES: *Comments.* Comments must be received on or before May 30, 1995.

Public Hearing. If anyone contacts the EPA requesting to speak at a public hearing by April 19, 1995, a public hearing will be held on April 28, 1995 beginning at 10 a.m. Persons interested in attending the hearing should call Ms. Marguerite Thweatt at (919) 541–5607 to verify that a hearing will be held.

Request to Speak at Hearing. Persons wishing to present oral testimony must contact the EPA by April 19, 1995 by contacting Ms. Marguerite Thweatt; Organic Chemicals Group, (MD–13), U. S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541–5607.

ADDRESSES: *Comments.* Comments should be submitted (in duplicate, if possible) to: Air Docket Section (LE–131), Attention: Docket No. A–92–45, U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460. The EPA requests that a separate copy also be sent to the contact person listed below. The public hearing, if required, will be held at the EPA's Office of Administration Auditorium, Research Triangle Park, North Carolina.

The docket is located at the above address in room M–1500, Waterside Mall (ground floor), and may be inspected from 8 a.m. to 4 p.m., Monday through Friday; telephone number (202) 382–7548. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: For information concerning the proposed rule, contact Mr. Leslie Evans at (919) 541–5410, Organic Chemicals Group, Emission Standards Division (MD–13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.

SUPPLEMENTARY INFORMATION: The proposed regulatory text is not included in this **Federal Register** document, but is available in Docket No. A–92–45, on the Technology Transfer Network (TTN), or from the EPA contact person designated in this notice. The TTN, EPA's electronic bulletin board, provides information and technology exchange in various areas of air pollution control. The service is free, except for the cost of a telephone call. Dial (919) 541–5742 for up to a 14,400 bps modem. If more information on the TTN is needed, call the HELP line at (919) 541–5384.

In addition to the proposed regulatory text, the Basis and Purpose Document, which contains the rationale for the various components of the standard, is available in the docket (Docket No. A–92–45, Category II–A), and on the TTN. This document is entitled Hazardous Air Pollutant Emissions From Process Units in the Thermoplastics Manufacturing Industry—Basis and Purpose Document for Proposed Standards, March 1995, and has been assigned document number EPA–453/R–95–004a.

Other materials related to this rulemaking, including technical memoranda, are available for review in the docket. Some of these memoranda have been compiled into a single document, the Supplementary Information Document (SID), to allow interested parties more convenient access to the information. The SID is available in the docket (Docket No. A–92–45, Category II–A) and from the EPA Library by calling (919) 541–2777. The document is entitled Hazardous Air Pollutant Emissions From Process Units in the Thermoplastics Manufacturing Industry—Supplementary Information Document for Proposed Standards, March 1995, and has been assigned document number EPA–453/R–95–003a.

The information presented in this preamble is organized as follows:

I. List of Affected Source Categories

Section 112 of the Act requires that the EPA evaluate and control emissions of HAP. The control of HAP is achieved through promulgation of emission standards under sections 112(d) and 112(f) of the Act and work practice and equipment standards under section 112(h) of the Act for categories of sources that emit HAP. On July 16, 1992, the EPA published an initial list of major and area source categories to be regulated, as required under section 112(c) of the Act. Included on that list were major sources emitting HAP from ABS, SAN, MABS, MBS, polystyrene, and PET. Nitrile resin production is being added to the source category list under section 112(c) of the Act because, based on information obtained during the gathering of HAP emission data for this proposed rule, the one facility identified as producing nitrile resins was determined to be a major source. Further, the EPA decided to include nitrile resin production under today's proposed rule because of similarities in process operations, emission characteristics, and control device applicability and costs with the various styrene-based resin source categories. For the purpose of this notice, these seven polymer and resin source categories are collectively referred to as the Group IV polymers and resins or the Group IV thermoplastics.

The EPA identified a total of 66 facilities producing one or more of the Group IV thermoplastics. Twenty facilities were identified that produced thermoplastics using multiple processes and, thus, fall within multiple subcategories. For example, six of the PET facilities use both the continuous terephthalic acid (TPA) process and the continuous dimethyl terephthalate (DMT) process.

All of the facilities considered in the analysis supporting today's proposed rule are believed to be major sources according to the 1990 Amendments criterion of emitting or of having the potential to emit 10 tons per year (tons/yr) of any one HAP or 25 tons/yr of combined HAP. (A year, for the purposes of compliance with this rule, is any consecutive twelve month period or 365 rolling days). The proposed rule would apply to all major sources that produce any of the seven thermoplastics identified in this notice. Area sources would not be subject to this proposed rule.

In developing the background information to support the proposed rule, the EPA chose to subcategorize four of the seven source categories for purposes of analyzing the maximum achievable control technology (MACT) floors and developing regulatory alternatives. A source category was subcategorized to account for major differences in production methods, raw material usage, or both. Table 1 summarizes the subcategories developed.

TABLE 1.—SUBCATEGORIZATION OF GROUP IV POLYMERS AND RESINS[a]

Source category	Subcategory	Number of facilities in subcategory[b]
ABS	Continuous mass	5
	Continuous emulsion	2
	Batch emulsion	4
	Batch suspension	2
	Batch latex	1
SAN	Continuous	3
	Batch	2
	ASA/AMSAN	1
Polystyrene	Continuous	22
	Batch	11
	EPS	7
PET	TPA, continuous	12
	TPA, batch	1
	DMT, continuous	10
	DMT, batch	10

[a] As discussed in the text, subcategorization was not needed for MABS, MBS, and nitrile facilities. Thus, these source categories are not shown in this table.

[b] Number of facilities include one or more process units of each described subcategory. Some facilities use more than one type of production method or raw material (process). Therefore, it is incorrect to sum these numbers to calculate the total number of facilities within a source category.

ASA=acrylonitrile styrene acrylate.
AMSAN=alpha methyl styrene acrylonitrile.
EPS=expandable polystyrene.
TPA=terephthalic acid.
DMT=dimethyl terephthalate.

No subcategorization was found to be justified for the three facilities producing MBS. Only one facility was found to produce MABS and only one to produce nitrile resins. Hereafter, for purposes of this preamble and the proposed standards, the terms ''subcategory'' and ''subcategories'' include the production of MBS, MABS, and nitrile even though these are source categories.

Upon inspection (see Section IV, Summary of Proposed Standards), it may appear that subcategorization does not affect the outcome of the proposed standards since the same level of control is required across most of the subcategories for a given type of emission point (e.g., storage vessel, process vent, etc.). In fact, subcategorization does affect the proposed level of control for individual types of emission points. As the development of the proposed standards

progressed beyond the technical analyses and the structure of the regulation was examined, the EPA considered different options that would create fewer subcategories for defining the source categories.

In previous rules, the EPA considered by-products, co-products, and intermediates to be products of a process. In the implementation of these previous rules, there has been confusion over the meaning of the terms ''product'' and ''to produce'' and the correct way to decide whether a source ''produces'' a listed chemical and is subject to the standard.

This confusion arises because of the complexity, diversity, and the highly integrated nature of the subject industries.

Because of this confusion, applicability will be based on the primary product that is produced by a thermoplastic product process unit. By-products, co-products, and isolated intermediates would not be considered in determining applicability. For the purposes of this rule, the EPA does not consider wastes to be products. Also, impurities or trace contaminants that are coincidentally processed and are not isolated are not considered to be a product.

The primary product of the thermoplastic product process unit is determined only once, and the determination would be based on the product that represents the largest percentage of the total mass produced by the thermoplastic product process unit.

II. Background

A. Summary of Considerations Made in Developing This Rule

The Act was created, in part, ''to protect and enhance the quality of the Nation's air resources so as to promote public health and welfare and the productive capacity of its population'' (section 101(b)(1) of the Act). As such, this regulation protects the public health by reducing emissions of some of the HAP listed in section 112(b)(1) of the Act.

The HAP listed in section 112(b)(1) of the Act emitted by the thermoplastic facilities covered by this proposed rule include styrene, acrylonitrile, butadiene, ethylene glycol, methanol, acetaldehyde, and dioxane. Some of these pollutants are considered to be mutagens and carcinogens, and all can cause reversible or irreversible toxic effects following exposure. The potential toxic effects include eye, nose, throat, and skin irritation; liver and kidney toxicity, and neurotoxicity. These effects can range from mild to severe. In extreme circumstances, death can result from exposure. These adverse health effects are associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect human variability such as genetics, age, health status (e.g., presence of pre-existing disease) and lifestyle. Due to the volatility and relatively low potential for bioaccumulation of these pollutants, air emissions are not expected to deposit in land or water and cause subsequent adverse human health or ecosystem effects.

The EPA does not have the type of current detailed data on each of the thermoplastic facilities covered by this rule, and the people living around the facilities, that would be necessary to conduct an analysis to determine the actual population exposures to the organic HAP emitted from these facilities and resulting health effects. Therefore, the EPA does not know the extent to which the adverse health effects described above occur in the populations surrounding these facilities. However, to the extent the adverse effects do occur, the promulgated standard will substantially reduce emissions and exposures to the level achievable with maximum achievable control technology.

The alternatives considered in the development of this regulation, including those alternatives selected as standards for new and existing sources, are based on process and emissions data received from the existing facilities known by the EPA to be in operation.

Regulatory alternatives more stringent than the MACT floor were selected when they were judged to be reasonable ''taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements'' (Section 112(d)(2) of the Act). In most instances, the proposed standards reflect regulatory alternatives that are judged to be reasonable and are equivalent to or more stringent than the MACT floor. In a few instances, the MACT floor was found to have a relatively high cost. In these cases, the MACT floor was chosen because a less costly, yet otherwise reasonable, regulatory alternative was not available.

The proposed standards give existing facilities 3 years from the date of promulgation to comply. This is the maximum amount allowed by the Act. Based on the number of existing sources affected by this rule, the EPA believes that required retrofits or other actions can be achieved in the timeframe allotted. New facilities are required to comply with the standard upon start-up. The EPA sees no reason why new facilities would not be able to comply with the requirements of the standards upon start-up.

Included in the proposed rule are methods for determining initial compliance as well as monitoring, recordkeeping, and reporting requirements. All of these components are necessary to ensure that affected sources will comply with the standards both initially and over time. However, the EPA has made every effort to simplify the requirements in the rule. This rule refers extensively to the HON (40 CFR part 63, subparts F, G, and H). In doing so, this rule has benefited from the extensive public debate and participation experienced in the HON rulemaking. The EPA has also attempted to maintain consistency with existing regulations by either incorporating text from existing regulations or referencing the applicable sections, depending on which method would be least confusing for a given situation.

Representatives from other interested EPA offices and programs, including State and Regional environmental agency personnel, participated in the regulatory development process as members of the Work Group. The Work Group is involved in the regulatory development process, and is given opportunities to review and comment on the regulation before proposal and promulgation. Therefore, the EPA believes that the implication to other EPA offices and programs has been adequately considered during the development of these standards. In addition, the EPA has met with some members of industry concerning these standards. Finally, industry, regulatory authorities, and environmental groups will have the opportunity to comment on the proposed standards and provide additional information during the public comment period following proposal.

These standards will result in an organic HAP emission reduction of 11,750 Mg/yr for existing facilities and 7,395 Mg/yr for new sources. The emission reductions achieved by these standards, when combined with the emission reductions achieved by other standards mandated by the Act, will achieve the primary goal of the Clean Air Act, which is to ''enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population.''

B. Regulatory Background

In 1990 (55 FR 51010, December 11, 1990), the EPA promulgated new source performance standards (NSPS) affecting four types of polymer manufacturing facilities (subpart DDD of 40 CFR part 60). Two of these four types—polystyrene and PET—are being affected by today's proposed rule. In addition, polystyrene manufacturing facilities may be subject to State regulations as the result of a control techniques guideline (CTG) document (EPA–450/3–83–008, November 1983; Docket No. A–92–45, Category II-A) addressing, in part, polystyrene manufacturing.

For polystyrene, subpart DDD applies to those facilities that use a continuous process to manufacture general purpose or high impact polystyrene. Facilities that produce general purpose or high impact polystyrene using a batch process were not covered under subpart DDD because information at that time indicated that no new facilities would be constructed using batch processes to produce general purpose or high impact polystyrene. Subpart DDD also applies to all facilities that manufacture expandable polystyrene (EPS), regardless of the process used.

For general purpose or high impact polystyrene facilities using a continuous process and all facilities producing EPS, subpart DDD requires control of continuous process volatile organic compound (VOC) emissions from each material recovery section. The standard for material recovery section process emissions is: (1) Limit the emissions of total organic compounds (TOC) (minus methane and ethane) to 0.0036 kilograms (kg) of TOC per megagram (Mg) of product (0.0036 pounds (lbs) TOC/1,000 lbs of product) from each material recovery section, (2) limit the outlet gas temperature from each final condenser in each material recovery section to −25 degrees Celcius (−25° C) (−13° Fahrenheit (−13° F)), or (3) reduce emissions from each material recovery section by 98 weight percent or to 20 parts per million by volume (ppmv). Modified or reconstructed affected facilities with uncontrolled emission rates at or below 0.05 kg TOC per Mg of product were exempted from this part of subpart DDD.

Like subpart DDD, the CTG applies to material recovery section continuous process emissions at polystyrene facilities using a continuous process. The CTG's recommended emission limit is 0.12 kg TOC/Mg of product.

Subpart DDD also requires control of VOC emissions from equipment leaks from polystyrene facilities using a continuous process and from all EPS facilities. With one exception, subpart DDD's standards for equipment leaks are the same as those for synthetic organic chemical manufacturing industry (SOCMI) facilities under subpart VV of 40 CFR part 60. The one exception concerns polymer pumps that are designed with a ''bleed port.'' Such pumps are exempted from the definition of a ''visible leak of fluid,'' but the exemption expires when the existing pump is replaced or reconstructed.

As mentioned previously, subpart DDD also applies to PET facilities that use either a DMT or TPA continuous process. Subpart DDD does not apply to PET facilities that use a batch process because the EPA did not expect any new PET facilities to be constructed using a batch process. For PET facilities using a continuous process, subpart DDD only requires control of selected process emissions. Standards were not proposed or promulgated for equipment leak emissions at PET facilities because available information at that time showed that equipment leak components at facilities using the continuous TPA process were in heavy liquid service and that continuous DMT facilities were already covered by the SOCMI equipment leak standards (subpart VV of 40 CFR part 60).

Table 2 summarizes subpart DDD requirements for process emissions for new, modified, or reconstructed PET facilities. For both DMT and TPA continuous facilities, subpart DDD limits ethylene glycol emissions from the polymerization reaction section by requiring compliance with an emission rate limit (0.02 kg TOC/Mg of product) and an ethylene glycol weight percent concentration limit (either 0.35 or 6.0 percent depending on the type of process) for the cooling water in the cooling tower. In addition, subpart DDD limits process emissions from the material recovery section at continuous DMT facilities and from the raw material preparation section at continuous TPA facilities.

TABLE 2.—SUMMARY OF NSPS PET STANDARDS

Process	Affected facility	Viscosity	Number of end finishers	Type of vacuum producer	Standard
DMT	Material Recovery.	Low			0.018 kg TOC/Mg of product *OR* limit temperature to +37 °F from each final condenser in the material recovery section.
		High	Single		(same as above).
			Multiple		(same as above).
DMT	Polymerization Reaction.	Low		Not steam jets	0.02 kg TOC/Mg of product.
				Steam jets	0.02 kg TOC/Mg of product *AND* 0.35 percent ethylene glycol by weight in the effluent exiting the vacuum system.
		High	Single	Not steam jets	0.02 kg TOC/Mg of product.
				Steam jets	0.02 kg TOC/Mg of product *AND* 0.35 percent ethylene glycol by weight in the effluent exiting the vacuum system.
			Multiple	Not steam jets	0.02 kg TOC/Mg of product.
				Steam jets	0.02 kg TOC/Mg of product *AND* 6.0 percent ethylene glycol by weight in the cooling water in the cooling tower.
TPA	Raw Materials Preparation.	Low			0.04 kg TOC/Mg of product.
		High	Single		(same as above).

TABLE 2.—SUMMARY OF NSPS PET STANDARDS—Continued

Process	Affected facility	Viscosity	Number of end finishers	Type of vacuum producer	Standard
		.....	Multiple	.....	(same as above).
TPA	Polymerization Reaction.	Low	.....	Not steam jets	0.02 kg TOC/Mg of product.
				Steam jets	0.02 kg TOC/Mg of product *AND* 0.35 percent ethylene glycol by weight in the effluent exiting the vacuum system.
		High	Single	Not steam jets	0.02 kg TOC/Mg of product.
				Steam jets	0.02 kg TOC/Mg of product *AND* 0.35 percent ethylene glycol by weight in the effluent exiting the vacuum system.
			Multiple	Not steam jets	0.02 kg TOC/Mg of product.
				Steam jets	0.02 kg TOC/Mg of product *AND* 6.0 percent ethylene glycol by weight in the cooling water in the cooling tower.

Key:
DMT = dimethyl terephthalate.
TPA = terephthalic acid.

In a manner similar to polystyrene facilities, subpart DDD has uncontrolled emission rate thresholds at or below which modified or reconstructed PET facilities are exempt. Table 3 summarizes these threshold emission rates.

TABLE 3.—SUMMARY OF PET THRESHOLD EMISSION RATES

Production process	Process section	Uncontrolled emission rate, kg TOC/Mg product [a]
Poly(ethylene terephthalate), dimethyl terephthalate process	Material Recovery	0.12 [b,c]
	Polymerization Reaction	1.80 [c,d,e]
Poly(ethylene terephthalate), terephthalic acid process	Raw Materials	g
	Preparation	1.80 [c,e,h]
	Polymerization Reaction	3.92 [c,f,h]

[a] "Uncontrolled emission rate" refers to the emission rate of a vent stream that vents directly to the atmosphere and to the emission rate of a vent stream to the atmosphere that would occur in the absence of any add-on control devices but after any material recovery devices that constitute part of the normal material recovery operations in a process line where potential emissions are recovered for recycle or resale.
[b] Emission rate applies to continuous emissions only.
[c] Applies to modified or reconstructed affected facilities only.
[d] Includes emissions from the cooling water tower.
[e] Applies to a process line producing low viscosity poly(ethylene terephthalate).
[f] fApplies to a process line producing high viscosity poly(ethylene terephthalate).
[g] See footnote h.
[h] Applies to the sum of emissions to the atmosphere from the polymerization reaction section (including emissions from the cooling water tower) and the raw materials preparation section (i.e., the esterifiers).

In 1994 (59 FR 46350, September 8, 1994), the EPA promulgated national emission standards for hazardous air pollutants (NESHAP) for industrial process cooling towers (40 CFR part 63, subpart G). This rule prohibits the use of chromium-based water treatment chemicals in industrial process cooling towers. Owners and operators of existing industrial process cooling towers must comply within 18 months of September 8, 1994, while owners and operators of new industrial process cooling towers must comply by September 8, 1994 or at initial start-up, depending on when construction was commenced.

III. Authority for National Emission Standards for Hazardous Air Pollutants (NESHAP) Decision Process

A. Source of Authority for NESHAP Development

Section 112 of the Act gives the EPA the authority to establish national standards to reduce air emissions from sources that emit one or more HAP. Section 112(b) contains a list of HAP to be regulated by NESHAP. Section 112(c) directs the EPA to use this pollutant list to develop and publish a list of source categories for which NESHAP will be developed. The EPA must list all known source categories and subcategories of "major sources" (defined below) that emit one or more of the listed HAP. A major source is defined in section 112(a) as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit in the aggregate, considering controls, 10 tons/yr or more of any one HAP or 25 tons/yr or more of any combination of HAP. This list of source categories was published in the **Federal Register** on July 16, 1992 (57 FR 31576) and includes ABS, SAN, MABS, MBS, polystyrene, and PET. Today's action proposes to add nitrile resin production to this list.

B. Criteria for Development of NESHAP

The NESHAP are to be developed to control HAP emissions from both new and existing sources according to the statutory directives set out in section

112(d) of the Act. The statute requires the standards to reflect the maximum degree of reduction in emissions of HAP that is achievable for new or existing sources. This control level is referred to as MACT. Consideration of control levels more stringent than the MACT floor (described below) must reflect consideration of the cost of achieving the emission reduction, any non-air quality, health, and environmental impacts, and energy requirements.

The MACT floor is the least stringent level allowed for MACT standards. For new sources, the standards for a source category or subcategory ''shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator'' (section 112(d)(3) of the Act). Existing source standards shall be no less stringent than the average emission limitation achieved by the best performing 12 percent of the existing sources for categories and subcategories with 30 or more sources or the average emission limitation achieved by the best performing 5 sources for categories or subcategories with fewer than 30 sources (section 112(d)(3) of the Act). These two minimum levels of control define the MACT floor for new and existing sources.

Two interpretations have been evaluated by the EPA for representing the MACT floor for existing sources. One interpretation is that the MACT floor is represented by the worst performing source of the best 12 percent performing sources. The second interpretation is that the MACT floor is represented by the ''average emission limitation achieved'' by the best performing sources, where the ''average'' is based on a measure of central tendency, such as the arithmetic mean, median, or mode. This latter interpretation is referred to as the ''higher floor interpretation.'' In a June 6, 1994 **Federal Register** notice (59 FR 29196), the EPA presented its interpretation of the statutory language concerning the MACT floor for existing sources. Based on a review of the statute, legislative history, and public comments, the EPA believes that the ''higher floor interpretation'' is a better reading of the statutory language. The determination of the MACT floor for existing sources under today's rule followed the ''higher floor interpretation.''

IV. Summary of Proposed Standards

A. Source Categories To Be Regulated

Today's proposed standards would regulate organic HAP process emissions from facilities in one of the 18 thermoplastic subcategories listed below, provided that a facility is determined to be a major source. For this proposed rule, an affected source is defined as one of the following:

- All organic HAP emission points at a facility using a continuous emulsion process to produce ABS.
- All organic HAP emission points at a facility using a continuous mass process to produce ABS.
- All organic HAP emission points at a facility using a batch emulsion process to produce ABS.
- All organic HAP emission points at a facility using a batch suspension process to produce ABS.
- All organic HAP emission points at a facility using a batch latex process to produce ABS.
- All organic HAP emission points at a facility producing MABS.
- All organic HAP emission points at a facility producing MBS.
- All organic HAP emission points at a facility using a continuous process to produce SAN.
- All organic HAP emission points at a facility using a batch process to produce SAN.
- All organic HAP emission points at a facility producing ASA/AMSAN.
- All organic HAP emission points at a facility using a continuous process to produce polystyrene.
- All organic HAP emission points at a facility using a batch process to produce polystyrene.
- All organic HAP emission points at a facility producing EPS.
- All organic HAP emission points at a facility using a continuous TPA process to produce PET and any collocated solid state processes.
- All organic HAP emission points at a facility using a batch TPA process to produce PET and any collocated solid state processes.
- All organic HAP emission points at a facility using a continuous DMT process to produce PET and any collocated solid state processes.
- All organic HAP emission points at a facility using a batch DMT process to produce PET and any collocated solid state processes.
- All organic HAP emission points at a facility producing nitrile resins.

The proposed rule regulates emissions from solid state PET processes if they are collocated with a TPA or DMT fed PET process, but does not regulate emissions from independently located solid state PET processes (i.e., those that purchase low molecular weight PET from an off-site source). As part of the rulemaking, information was submitted by the industry for collocated solid state PET processes, but none was submitted for independently located solid state PET processes.

(**Note:** The data request did not distinguish solid state as a separate process which might have precipitated companies not submitting data concerning PET produced by this process.)

In addition, the EPA believes that independently located solid state PET processes are likely to be non-major sources because there is not a significant source of organic HAP emissions from the solid state process. The emissions from a solid state process are typically the result of release of residual monomer in the low molecular weight PET. For these reasons, the EPA chose not to include independently located solid state PET processes in today's proposed rule.

B. Relationship to Other Rules

Sources subject to the proposed rule are also subject to other existing rules. In some cases, the proposed rule supersedes existing rules and affected sources are no longer required to comply with the existing rule. In other cases, there is no conflict between the existing rule and the proposed rule, and in these cases, the affected source must comply with both rules.

Sources subject to the proposed rule and subject to the NESHAP for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks (40 CFR part 63, subpart I) are required to continue to comply with subpart I until the compliance date of the proposed rule. After the compliance date of the proposed rule, compliance with the proposed rule will constitute compliance with subpart I.

Sources subject to the proposed rule may have storage vessels subject to the NSPS for Volatile Organic Liquid Storage Vessels (40 CFR part 60, subpart Kb). After the compliance date for the proposed rule, such storage vessels are only subject to the proposed rule and are no longer required to comply with subpart Kb.

Some sources subject to the proposed rule that produce PET or polystyrene are also subject to the NSPS for Polymers Manufacturing (40 CFR part 60, subpart DDD). After the compliance date for the proposed rule, such sources are only subject to the proposed rule and are no longer required to comply with subpart DDD. As part of this rulemaking, the EPA is proposing to modify subpart DDD to exclude reference to the manufacture of polystyrene and PET.

Sources subject to the proposed rule may have cooling towers subject to the NESHAP for Industrial Cooling Towers

(40 CFR part 63, subpart Q). There is no conflict between the requirements of subpart Q and the proposed rule. Therefore, sources subject to both rules must comply with both rules.

C. Pollutants To Be Regulated

The subcategories covered by today's proposed rule emit a variety of organic HAP. Among the most significant emissions of organic HAP are the following: Styrene, acrylonitrile, and butadiene from styrene-based resin production, which includes the production of ABS, SAN, MABS, MBS, and polystyrene; acrylonitrile from nitrile resin production; and ethylene glycol, methanol, acetaldehyde, and dioxane from PET production. The proposed standards would regulate emissions of these compounds, as well as a variety of other organic HAP that are emitted.

D. Affected Emission Points

Emissions from the following types of emission points (i.e. emission source types) are being covered by today's proposed rule: storage vessels, process vents, equipment leaks, wastewater operations, heat exchange systems and process contact cooling towers.

E. Format of the Standards

As discussed in more detail in Section IV.F, Proposed Standards, the Hazardous Organic NESHAP (HON) (subparts F, G, H, and I of 40 CFR part 63), the polymer manufacturing NSPS (subpart DDD of 40 CFR part 60), and the Batch Processes Alternative Control Techniques (ACT) document (EPA 453/R–93–017, November 1993; Docket No. A–92–45, Category II–A) provided a basis for selection of the proposed formats. In most instances, the format of today's proposed standards is the same as those found in the HON, Batch Processes ACT, and subpart DDD. The following paragraphs summarize the selected formats, including those that are different from the HON, Batch Processes ACT, and subpart DDD. The formats and their selection are discussed in more detail in the Basis and Purpose Document for this proposed regulation (Docket No. A–92–45, Category II–A).

For storage vessels, the format of the proposed standards is dependent on the method selected to comply with the standards. If tank improvements (e.g., internal or external floating roofs with proper seals and fittings) are selected, the format is a combination of design, equipment, work practice, and operational standards. If a closed vent system and control device are selected, the format is a combination of design and equipment standards.

For process vents, the format of the proposed standards is also dependent on the method selected to comply with the standards. If a flare is selected, the format is a combination of equipment and operating specifications. If a control device other than a flare is used, the formats are a percent reduction and an outlet concentration.

For equipment leaks, the proposed standards incorporate several formats: Equipment, design, base performance levels (e.g., maximum allowable percent leaking valves), work practices, and operational practices. Different formats are necessary for different types of equipment because of the nature of the equipment, available control techniques, and applicability of the measurement method.

For wastewater streams requiring control, the proposed standards incorporate several formats: Equipment, operational, work practice, and emission standards. The particular format selected depends on which portion of the wastewater stream is involved. For transport and handling equipment, the selected format is a combination of equipment standards and work practices. For the reduction of organic HAP from the wastewater stream itself, several alternative formats are included, including five alternative numerical emission limit formats (overall percent reduction for total volatile organic HAP (VOHAP), individual organic HAP percent reduction, effluent concentration limit for total VOHAP, individual VOHAP effluent concentration limits, and mass removal for organic HAP) and equipment design and operation standard for a steam stripper. For vapor recovery and destruction devices other than flares, the format is a weight percent reduction. For flares, the format is a combination of equipment and operating specifications.

Finally, a work practice standard is adopted for all cooling water/process heat exchange systems at Group IV resin facilities. This standard requires a leak detection and repair program to detect and repair leaks of organic HAP into cooling tower water. In addition, the proposed standards include a work practice standard that prohibits the use of cooling tower water in contact condensers in vacuum systems located at PET facilities.

F. Proposed Standards

With relatively few exceptions, the standards being proposed under today's action for storage vessels, continuous process vents, equipment leaks, wastewater operations, and heat exchange systems are the same as those promulgated for the corresponding types of emission points at facilities subject to the HON (subparts F, G, H, and I). The proposed standards also require emissions from certain batch process vents to be reduced by at least 90 percent or to be controlled in a flare that meets the requirements of § 63.11(b) of subpart A of 40 CFR part 63. (The criteria used to determine which batch process vents require control was based on the approach described in the Batch Processes ACT.) The standards being proposed today for certain continuous process vents from polystyrene facilities and from PET facilities using a continuous process require the same levels of control as were promulgated for these facilities under subpart DDD of 40 CFR part 60. Finally, for PET facilities, the proposed standards would prohibit the use of cooling tower water in contact condensers in the vacuum systems and would require that all vacuum system wastewater containing any of the organic HAP identified in Table 9 of the HON wastewater provisions be controlled to the same level of control as required under the HON, regardless of the wastewater stream's organic HAP content or flowrate.

Under the proposed standards, emissions from existing or new batch process vents, heat exchange systems not including process contact cooling towers, and equipment leaks are required to be controlled to the levels specified in the proposed standards. Emissions from existing storage vessels, continuous process vents, process wastewater streams, and process contact cooling towers are required to be controlled to the levels specified in the proposed standards or alternatively, the emissions averaging compliance approach specified in the rule may be used. Emissions from new storage vessels, continuous process vents, process wastewater streams, and process contact cooling towers are required to be controlled to the levels specified in the proposed standards. The emissions averaging compliance approach may not be used for new sources.

Tables 4 and 5 summarize the level of control being proposed under today's proposed standards. For those types of emission points where the level of control is the same as the HON, this is indicated in the table by the acronym ''HON.'' Similarly, where the proposed level of control is the same as promulgated under subpart DDD of 40 CFR part 60, this is indicated by the use of the words ''same as under subpart DDD.'' Finally, where the proposed

level of control is more stringent than the level of control in the HON or in subpart DDD for that type of emission point, the words ''MACT floor'' are used.

TABLE 4.—SUMMARY OF PROPOSED STANDARDS FOR EXISTING SOURCES IN RELATIONSHIP TO SUBPARTS G AND H OF 40 CFR PART 63 AND SUBPART DDD OF 40 CFR PART 60

Subcategory	Type of emission point				
	Storage vessels	Process vents	Equipment leaks	Wastewater	Heat exchange systems
ABS, continuous emulsion.	HON	HON	HON	HON	HON for heat exchange systems.
ABS, continuous mass	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.
ABS, batch emulsion .	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.
ABS, batch suspension.	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.
ABS, latex	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.
MABS	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.
MBS	HON	Continuous Process Vents: MACT Floor Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.
SAN, continuous	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.
SAN, batch	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.
ASA/AMSAN	MACT Floor.	MACT Floor	HON	No control	HON for heat exchange systems.
Polystyrene, continuous.	MACT Floor.	Continuous Process Vents from material recovery: same as subpart DDD Other Continuous Process vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.
Polystyrene, batch	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.
Expandable polystyrene.	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.
PET-TPA, continuous	HON	Continuous Process Vents from raw material preparation and polymerization reaction sections: same as subpart DDD Other Continuous Process vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON for wastewater (including all vacuum system generated wastewater).[a].	No cooling tower water allowed in vacuum system contact condensers. HON for heat exchange systems.
PET-TPA, batch - DMT, batch.	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON for wastewater (including all vacuum system generated wastewater)..	No cooling tower water allowed in vacuum system contact condensers. HON for heat exchange systems.
PET-DMT, continuous	HON	Continuous Process Vents from material recovery and polymerization reaction sections: same as subpart DDD Other Continuous Process vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON for wastewater (including all vacuum system generated wastewater).[a].	No cooling tower water allowed in vacuum system contact condensers. HON for heat exchange systems.

TABLE 4.—SUMMARY OF PROPOSED STANDARDS FOR EXISTING SOURCES IN RELATIONSHIP TO SUBPARTS G AND H OF 40 CFR PART 63 AND SUBPART DDD OF 40 CFR PART 60—Continued

Subcategory	Type of emission point				
	Storage vessels	Process vents	Equipment leaks	Wastewater	Heat exchange systems
Nitrile	MACT Floor.	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or compliant flare.	HON	HON	HON for heat exchange systems.

[a] Vacuum system wastewater streams containing any organic HAP identified in Table 9 of the HON wastewater provisions (subpart G) shall be considered Group 1 and are required to be controlled.

TABLE 5.—SUMMARY OF PROPOSED STANDARDS FOR NEW SOURCES IN RELATIONSHIP TO SUBPARTS G & H OF 40 CFR PART 63 AND SUBPART DDD OF 40 CFR PART 60

Subcategory	Type of emission point				
	Storage vessels	Process vents	Equipment leaks	Wastewater	Heat exchange systems
ABS, continuous emulsion.	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.
ABS, continuous mass	Regulatory Alternative 2 [a].	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.
ABS. batch emulsion	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.
ABS. batch suspension.	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.
ABS, latex	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.
MABS	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.
MBS	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.
SAN, continuous	MACT Floor.	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.
SAN, batch	HON	MACT Floor	HON	HON	HON for heat exchange systems.
ASA/AMSAN	MACT Floor.	MACT Floor	HON	No control	HON for heat exchange systems.
Polystyrene, continuous.	MACT Floor.	Continuous Process Vents from material recovery: Same as subpart DDD Other Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.
Polystyrene, batch	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.
Expandable polystyrene.	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.
PET—TPA, continuous.	HON	Continuous Process Vents from raw material preparation and polymerization reaction sections: same as subpart DDD Other Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON for wastewater (including all vacuum system generated wastewater). [b].	No cooling tower water allowed in vacuum system contact condensers. HON for heat exchange systems.

TABLE 5.—SUMMARY OF PROPOSED STANDARDS FOR NEW SOURCES IN RELATIONSHIP TO SUBPARTS G & H OF 40 CFR PART 63 AND SUBPART DDD OF 40 CFR PART 60—Continued

Subcategory	Type of emission point				
	Storage vessels	Process vents	Equipment leaks	Wastewater	Heat exchange systems
PET—TPA, batch—DMT, batch.	HON	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON for wastewater (including all vacuum system generated wastewater).[b]	No cooling tower water allowed in vacuum system contact condensers. HON for heat exchange systems.
PET—DMT, continuous.	HON	Continuous Process Vents from material recovery and polymerization reaction sections: same as subpart DDD Other Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON for wastewater (including all vacuum system generated wastewater).[b]	No cooling tower water allowed in vacuum system contact condensers. HON for heat exchange systems.
Nitrile	MACT Floor.	Continuous Process Vents: HON Batch Process Vents: 90 percent reduction or a compliant flare.	HON	HON	HON for heat exchange systems.

[a] The proposed standard is more stringent than the MACT floor, which is more stringent than the HON.
[b] Vacuum system wastewater streams containing any organic HAP identified in Table 9 of the HON wastewater provisions (subpart G) shall be considered Group 1 and are required to be controlled.

1. Storage vessels

Tables 6 and 7 summarize the proposed standards for existing and new storage vessels, respectively. The proposed standards would require owners and operators to first determine whether or not a storage vessel was required to be controlled. This is done through the application of certain criteria to each storage vessel. For those storage vessels determined to require control, the proposed rule then specifies the level of control required.

TABLE 6.—PROPOSED STANDARDS FOR EXISTING STORAGE VESSELS

Subcategory	Applicability criteria[a]	Level of Control[b]
All ABS SAN, continuous SAN, batch MABS MBS Polystyrene, batch All PET Nitrile (except as noted below).	Vapor pressure ≥0.75 psia and capacity ≥40,000 gallons[c].	If vapor pressure is <11.1 psia: 1. fixed roof and internal floating roof; or
	Vapor pressure ≥1.9 psia and capacity ≥20,000 gallons[c]	2. external floating roof; or 3. an external floating roof converted to an internal floating roof; or 4. a closed vent system and control device.
		If vapor pressure ≥11.1 psia: a closed vent system and control device[d]
ASA/AMSAN	AMST for capacities ≥10,200 gallons	98 percent reduction.
	Styrene/acrylonitrile for capacities ≥1,000 gallons.	98 percent reduction.
	Acrylonitrile for capacities ≥20,000 gallons	98 percent reduction.
	Any other chemical:	If vapor pressure is <11.1 psia:
	Vapor pressure ≥0.75 psia and capacity ≥40,000 gallonsc.	1. fixed roof and internal floating roof; or 2. external floating roof; or
	Vapor pressure ≥1.9 psia and capacity ≥20,000 gallons[c]	3. an external floating roof converted to an internal floating roof; or 4. a closed vent system and control device.
		If vapor pressure ≥11.1 psia: a closed vent system and control device[0d]
Nitrile	Control all acrylonitrile storage vessels ≥3,500 gallons.	(same as the HON level of control).
Polystyrene, continuous	Vapor pressure 0.28 psia and capacity ≥20,000 gallons.	(same as the HON level of control)
	Vapor pressure ≥2.08 psia and capacity ≥10,000 but less than 20,000 gallons	

[a] Storage vessels that meet the criteria are defined as Group 1 storage vessels and control of their emissions would be required. Storage vessels that do not meet the criteria are defined as Group 2 storage vessels and control of their emissions is not required.
[b] Required for Group 1 storage vessels only.
[c] The applicability criteria for these subcategories are the same as in the HON.
[d] The level of control is the same as the HON.
KEY: AMST = alpha methyl styrene.

TABLE 7.—PROPOSED STANDARDS FOR NEW STORAGE VESSELS

Subcategory	Applicability criteria [a]	Level of control [b]
All ABS (except CM) SAN, batch MABS MBS Polystyrene, batch All PET Nitrile (except as noted below).	Vapor pressure ≥0.1 psia and capacity ≥40,000 gallons [c].	If vapor pressure is <11.1 psia: 1. fixed roof and internal floating roof; or 2. external floating roof; or 3. an external floating roof converted to an internal floating roof; or 4. a closed vent system and control device. If vapor pressure ≥11.1 psia: a closed vent system and control device [d].
	Vapor pressure ≥1.9 psia and capacity ≥10,000 gallons [c]	
ABS, CM	VP ≥ 1.9 psia and capacity ≥10,000 gallons and <12,000 gallons.	(same as the HON level of control).
	Styrene for capacities ≥12,000 gallons	
	VP ≥ 0.0782 psia and ≥12,000 gallons	
SAN, continuous	VP ≥ 0.0735 to <0.1 psia and capacity ≥600,000 gallons.	90 percent reduction.
	VP ≥ 0.1 to <1.45 psia and ≥40,000 gallons ...	(same as the HON level of control).
	VP ≥ 1.45 to <14.7 psia and capacity ≥8,000 to <40,000 gallons.	98 percent reduction.
ASA/AMS	AMST for capacities ≥10,200 gallons	98 percent reduction.
	Styrene/acrylonitrile for capacities ≥1,000 gallons.	98 percent reduction.
	Acrylonitrile for capacities ≥20,000 gallons	98 percent reduction.
	Any other chemical:	(same as the HON level of control).
	Vapor pressure ≥0.1 psia and capacity ≥40,000 gallons [c].	
	Vapor pressure ≥1.9 psia and capacity ≥10,000 gallons [c]	
Nitrile	Control all acrylonitrile storage vessels ≥ 3,500 gallons.	(same as the HON level of control).
Polystyrene, continuous	Vapor pressure ≥ 0.78 psia and capacity ≥ 29,000 gallons.	(same as the HON level of control).
	Vapor pressure ≥ 0.09 psia and capacity ≥ 12,000 gallons but less than 29,000 gallons.	
	Vapor pressure ≥ 1.1 psia and capacity ≥ 5,170 gallons but less than 12,000 gallons .	

[a] Storage vessels that meet the criteria are defined as Group 1 storage vessels and control of their emissions would be required. Storage vessels that do not meet the criteria are defined as Group 2 storage vessels and control of their emissions is not required.
[b] Required for Group 1 storage vessels only.
[c] The applicability criteria for these subcategories are the same as those in the HON.
[d] The level of control is the same as in the HON.
KEY: CM = continuous mass; VP = vapor pressure.

a. *Applicability criteria.* For most existing and new storage vessels, the proposed criteria for determining which storage vessels are to be controlled are identical to the criteria from the HON storage vessel provisions and are based on storage vessel capacity and vapor pressure of the stored material. Typically, the vapor pressures and storage vessel capacity criteria that determine Group 1 or Group 2 status are different for existing and new sources. As in the HON, if a storage vessel meets the applicability criteria and is required to be controlled under today's proposed rule, it is referred to as a Group 1 storage vessel. If a storage vessel is not required to apply controls, it is referred to as a Group 2 storage vessel.

For new ABS, continuous mass facilities, the applicability criteria also rely on vapor pressure and storage vessel capacity, but use different levels of each for defining a Group 1 storage vessel (see Table 7).

For new continuous SAN facilities, the proposed standards for storage vessels rely on five different combinations of vapor pressure and storage vessel capacity to determine Group 1 storage vessels. These combinations of vapor pressure and storage vessel capacity are shown in Table 7.

For existing continuous polystyrene facilities, the proposed standards for storage vessels rely on two combinations of vapor pressure and storage vessel capacity to determine Group 1 storage vessels. These combinations of vapor pressure and storage vessel capacity are shown in Table 6.

For new continuous polystyrene facilities, the proposed standards for storage vessels rely on three combinations of vapor pressure and storage vessel capacity to determine Group 1 storage vessels. These combinations of vapor pressure and storage vessel capacity are shown in Table 7.

For existing and new ASA/AMSAN facilities, the proposed standards for storage vessels have two parts to the applicability criteria. The first part identifies specific chemical and storage vessel capacity combinations. The second part applies vapor pressure and storage vessel capacity applicability criteria for storage vessels containing chemicals not specifically identified.

For existing and new nitrile facilities, all acrylonitrile storage vessels with capacities greater than or equal to 3,500 gallons are required to be controlled. For all other chemicals, the applicability criteria are the same as in the HON.

b. *Level of control.* Except for the subcategories discussed below, the level of control required for storage vessels determined to be Group 1 storage vessels under the appropriate applicability criteria being proposed in today's rule is either technical modification to the tank (e.g., the installation of an internal floating roof)

or the use of a closed vent system and control device that is generally required to achieve at least 95 percent emission reduction. (This is the same level of control as required under the HON.) For all subcategories, storage vessels determined to be Group 2 are not required to be controlled.

For new continuous SAN facilities, different levels of control for two of the five applicability criteria combinations are being proposed. For the applicability combination of vapor pressure greater than 0.0735 but less than 0.1 pounds per square inch absolute (psia) *and* storage vessel capacity greater than or equal to 600,000 gallons, the proposed standard would require an emission reduction of 90 percent or more. For the applicability combination of vapor pressure greater than or equal to 1.45 but less than 14.7 psia *and* storage vessel capacity greater than or equal to 8,000 gallons but less than 40,000 gallons, the proposed standard would require an emission reduction of 98 percent or more.

For ASA/AMSAN facilities, different levels of control for storage vessels determined to be Group 1 based on the specific chemical/storage vessel capacity combination criteria are being proposed. For these storage vessels, the level of control being proposed is 98 percent.

2. Process Vents

As for storage vessels, the proposed standards for process vents require owners and operators to first determine whether or not a process vent (or set of process vents) requires control and, if so, then specifies the level of control required.

a. *Applicability criteria.* Tables 8 and 9 summarize the proposed applicability criteria for continuous and batch process vents at existing and new facilities, respectively. As for storage vessels, process vents that meet the applicability criteria are referred to as Group 1 process vents and those that do not are referred to as Group 2 process vents. With the exceptions discussed below, the proposed rule would require control of only those process vents determined to be Group 1 process vents under the appropriate criteria.

TABLE 8.—SUMMARY OF PROPOSED PROCESS VENT APPLICABILITY CRITERIA FOR EXISTING FACILITIES

Process vents	Subcategory	Applicability criteria	
Continuous Unit Operations	All (except as specified below)	TRE[a] ≤ 1.	
	MBS	TRE[a] ≤ 3.7.	
	ASA/AMSAN	None. All vents are required to be controlled.	
	Polystyrene, continuous: material recovery	None. Must meet standard.	
	PET/DMT, continuous: material recovery	0.12 kg TOC per Mg product[b].	
	PET/DMT, continuous: polymerization reaction	None. Must meet standard.	
	PET/TPA, continuous: raw material preparation and polymerization reaction.	None. Must meet standard.	
Batch Unit Operations	All	Stream volatility	Flowrate regression equation[c]
		Low	(0.00437) AE—51.6[d].
		Moderate	(0.00187) AE—14.0[d].
		High	(0.00081) AE—8.5[d].

[a] The total resource effectiveness (TRE) value is a reflection of the cost effectiveness of controlling an individual process vent. There are different TRE coefficients for existing and new process vents.
[b] If emissions from the described process vents are greater than the applicability criteria, control is required.
[c] If actual stream flowrate (standard cubic meters per minute) is less than the flowrate calculated by the regression equation, the process vent is required to be controlled.
[d] AE = annual emissions in kilograms per year.

TABLE 9.—SUMMARY OF PROPOSED PROCESS VENT APPLICABILITY CRITERIA FOR NEW FACILITIES

Process vents	Subcategory	Applicability criteria	
Continuous Unit Operations	All (except as specified below)	TRE[a] ≤ 1	
	SAN, batch	None. Must meet standard.	
	ASA/AMSAN	None. All vents are required to be controlled.	
	Polystyrene, continuous: material recovery	None. Must meet standard.	
	PET/DMT, continuous: material recovery and polymerization reaction.	None. Must meet standard.	
	PET/TPA, continuous: Raw material preparation and polymerization reaction.	None. Must meet standard.	
Batch Unit Operations	All (except as specified below)	Stream volatility	Flowrate regression equation[b]
		Low	(0.00437) AE—51.6[c].
		Moderate	(0.00187) AE—14.0[c].
		High	(0.00081) AE—8.5[c].
	SAN, batch	None	Must meet standard.

[a] The total resource effectiveness (TRE) value is a reflection of the cost effectiveness of controlling an individual process vent. There are different TRE coefficients for existing and new process vents.
[b] If actual stream flowrate (standard cubic meters per minute) is less than the flowrate calculated by the regression equation, the process vent is required to be controlled.
[c] AE=annual emissions in kilograms per year.

Except for certain PET and polystyrene continuous process vents, Group 1 continuous process vents are determined by comparing each process vent's total resource effectiveness (TRE) value to a TRE value of unity. The TRE is a reflection of the costs and other associated impacts of controlling an individual process vent. It is determined based on process vent stream characteristics such as emissions (mass per hour), heat content, and flowrate. The procedure in the proposed rule for determining Group 1 process vents is the same procedure as in the HON.

Except for continuous process vents at existing MBS facilities, continuous process vents with a TRE value of 1 or less would be classified as a Group 1 process vent. For continuous process vents at existing MBS facilities, a TRE value of 3.7 or less defines a Group 1 process vent.

As seen in Tables 8 and 9, there are no applicability criteria specified for several subcategories. At these facilities, a Group 1/Group 2 determination does not need to be made and all process vents are required to be controlled.

For process vents associated with the material recovery section from existing PET facilities using a continuous DMT process, Group 1 process vents are determined by comparing uncontrolled emission rates with threshold emission rates. Process vents associated with the material recovery section at an existing PET facility using a continuous DMT process would be considered Group 1 process vents if the uncontrolled emission rate is greater than 0.12 kg TOC per Mg of product (see Table 8). For other process vents at existing and new polystyrene and PET facilities (see Tables 8 and 9), there are no applicability criteria. These process vents must meet the proposed standards.

For process vents from batch unit operations, the process vent is first characterized as to its volatility—low, medium, or high. Next, the estimate of the stream's annual emissions is entered in the appropriate flowrate regression equation. If the actual flowrate is less than the calculated flowrate, then the batch process vent is a Group 1 vent under these standards, and control is required. As seen in Tables 8 and 9, the batch process vent applicability criteria are the same for existing and new sources, except for new SAN batch facilities.

For new SAN batch facilities, there are no applicability criteria for individual process vent streams; all process vents are subject to control in that the proposed standard for these facilities requires an overall emission reduction of 84 percent from all process vents.

A batch process vent that is combined with a continuous process vent prior to a control or recovery device is not required to comply with the batch process vent provisions if there are no emissions to the atmosphere up until the point the batch vent stream is combined with the continuous vent stream. The combined vent would be required to comply with the continuous process vent provisions. The presence of a batch process vent in a continuous process vent stream would necessitate that all applicability tests and performance tests be conducted while the batch process vent is emitting (i.e. at maximum operating conditions).

b. *Level of control.* For continuous process vents, most of the facilities are required to control Group 1 process vents by at least 98 percent. If a flare is used, it must meet the design and operating requirements of § 63.11(b) of subpart A of 40 CFR part 63. Exceptions to this are described in the paragraphs below.

For continuous process emissions from the material recovery section of polystyrene plants using a continuous process, the proposed standards would (1) limit the emissions of TOC (minus methane and ethane) to 0.0036 kg TOC/Mg per megagram (Mg) of product (0.0036 pounds (lbs) TOC/1,000 lbs of product) from each material recovery section, or (2) limit the outlet gas temperature from each final condenser in each material recovery section to −25°C (−13°F), or (3) reduce emissions from each material recovery section by 98 weight percent or to 20 ppmv. These are the same requirements as in subpart DDD.

For PET facilities using a continuous TPA process, the proposed standards would limit continuous process vent emissions from (1) the raw material preparation section to 0.04 kg TOC/Mg of product and (2) the polymerization reaction section to 0.02 kg TOC/Mg of product. Similarly, for PET facilities using a continuous DMT process, the proposed standards would limit (1) continuous process vent emissions from the material recovery section to 0.018 kg TOC/Mg of product or the temperature to 37°F from each final condenser in the material recovery section and (2) continuous process vent emissions from the polymerization reaction section to 0.02 kg TOC/Mg of product. These are also the same requirements that are in subpart DDD, with the exception that cooling tower emissions would not be considered as part of the polymerization reaction section.

For Group 1 continuous process emissions from other process sections at polystyrene and PET facilities, the proposed standards would require emission reduction by at least 98 percent or control by a flare that meets the requirements of § 63.11(b) of subpart A of 40 CFR part 63.

For batch process vents, the proposed standards would require Group 1 process vents from batch unit operations to be controlled by at least 90 percent.

There are three subcategories where the proposed standards are based on the MACT floor. These subcategories are existing MBS facilities, existing and new ASA/AMSAN facilities, and new SAN, batch facilities.

For existing MBS facilities, the proposed standards require continuous process vents at facilities to either (1) meet an emission level of 0.000590 kg of emissions per megagram of product for all continuous process vents or (2) control all continuous process vents with a total resource effectiveness (TRE) of 3.7 or less by at least 98 percent. The TRE is to be calculated for each process vent using the same TRE coefficients as for other existing sources. The development of the MACT floor and applicability criteria for MBS existing sources is documented in Docket No. A–92–45, Category II–B and in the SID.

For both existing and new ASA/AMSAN facilities, the proposed rule requires all process vents (continuous and batch) at both existing and new facilities to control emissions by at least 98 percent.

For new SAN, batch facilities, the proposed rule requires an overall emission reduction of 84 percent of process vent emissions.

3. Equipment Leaks

For all the subcategories, both existing and new facilities would be required to implement a leak detection and repair (LDAR) program. With a few exceptions, the LDAR program being proposed is the same as that specified in the National Emission Standards for Organic HAP for Equipment Leaks (40 CFR part 63, subpart H) and the National Emission Standards for Organic HAP for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks (40 CFR part 63, subpart I). Under the proposed standards, work practice requirements to reduce emissions from equipment that are in volatile HAP service for 300 or more hours per year (hr/yr) are specified. The proposed standards define ''in volatile HAP service'' as being in contact with or containing process fluid that contains a total of 5 percent or more total HAP. Equipment

subject to the proposed standards are: Valves, pumps, compressors, connectors, pressure relief devices, open-ended valves or lines, sampling connection systems, instrumentation systems, agitators, surge control vessels, bottoms receivers, and closed-vent systems and control devices.

Affected sources currently complying with the NESHAP for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks (40 CFR part 63, subpart I) are required to continue to comply with subpart I until the compliance date of today's proposed rule. Further, affected sources complying with subpart I through a quality improvement program shall be allowed to continue these programs without interruption as part of complying with today's proposed rule. In other words, becoming subject to today's proposed rule does not restart or reset the ''compliance clock'' as it relates to reduced burden earned through a quality improvement program.

4. Wastewater

Except for ASA/AMSAN facilities, the proposed standards require owners and operators to determine for each wastewater stream at its point of generation whether it is a Group 1 or Group 2 wastewater stream. As for process vents, Group 1 wastewater streams are required to be controlled, while Group 2 wastewater streams are not required to be controlled. The wastewater stream characteristics used to make the Group 1/Group 2 applicability determination are flowrate and organic HAP concentration. The proposed criteria for determining Group 1 wastewater streams are presented in Table 10 and are the same criteria used in the HON. The level of control required for Group 1 wastewater streams is dependent upon the organic HAP constituents in the wastewater stream. The levels of control proposed for these standards are the same as those for the HON. The proposed rule would not control wastewater emissions from any existing or new ASA/AMSAN facilities.

TABLE 10.—PROPOSED WASTEWATER APPLICABILITY CRITERIA [a] [b]

Existing source criteria	New source criteria
VOHAP[c] concentration ≧ 10,000 ppmw	Same as existing criteria
or	*and*
VOHAP[c] concentration ≧ 1,000 ppmw *and* flow rate ≧ 10 liters per minute	for a subset of organic HAP...VOHAP[c] concentration ≧10 ppmw *and* flowrate ≧0.02 liters per minute.

[a] Wastewater streams meeting these criteria are considered Group 1 wastewater streams and control is required.
[b] There are exemptions for minimal flowrates and concentrations.
[c] VOHAP=volatile organic HAP.

The proposed standards require owners and operators to comply with the maintenance wastewater requirements in § 63.105 of subpart F of this part. These provisions require owners and operators to include a description of procedures for managing wastewaters generated during maintenance in their start-up, shutdown and malfunction plan. The start-up, shutdown, and malfunction plan is required under subpart A of 40 CFR part 63.

5. Heat Exchange Systems and Process Contact Cooling Towers

Today's proposed standards would require a monitoring program to detect leakage of organic HAP from the process into the cooling water. The proposed monitoring program is the same as that in the HON (subpart F of this part). The proposed rule would also prohibit the use of cooling tower water in contact condensers in the vacuum systems at PET facilities. Further, if a wastewater stream is generated from the vacuum system and it contains any of the organic HAP identified in Table 9 of the HON wastewater provisions (subpart G), the proposed rule would require it to be controlled regardless of its organic HAP concentration or flowrate. The level of control required is the same as that for a Group 1 wastewater stream.

These provisions for control of emissions from process contact cooling towers are independent of the provisions of the NESHAP for Industrial Cooling Towers (40 CFR part 63, subpart Q) which may also be applicable to these cooling towers.

The EPA solicits comments on the emission reduction potential, costs, and technical feasibility of all control options for process contact cooling towers at PET facilities. Any comments on alternate control options should address the emissions from the cooling tower, the emissions from any wastewater discharged from the equipment required by the control option, and any ''reactor process'' or ''distillation column'' vent emissions associated with the option.

6. Emissions Averaging

Today's proposed standards would apply essentially the same emissions averaging scheme as has been adopted by the HON, although the emissions averaging provisions of the proposed rule are entirely contained in the proposed rule instead of referring to the subpart G emissions averaging provisions. Under the proposed rule, emissions averaging would be allowed among five collocated existing emission points belonging to the same subcategory. This number may be increased by three additional points if pollution prevention measures are to be used to control emission points to be included in the average. However, emissions from batch process vents and equipment leaks would not be allowed to be averaged. The owner or operator must demonstrate that the averaging scheme will not result in greater hazard or risk relative to strict compliance with the standards in the absence of averaging.

The EPA specifically requests comments on the selection of the limit of (5, or 8 if pollution prevention measures are used) emission points to be allowed per subcategory for purposes of averaging in this proposed rule. Will this limit preclude known opportunities within real facilities to generate cost-effective credits within a category or subcategory? Any comments on this need to address specifics on the emission and cost quantities computed, with detailed calculations and references to show how these quantities were determined.

The EPA is including emissions from process contact cooling towers and vacuum system wastewater at existing PET facilities in the emissions averaging procedures for the proposed rule. As noted earlier, the proposed standards would (1) prohibit existing PET facilities from using cooling tower water in the contact condensers associated with vacuum systems, and (2) would require the control of any wastewater stream generated by the vacuum system containing organic HAP listed on Table 9 of the wastewater provisions in

subpart G of this part to the level required for a Group 1 process wastewater stream. Control is required regardless of the organic HAP concentration and flowrate of the stream.

The proposed prohibition for cooling tower water would eliminate organic HAP emissions from the process contact cooling towers since the cooling tower water would not come in contact with the organic HAP generated by the process. If an owner or operator elected to comply with the proposed emissions averaging procedures, the owner or operator could elect not to eliminate process contact cooling tower water from the vacuum system. This would create a debit; that is, organic HAP emissions would now occur from the cooling tower, whereas, under the proposed rule, no organic HAP emissions would occur. Thus, the proposed emissions averaging procedures only include process contact cooling towers in the equation for the calculation of debits. On the other hand, since the proposed standard would eliminate organic HAP emissions from the cooling tower, there is no opportunity for an owner or operator to control cooling tower emissions to a level more stringent than the proposed rule. Thus, the proposed emissions averaging procedures for calculating credits do not include process contact cooling towers. The EPA is specifically requesting information on methodologies which could be used to estimate emissions from process contact cooling towers.

The EPA requests comments on all aspects of the implementation of emissions averaging and on ways that the emissions averaging provisions can be made more flexible without reducing the emission reduction. A discussion of the rationale for the proposed emissions averaging provisions is contained in Chapter 4 of the Basis and Purpose Document.

G. Compliance and Performance Test Provisions and Monitoring Requirements

Compliance and performance test provisions and monitoring requirements contained in today's proposed rule are very similar to those found in the HON (subpart G of part 63). Each type of emission point is discussed briefly in the paragraphs below. Also, significant differences from the parameter monitoring requirements found in subpart G are discussed.

1. Continuous Process Vents

The proposed regulations for process vents from continuous unit operations (continuous process vents) require the owner or operator to either calculate a TRE index value to determine whether each continuous process vent is a Group 1 or Group 2 vent, or the owner or operator can elect to comply with the control requirements without calculating the TRE index. The TRE index value is determined after the last recovery device in the process or prior to venting to the atmosphere. The TRE calculation involves an emissions test or engineering assessment and use of the TRE equations in the proposed rule.

Performance test provisions are included for Group 1 continuous process vents to verify that the control device achieves the required performance. Monitoring provisions necessary to demonstrate compliance are also included in the proposed rule.

Compliance provisions for continuous process vents at polystyrene and PET facilities are included in the proposed rule. For owners or operators electing to comply with a kg TOC/Mg of product limit, procedures to demonstrate compliance are provided. Also, procedures are included in the proposed rule to demonstrate compliance with the requirement to reduce overall process vent emissions (continuous and batch) by 84 percent for new SAN, batch facilities.

2. Batch Process Vents

Similar to the provisions for continuous process vents, there is a procedure for determining which batch process vents are Group 1 and which are Group 2. This procedure is based on annual emissions and annual average flowrate of the batch process vent. Equations for estimating annual emissions and annual average flowrates are provided in the proposed rule.

Performance test provisions are included for Group 1 batch process vents to verify that the control or recovery device achieves the required performance. Monitoring provisions necessary to demonstrate compliance are also included in the proposed rule.

For Group 2 batch process vents, the proposed rule requires owners and operators to establish a batch cycle limitation. The batch cycle limitation limits the number of batch cycles that can be accomplished for a given batch unit operation per year (i.e., for the operations that feed a single batch process vent). This enforceable limitation ensures that a Group 2 batch process vent does not become a Group 1 batch process vent as a result of running more batches than anticipated when the group determination was made. The determination of the batch cycle limitation is not tied to any previous production amounts. An affected source may set the batch cycle limitation at any level it desires as long as the batch process vent remains a Group 2 batch process vent. Alternatively the proposed rule would allow owners and operators to declare any Group 2 batch process vent to be a Group 1 batch process vent. In such cases, control of the batch process vent is required.

As described earlier, procedures are included in the proposed rule to demonstrate compliance with the requirement to reduce overall process vent emissions (continuous and batch) by 84 percent for new SAN, batch facilities.

3. Storage Vessels

Monitoring and compliance provisions include periodic visual inspections of vessels, roof seals, and fittings, as well as internal inspections. If a control device is used, the owner or operator must identify the appropriate monitoring procedures to be followed in order to demonstrate compliance. Monitoring parameters and procedures for many of the control devices likely to be used are already identified in other parts of the proposed rule. Reports and records of inspections, repairs, and other information necessary to determine compliance are also required by the proposed rule.

4. Wastewater

For demonstrating compliance with the various requirements, the proposed rule allows the owners or operators to either conduct performance tests or to document compliance using engineering calculations. Appropriate compliance and monitoring provisions are included in the regulation.

5. Equipment Leaks

The proposed rule retains the use of Method 21 to detect leaks. Method 21 requires a portable organic vapor analyzer to monitor for leaks from equipment in use. A ''leak'' is a concentration specified in the regulation for the type of equipment being monitored and is based on the instrument response to methane (the calibration gas) in air. The observed screening value may require adjustment for response factor relative to methane if the weighted response factor of the stream exceeds a specified multiplier. The proposed rule requires the use of Method 18 to determine the organic content of a process stream. Test procedures using either a gas or a liquid for pressure testing the batch system are specified to test for leaks.

6. Heat Exchange Systems

Monitoring of cooling water is required to detect leaks in non-contact heat exchange systems. If a leak is detected, the heat exchange system must be repaired.

7. Process Contact Cooling Towers

Owners and operators of affected sources subject to these provisions are required to indicate in their Implementation Plan and Notification of Compliance Status reports that cooling tower water will not be used in contact condensers associated with vacuum systems.

8. Continuous Parameter Monitoring

When compared to the HON, the proposed rule contains two significant differences related to continuous parameter monitoring. First, the proposed rule does not allow any excused excursions. The proposed rule, as did subpart G, requires at least 75 percent of monitoring data to constitute a valid days worth of data for continuous and batch process vents. Failure to have a valid day's worth of monitoring data is considered an excursion. The criteria for determining a valid day's or hour's worth of data are provided in the proposed rule. Second, the procedure for determining the parameter monitoring level for continuous and batch process vents is both more specific and restrictive than the procedure in subpart G because it relies exclusively on performance tests.

H. Recordkeeping and Reporting Requirements

The general recordkeeping and reporting requirements of this subpart are very similar to those found in subpart G of 40 CFR part 63. The proposed rule also relies on the provisions of subpart A of 40 CFR part 63. A table included in the proposed rule designates which sections of subpart A apply to the proposed rule. Specific recordkeeping and reporting requirements for each type of emission point are also included in the proposed rule.

The proposed rule requires sources to keep records and submit reports of information necessary to document compliance. Records must be kept for 5 years. The following six types of reports must be submitted to the Administrator as appropriate: (1) Initial Notification, (2) Implementation Plan (if an operating permit application has not been submitted or, for new sources, an application for approval of construction or reconstruction), (3) Emissions Averaging Plan, (4) Notification of Compliance Status, (5) Periodic Reports, and (6) other reports. The requirements for each of the six types of reports are summarized below. In addition, sources complying with the equipment leak requirements contained in subpart H must follow the recordkeeping and reporting requirements of subpart H.

1. Initial Notification

The Initial Notification is due 120 days after the date of promulgation for existing sources. For new sources, it is due 180 days before commencement of construction or reconstruction, or 45 days after promulgation, whichever is later. The notification must list the thermoplastic processes that are subject to the proposed rule, and which provisions may apply (e.g., continuous process vents, batch process vents, storage vessels, wastewater, and/or equipment leak provisions). A detailed identification of emission points is not necessary for the Initial Notification. The notification, however, must include a statement of whether the affected source expects that it can achieve compliance by the specified compliance date.

2. Implementation Plan

The Implementation Plan details how the affected source plans to comply. An Implementation Plan would be required only for affected sources that have not yet submitted an operating permit application or for new sources that have not yet submitted the same information as part of their application for approval of construction or reconstruction.

The Implementation Plan would be due 12 months prior to the date of compliance. For new sources, Implementation Plans would be submitted with the Notification of Compliance Status.

The information in the Implementation Plan should be incorporated into the affected source's operating permit application. The terms and conditions of the plan, as approved by the permit authority, would then be incorporated into the operating permit.

The Implementation Plan would include a list of emission points subject to the continuous process vents, batch process vents, storage vessels, wastewater, heat exchange systems, process contact cooling towers, and equipment leak provisions and, as applicable, whether each emission point (e.g., storage vessel or process vent) is Group 1 or Group 2. The control technology or method of compliance planned for each Group 1 emission point must be specified.

The plan must also certify that appropriate testing, monitoring, reporting, and recordkeeping will be done for each Group 1 emission point. If an affected source requests approval to monitor a unique parameter, a rationale must be included.

3. Emissions Averaging Plan

The Emissions Averaging Plan would be due 18 months prior to the date of compliance. New sources are not allowed to comply through the use of emissions averaging.

For points included in emissions averaging, the Emissions Averaging Plan would include: an identification of all points in the average and whether they are Group 1 or Group 2 points; the specific control technique or pollution prevention measure that will be applied to each point; the control efficiency for each control used in the average; the projected credit or debit generated by each point; and the overall expected credits and debits. The plan must include a demonstration that the emissions averaging scheme will not result in greater hazard or risk than if the emission points would comply with the standards in the absence of averaging. The plan must also certify that the same types of testing, monitoring, reporting, and recordkeeping that are required by the proposed rule for Group 1 points will be done for all points (both Group 1 and Group 2) included in an emissions average. If an affected source requests approval to monitor a unique parameter or use a unique recordkeeping and reporting system, a rationale must be included in the Emissions Averaging Plan.

4. Notification of Compliance Status

The Notification of Compliance Status would be required 150 days after the affected source's compliance date. It contains the information for Group 1 emission points and for all emission points in emissions averages, necessary to demonstrate that compliance has been achieved. Such information includes, but is not limited to, the results of any performance tests for continuous and/or batch process vents and wastewater emission points; one complete test report for each test method used for a particular kind of emission point; TRE determinations for continuous process vents; group determinations for batch process vents; design analyses for storage vessels and wastewater emission points; monitored parameter levels for each emission point and supporting data for the designated level; and values of all parameters used to calculate emission credits and debits for emissions averaging.

5. Periodic Reports

Generally, Periodic Reports would be submitted semiannually. However, there are two exceptions. First, quarterly reports must be submitted for all points included in an emissions average. Second, if monitoring results show that the parameter values for an emission point are above the maximum or below the minimum established levels for more than 1 percent of the operating time in a reporting period, or the monitoring system is out of service for more than 5 percent of the time, the regulatory authority may request that the owner or operator submit quarterly reports for that emission point. After 1 year, semiannual reporting can be resumed, unless the regulatory authority requests continuation of quarterly reports.

All Periodic Reports would include information required to be reported under the recordkeeping and reporting provisions for each emission point. For emission points involved in emissions averages, the report would include the results of the calculations of credits and debits for each month and for the quarter. For continuously monitored parameters, the data on those periods when the parameters are above the maximum or below the minimum established levels are included in the reports. Periodic Reports would also include results of any performance tests conducted during the reporting period and instances when required inspections revealed problems. Additional information the affected source is required to report under its operating permit or Implementation Plan would also be described in Periodic Reports.

6. Other Reports

Other reports required under the proposed rule include: reports of start-up, shutdown, and malfunction; process changes that change the compliance status of process vents; and requests for extensions of repair and notifications of inspections for storage vessels and wastewater.

In addition, quarterly reporting of the number of batch cycles accomplished for Group 2 batch process vents is required. Every fourth quarterly report would be required to include the total batch cycles accomplished during the previous 12 months, and a statement whether the owner or operator is in compliance with the batch cycle limitation.

V. Solicitation of Comments

The Administrator welcomes comments from interested persons on any aspect of the proposed rule, and on any statement in the preamble or the referenced supporting documents. The proposed rule was developed on the basis of information available. The Administrator is specifically requesting factual information that may support either the approach taken in the proposed standards or an alternate approach. To receive proper consideration, documentation or data should be provided.

Specifically, the EPA is requesting comments and data on several aspects of the proposed rule. First, the EPA solicits comments and data on the technical feasibility and costs for emission control techniques for the vacuum system and associated process contact cooling towers used in PET production as described in Section IV.F.5 of this preamble and in the Basis and Purpose Document, Chapter 6. Second, the EPA solicits comments on several aspects of the emissions averaging provisions as described in Section IV.F.6 of this preamble and in the Basis and Purpose Document, Chapter 4. The emissions averaging provisions in this proposed rule are modeled after those in the HON. The EPA is interested in comments on all aspects, but is especially interested in comments on the limitation of the number of emission points allowed in an average and on ways that the implementation of emissions averaging can be made more flexible without reducing the emission reduction. Third, the EPA solicits comments related to the use of subpart DDD emission limits and the proposed modification to subpart DDD. Fourth, and finally, in some instances, the EPA has required control more stringent than that required by the MACT floor. In these instances, the EPA has judged the impacts to be reasonable. The EPA specifically solicits comments on these decisions.

VI. Summary of Environmental, Energy, Cost, and Economic Impacts

This section presents the air, non-air environmental (water and solid waste), energy, cost, and economic impacts resulting from the control of organic HAP emissions under this rule.

A. Facilities Affected by These NESHAP

The proposed rule would affect ABS, SAN, MABS, MBS, polystyrene, PET, and nitrile facilities that are major sources in themselves, or that are located at a major source. Based on available information, all of the facilities at which these thermoplastics are produced were judged to be major sources for the purpose of developing these standards. (Final determination of major source status occurs as part of the compliance determination process undertaken by each individual source.)

Impacts are presented relative to a baseline reflecting the level of control in the absence of the rule. The current level of control was well understood because emissions and control data were collected on each facility included in the analysis. The impacts estimates were determined for both existing facilities and new facilities (i.e., those that are expected to begin operation through 1999).

The expected growth rate in each of the seven source categories was analyzed (see Docket No. A–92–45, Category II–B) and the SID. Based on this analysis, the following average annual growth rates (percent per year) through 1999 were estimated:

- ABS—4 percent.
- SAN—4 percent.
- MABS—3 percent.
- MBS—3 percent.
- Polystyrene—3 percent.
- PET—10 percent for bottle-grade resins and 4 percent for other PET resins.
- Nitrile—3 percent.

The impacts for existing sources were estimated by bringing each facility's control level up to the proposed standards. For new sources, impacts were based on identifying the number of new facilities required to meet the expected growth within the source category, identifying the types of facilities (e.g., batch versus continuous) that would be built, and then selecting a subset of the existing facilities to represent the expected growth. The impacts on these ''new'' facilities were determined by applying the proposed standards for new sources to the selected subset of facilities assuming the existing level of control. This methodology is discussed in detail in Docket No. A–92–45, Category II–B and the SID.

B. Primary Air Impacts

The proposed standards are estimated to reduce organic HAP emissions from all existing sources by 11,750 Mg/yr from a baseline level of 24,780 Mg/yr. This is a 47 percent reduction. For new facilities, the proposed standards are estimated to reduce organic HAP emissions by 7,395 Mg/yr from a baseline level of 14,920 Mg/yr, for a 50 percent reduction. Table 11 summarizes the organic HAP emission reductions for each individual subcategory.

TABLE 11.—Organic HAP Emissions and Emission Reductions

Subcategory	Existing sources			New sources		
	Baseline, Mg/yr	Emission reduction, Mg/yr	Percent reduction	Baseline, Mg/yr	Emission Reduction, Mg/yr	Percent reduction
ABS, continuous mass	240	190	80%	95	87	92%
ABS, continuous emulsion [a]	1,110	>180	>16%	400	>115	>29%
ABS, batch emulsion	500	56	11%	35	15	43%
ABS, batch suspension	15	5	33%	13	5	38%
ABS, latex	3	2	67%	—	—	—
SAN, continuous	110	65	60%	40	25	63%
SAN, batch	35	13	37%	20	6	30%
ASA/AMSAN	100	94	94%	—	—	—
MABS [a]	86	>38	>44%	—	—	—
MBS	190	130	68%	20	16	80%
Polystyrene, continuous	1,440	1,060	74%	330	240	73%
Polystyrene, batch	190	130	68%	—	—	—
Expandable polystyrene	450	92	20%	—	—	—
PET-TPA, continuous	6,090	2,400	40%	6,090	2,200	36%
PET-TPA, batch [a]	1,310	>6	>1%	1,310	>6	>1%
PET-DMT, continuous	4,480	2,330	52%	3,190	1,810	57%
PET-DMT, batch	8,400	4,950	59%	3,380	2,870	85%
Nitrile	30	10	33%	—	—	—
Totals [b]	24,780	11,750	47%	14,920	7,395	50%

— No new growth projected, therefore no impacts expected.
[a] A portion of the emission reductions for this subcategory are confidential business information.
[b] Total values are affected by the subcategories for which some data are confidential business information.

C. Non-Air Impacts

The proposed standards are not expected to generate any adverse water impacts. Depending on the methods selected to comply with the proposed prohibition of cooling tower water in contact condensers, the amount of wastewater generated at PET facilities could decrease.

The proposed standards are not expected to increase the generation of solid waste at any Group IV thermoplastic facility.

D. Energy Impacts

Energy impacts include increased energy use (fuel) for the operation of control equipment, energy credits attributable to the prevention of organic HAP emissions from equipment leaks, and emissions of particulates, sulfur dioxides (SOx), and nitrogen oxide (NOx) (secondary air impacts) associated with increased energy use. Under today's proposed rule, energy use is expected to increase by approximately 30,000 barrels of oil per year for existing sources and 44,000 for new sources. The emissions of secondary air pollutants associated with this energy increase are 70 Mg/yr for existing sources and 80 Mg/yr for new sources. At the same time, energy credits attributable to the prevention of organic HAP emissions from equipment leaks are approximately 17,000 barrels of oil per year for existing sources and 8,000 for new sources. This results in a net increase of approximately 13,000 barrels of oil per year for existing sources and 36,000 for new sources.

These figures are related to the control of process vents, wastewater operations, and equipment leaks. Energy impacts related to storage vessels were not estimated since many storage vessels would be controlled through the use of internal floating roofs which do not have any associated energy impacts. Further, the estimates above do not include the projected energy savings associated with control of emissions from process contact cooling towers and vacuum system wastewater associated with the manufacture of PET. The majority of existing vacuum systems are operated with steam jets, which are very energy intensive. The precise affect of the proposed rule on the use of steam jets cannot be predicted with accuracy. However, it is anticipated by the EPA that compliance with the proposed rule will, in almost all cases, decrease the energy demand of the vacuum systems.

Given the relatively small energy impacts projected for the control of process vents, wastewater operations, and equipment leaks and the projected energy savings associated with control of vacuum system air emissions, the EPA has judged the energy impacts associated with today's proposed rule to be acceptable.

E. Cost Impacts

Cost impacts include the capital costs of new control equipment, the cost of energy (supplemental fuel, steam, and electricity) required to operate control equipment, operation and maintenance costs, and the cost savings generated by reducing the loss of valuable product in the form of emissions. Also, cost impacts include the costs of monitoring, recordkeeping, and reporting associated with the proposed standards. Average cost effectiveness ($/Mg of pollutant removed) is also presented as part of cost impacts and is determined by dividing the annual cost by the annual emission reduction. Table 12 presents the estimated capital and annual costs and average cost effectiveness by subcategory.

TABLE 12.—SUMMARY OF COST IMPACTS

Subcategory	Existing sources			New sources		
	Total capital cost, $1000	Total annual costs, $1000/yr	Average cost-effectiveness ($/Mg)	Total capital cost, $1000	Total annual costs, $1000/yr	Average cost-Effectiveness ($/Mg)
ABS, continuous mass	210	100	550	150	38	430
ABS, continuous emulsion [a]	>3,540	>1,300	<7,160	>3,490	>1,730	<14,970
ABS, batch emulsion	430	310	5,550	18	14	960
ABS, batch suspension	28	19	3,570	28	19	3,760
ABS, latex	0.5	−0.5	−240	—	—	—
SAN, continuous	450	160	2,520	180	38	1,490
SAN, batch	80	33	2,520	1	−1.3	−210
ASA/AMSAN	550	200	2,150	—	—	—
MABS [a]	90	>−2	>−50	—	—	—
MBS	550	360	2,720	440	234	14,200
Polystyrene, continuous	770	280	260	200	90	350
Polystyrene, batch	300	160	1,270	—	—	—
Expandable polystyrene	110	50	540	—	—	—
PET-TPA, continuous	40,790	2,970	1,230	2,160	−3,926	−1,770
PET-TPA, batch [a]	>30	>18	<3,180	>30	>18	<3,180
PET-DMT, continuous	28,250	3,010	1,300	2,200	−970	−540
PET-DMT, batch	22,080	3,360	680	1,440	−38	−13
Nitrile	9	7	660	—	—	—
Totals [b]	98,270	12,330	1,050	10,340	−2,750	−370

—No new growth projected, therefore no impacts expected.
[a] A portion of the costs and/or emission reductions for this subcategory are confidential business information.
[b] Total values are affected by the subcategories for which some data are confidential business information.

Under the proposed rule, it is estimated that total capital costs for existing sources would be $98 million (1989 dollars), and total annual costs would by $12.3 million (1989 dollars) per year. It is expected that the actual compliance cost impacts of the proposed rule would be less than presented because of the potential to use common control devices, upgrade existing control devices, use other less expensive control technologies, implement pollution prevention technologies, or use emissions averaging. Since the effect of such practices is highly site-specific and data were unavailable to estimate how often the lower cost compliance practices could be utilized, it is not possible to quantify the amount by which actual compliance costs would be reduced.

F. Economic Impacts

The economic impact analysis for the selected regulatory alternatives shows that the estimated price increases for the affected chemicals range from 0.1 percent for nitrile to 2.8 percent for SAN. Estimated decreases in output range from 0.1 percent for polystyrene to 4.6 percent for SAN. Net annual exports (exports minus imports) are predicted to decrease by an average of 2.5 percent.

As many as five PET facilities and one ABS facility are at risk of discontinuing PET and ABS production, respectively, due to the burden of compliance with the standard. This does not mean that the facilities affected face the risk of closure. The facilities affected will continue to produce other chemicals whose processes are not affected by this standard.

Three assumptions in the analysis likely lead to an overestimate of the number of facilities at risk of discontinuing production of affected chemicals. First, the economic analysis model assumes that all PET and ABS facilities compete in a national market, though in reality some facilities may be protected from some competitors by regional or local trade barriers.

Second, it is assumed that the facilities with the highest control cost per unit of production also have the highest baseline production costs per unit. This assumption may not always be true since the baseline production costs per unit are not known, and thus the estimated number of facilities that would discontinue production of affected chemicals may be too high.

Third, for the production of PET, the selected regulatory alternative includes the control of organic HAP emissions from the vacuum system and process contact cooling tower. Control of these emissions is the highest cost item in the selected regulatory alternative and is the biggest contributor to the risk of facilities discontinuing PET production. The economic analysis is based on the use of ethylene glycol jets to control these emissions. There are a number of potential control technologies for these emissions that are expected by the EPA to have lower costs, but costs for these control technologies were not calculated. Ethylene glycol jets are being used by at least two facilities and data were available from one facility. The EPA has and will continue to investigate other control technologies for control of these emissions. The EPA invites comment and data on other control technologies.

More detailed information concerning the economic impacts and analysis are included in the Regulatory Impacts Analysis document (Docket No. A–92–45, Category II–B).

VII. Administrative Requirements

A. Public Hearing

A public hearing will be held, if requested, to discuss the proposed standard in accordance with section 307(d)(5) of the Clean Air Act. Persons wishing to make oral presentation on the proposed standards for ABS, SAN, MABS, MBS, polystyrene, PET, and nitrile production should contact the EPA at the address given in the **ADDRESSES** section of this preamble. Oral presentations will be limited to 15 minutes each. Any member of the public may file a written statement before, during, or within 30 days after the hearing. Written statements should be addressed to the Air Docket Section address given in the **ADDRESSES** section

of this preamble and should refer to Docket No. A–92–45.

A verbatim transcript of the hearing and written statements will be available for public inspection and copying during normal working hours at the EPA's Air Docket Section in Washington, DC (see **ADDRESSES** section of this preamble).

B. Docket

The docket is an organized and complete file of all the information submitted to or otherwise considered by the EPA in the development of the proposed rule. The principal purposes of the docket are:

(1) To allow interested parties to readily identify and locate documents so that they can intelligently and effectively participate in the rulemaking process; and

(2) To serve as the record in case of judicial review (except for interagency review materials (section 307(d)(7)(A)).

C. Executive Order 12866

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

(1) Have an annual effect on the economy of $100 million or more or adversely affect, in a material way, the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of the Executive Order, the OMB has notified the EPA that it considers this a ''significant regulatory action'' within the meaning of the Executive Order. The EPA submitted this action to the OMB for review. Changes made in response to suggestions or recommendations from the OMB were documented and included in the public record.

D. Enhancing the Intergovernmental Partnership Under Executive Order 12875

In compliance with Executive Order 12875, we have involved State, local, and tribal governments in the development of this rule. These governments are not directly impacted by the rule; i.e. they are not required to purchase control systems to meet the requirements of the rule. However, they will be required to implement the rule; e.g. incorporate the rule into permits and enforce the rule. They will collect permit fees which will be used to offset the resource burden of implementing the rule. Two representatives of the State governments have been members of the EPA Work Group developing the rule. The Work Group has met numerous times, and comments have been solicited from the Work Group members, including the State representatives. Their comments have been carefully considered in the rule development. In addition, all States are encouraged to comment on this proposed rule during the public comment period, and the EPA intends to fully consider these comments in the final rulemaking.

E. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An information collection request (ICR) document has been prepared by the EPA (ICR No. 1737.01), and a copy may be obtained from Sandy Farmer, Information Policy Branch, EPA, 401 M Street SW (2136), Washington, DC 20460, or by calling (202) 260–2740. The public reporting burden for this collection of information is estimated to average 938 hours per response per year, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, 2136, U. S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20503, marked ''Attention: Desk Officer for EPA.'' The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

F. Regulatory Flexibility Act

The Regulatory Flexibility Act (or RFA, Public Law 96–354, September 19, 1980) requires Federal agencies to give special consideration to the impact of regulation on small businesses. The RFA specifies that a final regulatory flexibility analysis must be prepared if a proposed regulation will have a significant economic impact on a substantial number of small entities. To determine whether a final RFA is required, a screening analysis, otherwise known as an initial RFA, is necessary.

Regulatory impacts are considered significant if:

(1) Annual compliance costs increase total costs of production by more than 5 percent, or

(2) Annual compliance costs as a percent of sales are at least 20 percent (percentage points) higher for small entities, or

(3) Capital cost of compliance represent a significant portion of capital available to small entities, or

(4) The requirements of the regulation are likely to result in closures of small entities.

A ''substantial number'' of small entities is generally considered to be more than 20 percent of the small entities in the affected industry.

Consistent with Small Business Administration (SBA) size standards, a thermoplastic producing firm is classified as a small entity if it has less than 750 employees, and is unaffiliated with a larger entity. Based upon this criterion, only one firm employs less than 750 workers.

Data were available to examine two of the criteria: the potential for closure, and a comparison of compliance costs as a percentage of sales.

For criterion one, the affected source is not expected to fall at risk of closure from the regulation, thus this criterion is not met. Also, the compliance costs were only 0.001 percent of total sales for the affected source, and this does not meet criterion two.

The affected firm is an MBS producer, and since the economics analysis lead to the conclusion that no MBS facilities are at risk of closure, this criterion is not met. Also, the compliance costs were only 0.001 percent of total sales for the firm.

In conclusion, and pursuant to section 605(b) of the Regulatory Flexibility Act, 5 U.S.C. 605(b), the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities. The basis for the certification is that the economic impacts for small entities do not meet or exceed the criteria in the

Guidelines to the Regulatory Flexibility Act of 1980, as shown above. Further information on the initial RFA is available in the background information package (see **SUPPLEMENTARY INFORMATION** section near the beginning of this preamble).

G. Miscellaneous

In accordance with section 117 of the Act, publication of this proposal was preceded by consultation with appropriate advisory committees, independent experts, and Federal departments and agencies. The Administrator will welcome comments on all aspects of the proposed regulation, including health, economic and technical issues, and on the proposed test methods.

This regulation will be reviewed 8 years from the date of promulgation. This review will include an assessment of such factors as evaluation of the residual health and environmental risks, any overlap with other programs, the existence of alternative methods, enforceability, improvements in emission control technology and health data, and the recordkeeping and reporting requirements.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

Dated: March 15, 1995.

Carol M. Browner,

Administrator.

[FR Doc. 95–7066 Filed 3–28–95; 8:45 am]

BILLING CODE 6560–50–P

40 CFR Part 180

[PP 3F4233/P609; FRL–4944–7]

RIN 2070–AC18

Bromoxynil; Pesticide Tolerance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: This document proposes a tolerance for residues of the herbicide bromoxynil (3,5-dibromo-4-hydroxybenzonitrile), resulting from the application of its octanoic and heptanoic acid esters. The proposal would amend the tolerance in or on the raw agricultural commodity (RAC) cottonseed (transgenic BXN varieties only) at 0.04 part per million (ppm). Rhone-Poulenc AG Co. submitted petitions requesting EPA to establish the maximum permissible residue of the herbicide in or on transgenic cottonseed.

DATES: Written comments, identified by the document control number, [PP 3F4233/P609], must be received on or before April 28, 1995.

ADDRESSES: By mail, submit comments to: Public Docket and Freedom of Information Section, Field Operations Division (7506C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person bring comments to: Rm. 1132, CM #2, 1921 Jefferson Davis Hwy., Arlington, VA 22202.

Information submitted as a comment concerning this document may be claimed confidential by marking any part or all of that information as ''Confidential Business Information'' (CBI). Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. A copy of the comment that does not contain CBI must be submitted for inclusion in the public record. Information not marked confidential may be disclosed publicly by EPA without prior notice. All written comments will be available for public inspection in Rm. 1132 at the address given above, from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: By mail: Robert J. Taylor, Product Manager (PM) 25, Registration Division (7505C), Environmental Protection Agency, 401 M. St., SW., Washington, DC 20460. Office location and telephone number: Rm., 241, CM #2, 1921 Jefferson Davis Hwy., Arlington, VA 22202, (703)-305-6800; e-mail: Taylor.Robert@epamail.epa.gov.

SUPPLEMENTARY INFORMATION: EPA issued a notice, published in the **Federal Register** of October 21, 1993 (58 FR 54354), announcing that the Rhone-Poulenc AG Co., P.O. Box 12014, 2 T.W. Alexander Drive, Research Triangle Park, NC 27709, had submitted a pesticide petition, PP 3F4233, to EPA proposing to amend 40 CFR 180.324 by establishing a regulation to permit the residues of the herbicide bromoxynil (3,5-dibromo-4-hydroxybenzonitrile) resulting from the application of its octanoic and heptanoic acid esters in or on the raw agricultural commodity (RAC) transgenic cottonseed at 0.04 ppm. There were no comments or requests for referral to an advisory committee received in response to the notice of filing.

The data submitted in the petition and other relevant material have been evaluated. The toxicology data listed below were considered in support of this tolerance. Based on bridging studies, the Agency has determined that bromoxynil octanoate and bromoxynil heptanoate are toxicologically equivalent. For this reason, studies using the bromoxynil phenol are accepted in fulfillment of studies required for bromoxynil octanoate and bromoxynil heptanoate.

Phenol technical-grade bromoxynil

1. Several acute toxicology studies were performed, placing technical-grade bromoxynil in toxicity Category II.

2. An acute oral toxicity study in rats resulted in LD_{50} = 81 mg/kg (males) and LD_{50} = 93 mg/kg (females).

3. A 2-year combined feeding/carcinogenicity study was conducted with rats administered (oral) dosages of 0, 60, 190, or 600 ppm (0, 2.6, 8.2, or 28 mg/kg/day in males; 0, 3.3, 11.0, or 41 mg/kg/day in females) bromoxynil phenol in the diet. In males the no-observed-effect-level (NOEL) for systemic toxicity is 2.6 mg/kg/day, and the lowest-effect-level (LEL) is 8.2 mg/kg/day. In females, the NOEL is 3.3 mg/kg/day, and the lowest-effect-level (LEL) is 11.0 mg/kg/day. This study did not demonstrate any increase in tumor incidences in either male or female rats. This study has not been considered by the RfD committee. The RfD was set based on the NOEL from the supplementary rat study (see item #4).

4. A 2-year combined feeding/carcinogenicity study was conducted with rats administered bromoxynil phenol in the diet at dose levels of 0, 10, 30, or 100 ppm (0, 0.5, 1.5, or 5 mg/kg/day). In both males and females, the NOEL and LOEL for systemic toxicity was 5 mg/kg/day and >5 mg/kg/day, respectively. At the highest dose tested, increased liver weights were observed at 12 months, but not at 24 months. This study was considered negative for carcinogenicity. This study is considered supplementary. The RfD is based on this study and an uncertainty factor of 300 rather than 100 was used since the study is supplementary.

5. A 1-year oral study was conducted with dogs administered bromoxynil phenol at dose levels of 0, 0.1, 0.3, 1.5, or 7.5 mg/kg/day in capsules. The NOEL is 0.3 mg/kg/day and the LEL is 1.5 mg/kg/day in both males and females.

6. An 18-month carcinogenicity study was conducted with mice administered bromoxynil phenol at dose levels of 0, 10, 30, or 100 ppm (0, 1.3, 3.9, or 13 mg/kg/day) in the diet. For males, dose-related increases in hyperplastic nodules and liver adenomas/carcinomas were observed which were statistically significant at the 13-mg/kg/day dose level. Increased relative liver weights