FOR FURTHER INFORMATION CONTACT: Part 50 Notice—Ms. Susan Lyon Stone, Air Quality Strategies and Standards Division (MD–15), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone (919) 541–1146. Part 53 Notice—Mr. Frank McElroy, Atmospheric Research and Exposure Assessment Laboratory (MD–77), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone (919) 541–2622.

SUPPLEMENTARY INFORMATION: In order to allow additional time to review the Proposed Requirements for Implementation Plans and Ambient Air Quality Surveillance for SO_2 National Ambient Air Quality Standards (40 CFR parts 51 and 58) before submitting comment on the National Ambient Air Quality Standards for Sulfur Oxides (Sulfur Dioxide)—Reproposal (40 CFR parts 50 and 53), the EPA is extending the public comment period on the 40 CFR parts 50 and 53 proposals from March 15, 1995 to April 14, 1995. The document that proposes for public comment the requirements for implementing the alternative measures and changes in the sulfur dioxide ambient air surveillance network will be published in the **Federal Register** on or about March 1, 1995.

The comment period extension is also intended to provide additional opportunity for members of the medical community who are experts in the field of asthma treatment to provide comment on the health significance of the sulfur dioxide-induced effects. The extended comment period will also provide additional time to comment on other parts of the November 15, 1994 notice (59 FR 58958).

List of Subjects

40 CFR Part 50

Air pollution control, Carbon monoxide, Lead, Nitrogen dioxide, Ozone, Particulate matter, Sulfur oxides.

40 CFR Part 53

Administrative practice and procedure, Air pollution control, Reporting and recordkeeping requirements.

Dated: March 9, 1995.

Mary D. Nichols,

Assistant Administrator for Air and Radiation.

[FR Doc. 95–6266 Filed 3–13–95; 8:45 am]

BILLING CODE 6560–50–P

40 CFR Part 63

[AD-FRL–5168–8]

RIN 2060–AD95

National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Hazardous Air Pollutant Emissions From the Printing and Publishing Industry

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule and notice of public hearing.

SUMMARY: The proposed standards would reduce emissions of hazardous air pollutants (HAP) from existing and new printing operations that are major sources of HAP emissions. A major source is defined in section 112(a) of the Clean Air Act as amended in 1990 (Act) as a source that emits, or has the potential to emit, considering controls, 10 tons per year (tpy) or more of any individual HAP or 25 tpy or more of any combination of HAP. Some of these pollutants are emitted from publication rotogravure and product and packaging rotogravure and wide-web flexographic printing. These operations are covered in the proposed rule. In these printing operations, a variety of HAP are used as solvents and components in inks and other materials applied by printers. The HAP emitted by the facilities covered by this proposed rule include toluene, xylene, ethylbenzene, methanol, methyl ethyl ketone, methyl isobutyl ketone, ethylene glycol and glycol ethers. All of these pollutants can cause reversible or irreversible toxic effects following exposure. The potential toxic effects include eye, nose, throat and skin irritation; and blood cell, heart, liver and kidney damage. The proposed rule is estimated to reduce emissions of HAP by 6,700 Mg per year. The emissions reductions achieved by these standards when combined with the emissions reductions achieved by similar standards, 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.''

The proposed rule implements section 112(d) of the Clean Air Act Amendments of 1990 (1990 Amendments), which requires the Administrator to regulate emissions of HAP listed in section 112(d) of the 1990 Amendments. The intent of this rule is to protect the public health by requiring the maximum degree of reduction in emissions of HAP from new and existing major sources, taking into consideration the cost of achieving such emission reduction, any nonair quality, health and environmental impacts, and energy requirements.

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

Public Hearing. Anyone requesting a public hearing must contact the EPA no later than April 13, 1995. If a hearing is held, it will take place on April 28, 1995, beginning at 10 a.m.

ADDRESSES: Comments. Comments should be submitted (in duplicate, if possible) to: Air and Radiation Docket (Mail Code 6102), Attention: Docket No. A–92–42, 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 docket is located at the above address in room M–1500, Waterside Mall (ground floor), and may be inspected from 8 a.m. to 5:30 p.m., Monday through Friday; telephone number (202) 260–7548, FAX (202) 260–4400. A reasonable fee may be charged for copying docket materials.

Public Hearing. If anyone contacts the EPA requesting a public hearing by the required date (see DATES), the hearing will be held at the EPA Office of Administration Auditorium in Research Triangle Park, North Carolina. Persons interested in speaking at a public hearing should contact Ms. Kim Teal, Coatings and Consumer Products Group, (MD–13), U. S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541–5580. Persons interested in attending the hearing should contact Ms. Kim Teal to verify that it will be held.

Additional Information. For information on accessing the U.S. EPA Technology Transfer Network electronic bulletin board and obtaining copies of the Proposed Regulatory Text, Background Information Document or Economic Impact Analysis, please refer to the **SUPPLEMENTARY INFORMATION** section below.

FOR FURTHER INFORMATION CONTACT: For information concerning the proposed regulation, contact Mr. David Salman at (919) 541–0859, Coatings and Consumer Products Group, Emission Standards Division (MD–13), U. S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.

SUPPLEMENTARY INFORMATION:

Technology Transfer Network. The Technology Transfer Network (TTN) is one of EPA's electronic bulletin boards. The TTN provides information and technology exchange in various areas of air pollution control. The service is free

except for the cost of a phone call. Dial (919) 541–5472 for up to a 14,000 bps modem. If more information on TTN is needed call the HELP line at (919) 541–5384.

Proposed Regulatory Text. The proposed regulatory text is not included in this **Federal Register** notice, but is available in Docket No. A–92–42, or by written or telephone request from the Air and Radiation Docket. This notice and the proposed regulatory language are also available for downloading TTN under Clean Air Act, Recently Signed Rules.

Background Information Document. The Background Information Document (BID) for the proposed standards may be obtained from the docket; the U. S. EPA Library (MD–35), Research Triangle Park, North Carolina 27711, telephone number (919) 541–2777; or the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, telephone (703) 487–4650. Please refer to ''National Emission Standards for Hazardous Air Pollutants: Printing and Publishing Industry—Background Information for Proposed Standards'' (EPA–453/R–95–002a). The BID is also available for downloading on the TTN.

Economic Impact Analysis. The Economic Impact Analysis (EIA) for the proposed standards may be obtained from the docket, the U. S. EPA Library, or the NTIS. Please refer to ''Economic Impact Analysis for the Printing and Publishing NESHAP'' (EPA–452/D–95–001). The EIA is also available for downloading on the TTN.

Preamble Outline. The information presented in this preamble is organized as follows:

I. Background.

The proposed rule addresses facilities which apply ink and other materials to any substrate, except fabric, using rotogravure or wide-web flexographic methods. These facilities print products such as magazines, newspapers, supplements, packaging and wallpaper on substrates such as paper, plastic, metal foil, and vinyl.

A. Regulatory Background and Purpose.

The Act requires, under section 112, that EPA evaluate and control emissions of HAP. The control of HAP is to be achieved through promulgation of emission standards under sections 112(d) and (f), and of work practice standards under section 112(h) where appropriate, for categories of sources that emit HAP. Pursuant to section 112(c) of the Act, EPA published in the **Federal Register** the initial list of source categories that emit HAP on July 16, 1992 (57 FR 31576). This list includes major and area sources of HAP for which the EPA intends to issue regulations between November 1992 and November 2000.

The Act was created, in part, ''to protect and 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 Act, section 101(b)(1)). As such, this proposed regulation would protect the public health by reducing emissions of HAP from publication rotogravure and product and packaging rotogravure and wide-web flexographic printing.

The HAP listed in section 112(b)(1) emitted by printing facilities that would be covered by this proposed rule include toluene, xylene, ethylbenzene, methanol, methyl ethyl ketone, methyl isobutyl ketone, ethylene glycol and glycol ethers. All of these pollutants can cause reversible or irreversible toxic effects following exposure. The potential toxic effects include eye, nose, throat and skin irritation; and blood cell, heart, liver and kidney damage. 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., the presence of pre-existing disease) and lifestyle.

The proposed standards will reduce HAP emissions from publication rotogravure printing facilities by 4,750 Mg/yr (5,220 tpy) from a baseline level of 17,500 Mg/yr (19,200 tpy). The proposed standards will reduce HAP emissions from product and packaging rotogravure and wide web flexographic printing facilities by 1,940 Mg/yr (2,140 tpy) from a baseline level of 4,200 Mg/yr (4,620 tpy).

There are no significant economic impacts associated with the proposed standards. There are no firms or facilities at risk of closure as a result of the proposed standards and there will not be a significant economic impact on a substantial number of small entities.

B. Common Sense Initiative

On October 17, 1994, the Administrator established the Common Sense Initiative (CSI) Council in accordance with the Federal Advisory Committee Act (U.S.C. App. 2, Section 9(c)) requirements. The CSI addresses six industrial sectors. The Printing and Publishing industry is one of these sectors.

The following are the six elements of the CSI program, as stated in the ''Advisory Committee Charter.''

1. *Regulation.* Review existing regulations for opportunities to get better environmental results at less cost. Improve new rules through increased coordination.

2. *Pollution Prevention.* Actively promote pollution prevention as the standard business practice and a central ethic of environmental protection.

3. *Recordkeeping and Reporting.* Make it easier to provide, use, and

publicly disseminate relevant pollution and environmental information.

4. *Compliance and Enforcement.* Find innovative ways to assist companies that seek to comply and exceed legal requirements while consistently enforcing the law for those that do not achieve compliance.

5. *Permitting.* Improve permitting so that it works more efficiently, encourages innovation, and creates more opportunities for public participation.

6. *Environmental Technology.* Give industry the incentives and flexibility to develop innovative technologies that meet and exceed environmental standards while cutting costs.

The Agency intends to work with the Printing CSI sector team and consider its consensus recommendations concerning the proposed standards. Even though the data collection and analysis efforts for the proposed standards were completed before the CSI program was announced, many aspects of the CSI are reflected in the proposed standards.

The alternatives considered in the development of this regulation, including those alternatives selected as standards for new and existing printing facilities are based on process and emissions data received from over 600 printing facilities. The EPA met with industry and trade groups on numerous occasions to discuss these data. In addition, facilities and State regulatory authorities had the opportunity to comment on draft versions of the proposed regulation and to provide additional information. Two trade organizations provided extensive comments; these comments were considered, and in some cases, today's proposed standards reflect these comments. Of major concern to industry were the opportunity to comply through pollution prevention by using low HAP content materials.

The regulation allows sources flexibility to select from various options for compliance. Sources may reduce HAP usage and emissions through conversions to waterborne, lower HAP solvent-borne or ultraviolet/electron beam cure materials. Alternatively, sources may install or upgrade existing capture and control devices to meet the proposed standard. Finally sources have the option to comply by a combination of lower HAP materials and capture and control. Facilities may select the most cost-effective option based on facility specific considerations.

The proposed standards give existing facilities 3 years from the date of promulgation to comply. This is the maximum amount of time allowed under the Clean Air Act. This timeframe will provide the greatest opportunity for developing and adopting low HAP content materials, and provide sufficient time for facilities that choose to install or upgrade capture and control equipment.

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 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. The Agency has also attempted to maintain consistency with 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, as well as representatives from State regulatory agencies are included in the regulatory development process as members of the Work Group. The Work Group must review and concur with the regulation before proposal and promulgation. Therefore, the EPA believes that the implications to other EPA offices and programs have been adequately considered during the development of these standards.

II. Summary of the Proposed Rule

Table 1 provides an overview of the proposed rule, including applicability; the standards for each affected source; test methods and procedures; and monitoring, recordkeeping, and reporting requirements.

TABLE 1.—SUMMARY OF SUBPART KK OF 40 CFR PART 63—NATIONAL EMISSION STANDARDS FOR THE PRINTING AND PUBLISHING INDUSTRY

Affected source and requirement	Description
Printing and Publishing Industry:	
Applicability	This rule applies to facilities engaged in rotogravure and wide-web flexographic printing that are major sources as defined in 40 CFR part 63. (63.821).
Estimated Number of Facilities.	Approximately 200 facilities are expected to be affected by the rule. Applicable SIC codes include 2295, 2392, 2647, 2649, 2651, 2671, 2673, 2674, 2711, 2721, 2754, 2759, 3497, and 3996.
Permit Requirements	Major sources are required to obtain operating permits in State where facility is located according to 40 CFR part 70 and applicable State regulations. (63.821(d)).
All Affected Sources:	
Standards	Comply with §§63.4 through 63.6 of the General Provisions of 40 CFR part 63, subpart A, except for §63.6(h). (63.823).
Compliance Dates	Within three years of the effective date for existing sources and upon startup for new sources. (63.826).
Test Methods and Procedures.	See individual affected sources.
Monitoring Requirements	See individual affected sources.
Recordkeeping Requirements	Comply with §63.10(b) and (c) of the General Provisions. (63.829).
Reporting Requirements	Initial notification, notification of performance tests, notification of compliance status, performance test reports, startup, shutdown and malfunction reports, summary reports, and HAP use reports as described in §§63.9–63.10. (63.830).
Publication Rotogravure Facilities:	
Standards	Control of 92 percent of organic HAP or equivalent. (Organic HAP emissions limited to no greater than 8 percent of the mass of volatile matter, including water, used on a plantwide basis.) (63.824(b)).
Performance Test Period and Tests.	1. Test Period. Each and every month. (63.824(b)). 2. Performance Test. Initial performance test for all control devices to demonstrate compliance with overall control efficiency requirement. (63.824(b))

TABLE 1.—SUMMARY OF SUBPART KK OF 40 CFR PART 63—NATIONAL EMISSION STANDARDS FOR THE PRINTING AND PUBLISHING INDUSTRY—Continued

Affected source and requirement	Description
Test Methods and Procedures.	1. Organic HAP content determination. (63.827(b)(1)). 2. Volatile matter content determination. (63.827(c)(1)). 3. Overall control efficiency using liquid-liquid mass balance for solvent recovery systems. (63.824(b)(1)(i). 4. Overall control efficiency determination using capture efficiency test with continuous emission monitors. (63.824(b)(1)(ii) and 63.824(b)(2)(ii)). 5. Overall control efficiency determination using capture efficiency test and incinerator destruction efficiency test. (63.824(b)(2)(i).
Monitoring Requirements	1. Hourly recording of flow rate from press to control device. (63.828(a)(1). 2. Quarterly audit of continuous emission monitors. (63.828(a)(2)(i)). 3. Monitoring of capture system operating parameter. (63.828(a)(5)).
Product and Packaging Rotogravure Presses and Wide-web Flexographic Presses, or Groups of Presses Controlled by a Common Solvent Recovery System:	
Standards	Control of 95 percent of organic HAP, or organic HAP emissions limited to no greater than 0.20 kg HAP per kg of solids applied, for each press, or group of presses controlled by a common solvent recovery system, or organic HAP emissions limited to no greater than 0.04 kg HAP per kg inks and other materials applied, for each press. (63.825(b)).
Performance Test Period and Tests.	1. Test Period. *Uncontrolled Presses.* Each and every month. *Presses controlled with solvent recovery systems.* Each and every month. *Presses controlled with incinerators monitoring operating parameters.* Every three hour period. *Presses controlled with incinerators using continuous emissions monitors.* Each and every month. (63.825(b) and (c)). 2. Performance Test. Initial performance test for all control devices to demonstrate compliance with organic HAP emission rate. (63.825(g) and (h)).
Test Methods and Procedures.	1. Organic HAP content determination. (63.827(b)(2)). 2. Volatile matter and solids content determination. (63.827(c)(2)). 3. Overall control efficiency using liquid-liquid mass balance for solvent recovery systems. (63.825(g). 4. Overall control efficiency determination using capture efficiency test with continuous emission monitors. (63.825(g)(2) and 63.825(h)(2)). 5. Overall control efficiency determination using capture efficiency test and incinerator destruction efficiency test. (63.825(h)).
Monitoring Requirements	1. Hourly recording of flow rate from press to control device. (63.828(a)(1)). 2. Quarterly audit of continuous emission monitors. (63.828(a)(2)(i)). 3. Quarterly calibration of incinerator monitoring thermocouple(s). (63.828(2)(ii)). 4. Operation of continuous emission monitors. (63.828(a)(3)). 5. Measurement of incinerator operating parameters. (63.828(a)(4)). 6. Monitoring of capture system operating parameter. (63.828(a)(5)).

A. Applicability

The proposed rule would apply to each new and existing publication rotogravure or product and packaging rotogravure and wide web flexographic printing facility that is a major source, as defined under section 112(a) of the Act. A major source is one that emits or has the potential to emit, considering controls, 9.1 Mg/yr (10 tons/yr) or more of any one HAP or 22.7 Mg/yr (25 tons/yr) of any combination of HAP for all activities conducted at the facility. Publication rotogravure and product and packaging rotogravure and wide web flexographic printing operations at any major source that conducts other work would be subject to the proposed standards, regardless of the relative proportion of printing and non-printing work at the facility. Research or laboratory facilities are not subject to the provisions of the standards unless they are collocated with production lines.

The proposed rule uses the definition of research and laboratory facilities from section 112(c)(7) of the Act. This section provides that ''research or laboratory facility'' means any stationary source whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a *de minimis* manner.

Research activities include those activities that are employed to develop a new rotogravure or flexographic ink, coating or other material; a new substrate or end product; and may also include activities devoted to optimizing the manufacture of the product. Once a facility determines that the manufacture of this product is viable, the EPA believes that additional activities are likely to be beyond the research phase.

As noted in § 63.821(a)(1), the proposed printing and publishing rule would apply to facilities that are major sources as defined in 40 CFR 63.2. An important consideration in the definition of ''major source'' is a given plant site's ''potential to emit.'' The ''potential to emit'' is defined in 40 CFR 63.2 as follows: '' 'Potential to emit' means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it

would have on emissions is Federally enforceable.''

A key aspect of the potential to emit definition is that restrictions must be Federally enforceable. Examples of restrictions that would be considered Federally enforceable are listed in a definition in 40 CFR 63.2.

The EPA believes that there are printing and publishing facilities whose actual emissions of HAP are substantially less than ''major'' amounts (i.e., more than 10 tons per year of any single HAP, or more than 25 tons per year from the sum of all HAP emitted). Many of these facilities, however, would be considered ''major sources'' that are subject to the proposed rule because there is no Federally enforceable restriction in place that limits their potential to emit HAP. The EPA believes that the this rule should provide a mechanism for such facilities to accept and document such restrictions.

The EPA proposes, in § 63.821(a)(2) through (3) of the proposed rule, that if owners or operators commit to using no more than 9.1 Mg (10 tons) per 12 month period of each HAP and less than 22.7 Mg (25 tons) per 12 month period of any combination of HAP at the entire facility, including materials used for source categories or purposes other than printing and publishing, then the facility can be considered an area source. Each facility for which the owner or operator commits to the criteria stated in § 63.821(a)(2) would be subject only to the recordkeeping provisions in § 63.829(d) and the reporting provisions in § 63.830(d) of this subpart as long as the commitment is met for each 12 month period. If the commitment is not met for any 12 month period then the facility would be in violation of its commitment and would be considered a major source of HAP beginning the first month after the end of the first 12 month period in which either of the HAP use thresholds was exceeded. As a major source of HAP, each such facility would be subject to the provisions of this subpart as noted in § 63.821(a)(1) and would no longer be eligible to use the provisions of § 63.821(a)(2).

The EPA believes that there are sources using more than 10 tons of an individual HAP or more than 25 tons of total HAP per 12 month period that may emit less than ''major'' amounts (e.g., sources using capture and control equipment that reduces HAP emissions), and for which the owner or operator may be willing to accept case-by-case operating restrictions that would ensure that the potential to emit does not exceed the major source threshold. The EPA is considering adding language to the final rule that would provide a mechanism for such sources. The EPA requests comment on: (1) Whether such language should be added; (2) the type of reporting and process required to establish the case-by-case commitment (in particular, how to establish throughput and content limitations and performance criteria for the capture and control equipment that would ensure area source status); and (3) the types of records that should be maintained to document compliance with the restrictions. In addition, the EPA requests comment on whether the level of recordkeeping and reporting should vary, depending on the level of emissions (as reflected by the throughput and content of the materials used, and performance of the capture and control equipment).

In general, rotogravure and wide web flexographic printing facilities are covered by the SIC codes listed in Table 2. However, facilities classified under other SIC codes may be subject to the proposed standards if the facility meets the definition of a major source and conducts rotogravure or wide web flexographic printing.

TABLE 2.—ROTOGRAVURE AND WIDE WEB FLEXOGRAPHIC PRINTING SIC CODES

SIC Code	Description
2295	Vinyl Coated or Laminated Fabric.
2392	House Furnishings, including Shower Curtains.
2647	Sanitary Paper Products.
2649	Wallcoverings.
2651	Folding Paperboard Boxes.
2671	Coated and Laminated Paper and Plastic Film for Packaging.
2673	Plastic Bags and Liners, Coated and Laminated.
2674	Uncoated Paper Bags and Sacks and Multiwall Shipping Sacks and Bags.
2711	Newspapers.
2721	Periodicals.
2754	Commercial Printing, Gravure.
2759	Commercial Printing, NEC.
3497	Laminated Aluminum Foil, Flexible Packaging.
3996	Hard Surface Floor Coverings.

Based on information obtained through an information collection request and information provided by the Gravure Association of America (GAA), there are an estimated 200 facilities that will be subject to the proposed standards. The combined HAP emissions from these facilities are estimated to be over 21,800 Mg/yr (24,000 tpy).

Affected Sources

The proposed rule would limit organic HAP emissions that result from publication rotogravure and product and packaging rotogravure and wide-web flexographic printing. The standard applies to HAP present in inks, ink extenders, solvents, coatings, varnishes, primers, adhesives, and other materials applied with rotogravure and flexographic plates. Printed items include magazines, advertising inserts, catalogs, flexible packaging, corrugated boxes, paper towels, newspapers, wall coverings, floor coverings, shower curtains, etc.

Sources in the publication rotogravure segment of the printing and publishing industry include but are not limited to ink and solvent storage tanks, ink mixing, printing, press and parts cleaning, proof and production presses and solvent recovery. Sources in the product/package rotogravure and wide-web flexography segments include the printing presses.

Various organic HAP are used in the printing industry. Organic HAP used include toluene, xylene, ethylbenzene, methyl ethyl ketone, methyl isobutyl ketone, methanol, hexane, dibutylphthalate, toluene diisocyanate, ethylene glycol and glycol ethers. These are the HAP expected to be emitted by the industry, however, the proposed standards apply to emissions of all organic HAP listed in section 112(b).

B. Proposed Standards for Affected Sources

In addition to the standards for affected sources as discussed below, the affected sources would be subject to the General Provisions which were promulgated in the **Federal Register** March 16, 1994 (59 FR 12408) under 40 CFR part 63, subpart A. The General Provisions stipulate that all affected sources subject to the proposed rule are also subject to, as appropriate, 40 CFR 63.4, 63.5, and 63.6.

The proposed rule requires each owner or operator who uses a control device or equipment to control HAP emissions to prepare an operation and maintenance plan in accordance with § 63.6. In addition to the information required in § 63.6, the proposed rule requires that the owner or operator of the control device or equipment include the following information: (1) The operation and maintenance criteria for each air pollution control device or equipment, including a standardized checklist to document the operation and maintenance of the equipment; (2) a systematic procedure for identifying malfunctions and for reporting them

immediately to supervisory personnel; and (3) procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.

The General Provisions also state that an owner or operator who uses an air pollution control device or equipment not listed in the proposed rule must submit to the Administrator for approval a description of the device, test data verifying the performance of the device or equipment for HAP and/or VOC emissions, appropriate operating parameters that would be monitored to establish compliance with the proposed standards, and a copy of the inspection and maintenance plan required under § 63.6. The authority to approve an alternate air pollution control device is retained by the Administrator and is not delegated.

Finally, § 63.6(g) allows an owner or operator of an affected source to use alternative means of compliance. This allows the development and use of new technology not known or not demonstrated at the time the rule was promulgated.

The affected sources for the proposed standards are defined as follows: (1) Each publication rotogravure facility (all publication rotogravure presses plus all associated operations including but not limited to ink and solvent storage tanks, ink mixing, printing, press and parts cleaning, proof and production presses and solvent recovery); and (2) each product or packaging rotogravure or wide-web flexographic press or group of presses controlled by a common solvent recovery system. The following paragraphs summarize the proposed standards for each affected source.

1. Publication Rotogravure Presses

The proposed standards for publication rotogravure facilities would apply to all new and existing affected sources. The proposed standards allow the use of control devices provided each facility achieves an overall control efficiency, taking into account capture and control device efficiency of 92 percent, when the organic HAP content of solvent borne inks and other materials used is equivalent to the volatile matter content. When non-HAP VOC or water is present in the inks or other materials applied, each control device must achieve a control efficiency such that the sum of the organic HAP recovered or destroyed, plus the water used, plus the VOC used, minus the organic HAP used makes up a minimum of 92 percent of the sum of the VOC used plus the water used. (Organic HAP emitted is less than 8 percent of the total volatile matter.)

Compliance with the proposed standard would be demonstrated by a monthly mass balance when a solvent recovery system is used. Compliance for control devices other than solvent recovery systems would be shown on a continuous basis based on a specific operating parameter or parameters, such as temperature for incinerators.

2. Package and Product Rotogravure and Wide-web Flexographic Presses

The proposed standards for package and product rotogravure and wide-web flexographic presses would apply to all new and existing affected sources. The proposed standards allow the use of low HAP materials, control devices, or a combination of low HAP materials and control devices. Presses applying any combination of inks, coatings, primers, adhesives, solvents, extenders and other materials such that the monthly mass weighted organic HAP contents of these materials is equal to or less than 0.20 kg per kg of solids applied, or equal to or less than 0.04 kg per kg of materials applied would be in compliance. The proposed standards allow the use of control devices, provided that each control device used for the control of HAP achieves an overall control efficiency, taking into account capture and control device efficiency of 95 percent. Presses would also be allowed to comply with the proposed standards by using control systems provided that the HAP emissions are equal to or less than 0.20 kg per kg of solids applied. In cases where a solvent recovery system is used to control emissions from more than one press, the group of commonly controlled presses can be considered a single affected source for the purpose of complying with the overall control device efficiency standard or the overall organic HAP emission rate standard.

Compliance with the proposed standard would be demonstrated either by a monthly mass balance or through the use of continuous emission monitors when a solvent recovery system is used. Compliance for control devices other than solvent recovery systems would be shown on a continuous basis based on a specific operating parameter or parameters, such as temperature for incinerators. Compliance with the proposed organic HAP content level standards would be shown on a monthly basis for compliant materials. Sources demonstrating compliance by a combination of means would demonstrate control device efficiency as described above and demonstrate mass average organic HAP content on a monthly basis.

C. Compliance Dates

The proposed rule would require all existing sources to comply no later than three years after the effective date of the standards. In addition, the proposed rule adopts the compliance dates specified in § 63.6(b) and § 63.6(c). New sources must comply with the standard upon startup or the effective date of this regulation, whichever is later.

D. Compliance Extensions

Because of the length of time necessary to properly specify, order and install additional capture and control equipment some existing facilities may need to request a compliance extension. Similarly, some existing facilities choosing to adapt to lower HAP ink (and other press material) formulations may have to select and test substitutes for a large number of specific applications. These existing facilities may need to request a compliance extension.

Section 63.6(i) of 40 CFR part 63 provides the requirements for requesting an extension of compliance with a relevant standard established under part 63. Specifically, § 63.6(i)(4) allows the issuance of a permit granting an extension of up to one year to comply with the standard, if such additional period is necessary for the installation of controls. Section 63.6(i)(4)(i)(B) requires requests for compliance extensions to be submitted no later than 12 months before the affected source's compliance date.

E. Compliance Testing and Monitoring

In addition to the specific testing and monitoring requirements specified below for each affected source, the proposed rule adopts the testing requirements specified in § 63.7.

1. Test Methods and Procedures

a. Publication Rotogravure. For facilities using solvent recovery systems, the overall control efficiency would be determined using a mass balance over the period of each calendar month. Owners or operators would be required to measure the amount of all materials used during the month and to determine the organic HAP and volatile matter content of these materials. Owners or operators would also be required to measure the amount of volatile matter recovered by the solvent recovery system during the month and to calculate the overall HAP control efficiency. The organic HAP content would be determined by proposed EPA Method 311, or from manufacturers data when these data are equivalent to those obtained from proposed EPA Method 311. When it is not possible to

determine the organic HAP content using proposed EPA Method 311, the owner or operator shall submit to the Administrator an alternative technique for determining the organic HAP content. The volatile matter content of the materials used shall be determined by manufacturers formulation data or by Method 24A of 40 CFR part 60, appendix A.

For facilities using incinerators, owners or operators must determine the incinerator destruction efficiency and the capture efficiency. Incinerator destruction efficiency would be determined using EPA Method 1 or 1A, EPA Method 2, 2A, 2C or 2D, EPA Methods 3 and 4, and EPA Method 25 or 25A of 40 CFR part 60, appendix A. Capture efficiency would be confirmed using Procedure T to verify the presence of a permanent total enclosure or determined using the capture efficiency protocol specified in 40 CFR 52.741 (a)(4)(iii).

b. Package and Product Rotogravure and Wide-web Flexography. Owners or operators may comply by means of use of materials meeting the organic HAP threshold requirements or through use of control equipment, or through a combination of low organic HAP materials and control equipment. The proposed standards for organic HAP emissions would require compliance with an organic HAP content threshold based on solids content (kg of organic HAP per kg of solids applied), an organic HAP threshold based on material (kg of organic HAP per kg of materials applied), an overall organic HAP control efficiency (percent), or an organic HAP emission rate (kg of organic HAP emitted per kg of solids applied).

The organic HAP content of inks, coatings, primers, adhesives, solvents and other materials applied on the press would be determined by proposed EPA Method 311, or from manufacturers data when these data are equivalent to those obtained from proposed EPA Method 311. When it is not possible to determine the organic HAP content using proposed EPA Method 311, the owner or operator shall submit to the Administrator an alternative technique for determining the organic HAP content.

The facility may rely on manufacturer's data to determine the organic HAP content when these data are equivalent to those obtained from proposed EPA Method 311. The mass of each ink, coating, primer, adhesive, solvent and other material applied would be determined using company records. If diluent solvents or other ingredients are added to a material prior to application, then the total organic HAP fractions and mass must be adjusted appropriately to account for such additions. These values would be required for each monthly period; however, only changes in formulation would require re-determination of total organic HAP weight fraction. The proposed standards would then require the owner or operator to calculate the average mass of organic HAP in materials applied per mass of solids applied.

If an owner or operator is seeking to comply by using materials with a weighted average HAP content below the organic HAP content threshold requirement or the low solids organic HAP threshold requirement, the owner or operator would need to determine the organic HAP content and solids content. If no changes in formulation as applied occurred, then a re-calculation of the organic HAP level would not be required.

If a control device is used, the proposed standards require the owner or operator to demonstrate compliance with the overall control efficiency requirement of at least 95 percent. Alternately, the owner or operator may determine the overall control efficiency of the equipment and the HAP content and solids content of the materials applied. To comply by this combination of means, the owner or operator would have to demonstrate a HAP emissions limitation of 0.20 kg HAP per kg of solids applied.

For a solvent recovery system, overall control efficiency would be determined using a liquid-liquid mass balance, or by conducting an initial performance test of capture efficiency and using continuous emissions monitors. The liquid-liquid mass balance determination would be made every month. Owners or operators would be required to measure the amount of all materials applied during the month and to determine the volatile matter content of these materials. Owners or operators measuring overall control efficiency using a liquid-liquid mass balance would also be required to measure the amount of volatile matter recovered by the solvent recovery system during the month and to calculate the overall HAP control efficiency.

Owners or operators using solvent recovery systems may also demonstrate compliance by conducting an initial performance test of capture efficiency and operating continuous emissions monitors to determine the total volatile matter content at both the inlet to and the outlet from the carbon adsorber such that the percent efficiency of the carbon adsorber can be calculated for each calendar month. The owner or operator must verify the presence of a permanent total enclosure using Procedure T, or determine the capture efficiency using the protocol specified in 40 CFR 52.741(a)(4)(iii). The overall organic HAP control efficiency must be calculated as the product of the capture efficiency and the carbon adsorber efficiency.

For control devices other than carbon adsorbers, the overall control efficiency would be based on capture efficiency and destruction efficiency. Capture efficiency would be determined based on the procedure specified in 40 CFR 52.741(a)(4)(iii), unless the operation is performed within a permanent total enclosure. An enclosure that meets the requirements of a permanent total enclosure as specified by Procedure T of 40 CFR 52.741 would have a capture efficiency of 100 percent.

The destruction efficiency of a control device other than a carbon adsorber would be determined using EPA Method 1 or 1A, EPA Method 2, 2A, 2C or 2D, EPA Methods 3 and 4, and EPA Method 25 or 25A of 40 CFR part 60, appendix A. The owner or operator would record such process conditions as may be necessary to determine the conditions of the performance test.

To determine the value of an incinerator operating parameter that will demonstrate continuing compliance, the time weighted average of the values recorded during the performance test shall be computed. For a thermal incinerator, the owner or operator shall establish as the operating parameter the minimum combustion temperature. For a catalytic incinerator, the owner or operator shall establish as the operating parameters the minimum gas temperatures both upstream and downstream of the catalyst bed. These minimum temperatures are the operating parameters used to demonstrate continuing compliance.

The affected source is in compliance if the overall HAP control efficiency is at least 95 percent. Alternately, the source can comply on the basis of HAP emission limitation. The facility would be required to determine the organic HAP content and solids content of inks, coatings, primers, adhesives, solvents and other materials applied on the press. The mass of each ink, coating, primer, adhesive, solvent and other material applied would be determined using company records. If diluent solvents or other ingredients are added to a material prior to application, then the total organic HAP content, solids content and mass must be adjusted appropriately to account for such additions.

The organic HAP content would be determined from proposed EPA Method 311 or, when this is not possible the owner or operator shall submit to the Administrator, an alternative technique for determining the organic HAP content. Manufacturer's formulation data may be used provided that the data are equivalent to those obtained using proposed EPA Method 311. The volatile matter and solids content of the materials used shall be determined by manufacturers formulation data or by Method 24 of 40 CFR part 60, appendix A.

These values would be required for each monthly period. The proposed standards would then require the owner or operator to calculate the average mass of organic HAP in materials applied per mass of solids applied. The overall control efficiency as determined above would be used to determine the HAP emission limitation. To comply by this combination of means, the owner or operator would have to demonstrate a HAP emissions limitation of 0.20 kg HAP per kg of solids applied.

2. Monitoring Requirements

Monitoring is required by the proposed standards to determine whether a source is in compliance. For owners or operators using thermal or catalytic incinerators, this can be accomplished by measuring site-specific operating parameters, the values of which are established by the owner or operator during the initial compliance test. The operating parameter value is defined as the minimum or maximum value established for a control device or process parameter that, if achieved by itself or in combination with other operating parameter values, determines that an owner or operator is complying with the applicable emission limitation or standards. This type of monitoring would be required for those emission points for which the standards are expressed as a percent control, or for affected sources using control devices to achieve an organic HAP emission limit. In addition, the owner or operator is expected to install and operate the monitoring equipment properly.

The proposed rule would require temperature to be monitored, using a continuous recorder, for incinerators. For catalytic incinerators, temperature monitors would be placed immediately before and after the catalyst bed. For other incinerators, the temperature monitor would be placed in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs. All monitoring equipment would be installed, calibrated, maintained, and operated according to manufacturer's specifications.

The proposed standards would require each owner or operator to establish a range of values for each of these monitored parameters during the initial performance test. As long as the control device is operated within the established ranges, the proposed emission standards are considered to be met. Consequently, exceedances of these parameters would be considered a violation of the standards since operating the control device outside of the established ranges may reduce the efficiency of the control device.

Owners or operators of publication rotogravure sources operating solvent recovery systems would be required to conduct monthly mass balances as described in the section II.E.1 of the preamble. Owners or operators of other sources operating solvent recovery systems would be required either to conduct monthly mass balances as described in the previous section or to operate continuous emission monitors. The continuous emission monitors would be used to determine the total volatile matter concentration at both the inlet to and the outlet from the carbon adsorber, such that the percent efficiency of the carbon adsorber can be calculated for each calendar month.

Owners or operators of package or product rotogravure or flexographic printing facilities complying by means of use of materials meeting the applicable HAP content threshold standards would demonstrate compliance through recordkeeping as described in section II.E.1 of the preamble.

Under 40 CFR 63.6(g), an owner or operator of an affected source may request the use of alternative methods of emission reduction for complying with design, equipment, work practice, or operational emission standards, or combination thereof, established under this part. Under the proposed rule, an owner or operator of an affected source may also use control devices other than those specifically identified in the proposed rule as a means for achieving compliance with any portion of the rule. If devices other than those identified are used, the proposed standards would require the owner or operator to submit the parameters to be monitored to the Administrator for approval. The authority to approve the use of alternate control devices and the parameters to be monitored is retained by the Administrator and is not delegated.

Section 114(a)(3) of the Act requires enhanced monitoring and compliance certifications of all major stationary sources. The annual compliance certifications certify whether compliance has been continuous or intermittent. Enhanced monitoring shall be capable of detecting deviations from each applicable emission limitations or standard with sufficient representativeness, accuracy, precision, reliability, frequency, and timeliness to determine if compliance is continuous during a reporting period. The monitoring in this regulation satisfies the requirements of enhanced monitoring.

F. Recordkeeping and Reporting Requirements

The proposed rule proposes to adopt the requirements contained in 40 CFR 63.9 and 40 CFR 63.10. The proposed rule, however, contains additional or clarifying elements and changes certain time periods allowed for submitting or responding to certain reports and requests required in § 63.10. These elements and changes are summarized below for each of the operations for which standards are being proposed.

1. Recordkeeping Requirements

a. Publication Rotogravure. Records must be maintained of the organic HAP and volatile matter content, as received, and the monthly usage of all inks, solvents, varnishes, adhesives and other materials applied on publication rotogravure presses. Where incinerators are used, records must be maintained of the overall control efficiency and all test results, data, and calculations used in determining the overall control efficiency.

Where solvent recovery systems are used, records must be maintained of the overall control efficiency, all test results, data, and calculations used in determining the overall control efficiency, and the monthly material balances used to demonstrate compliance.

b. Packaging and Product Rotogravure and Wide-web Flexography. Records must be maintained of the organic HAP, volatile matter and solids content, as received, and the monthly usage of all inks, solvents, varnishes, primers, adhesives and other materials applied on packaging and product rotogravure presses and wide-web flexographic presses. Each owner or operator would be required to keep records of the equipment monitoring parameter measurements specified in the proposed rule. For an incinerator other than a catalytic incinerator, continuous records must be maintained of the firebox temperature (or temperature in the ductwork immediately downstream of the firebox). For a catalytic incinerator, continuous records must be maintained

of the gas stream temperature immediately before and after the catalyst bed. For both types of incinerators, records must be maintained of the overall control efficiency and all test results, data, and calculations used in determining the overall control efficiency.

For carbon adsorbers, records must be maintained of the overall control efficiency, all test results, data, and calculations used in determining the overall control efficiency.

2. Reporting Requirements

The proposed rule would require four basic types of reports: (1) Initial notification, (2) notification of compliance status, (3) periodic reports, and (4) other reports. In addition, the proposed rule would require that the results of any performance test required under § 63.7 be reported no later than 60 days after the completion of the test. A permit application as required under 40 CFR part 70 may be used in lieu of the initial notification provided the same information is contained in the permit application as required for the initial notification.

As stated above, the proposed standards adopt the reporting requirements contained in § 63.9(a) through § 63.9(e) and § 63.9(h) through § 63.9(j) and 63.10 (a), (b), (d), and (f). However, the time period allowed for the Administrator to notify the owner or operator in writing of approval or disapproval of the request for an adjustment to a particular time period or postmark deadline submitted under § 63.9(i) has been changed to within 30 calendar days of receiving sufficient information to evaluate the request, rather than 15 calendar days as provided for in § 63.9(i)(3).

Sections 63.9 and 63.10 identify the type of generic information to be included in the initial notification, notification of compliance status, and other reports and, therefore, this information is not repeated in this preamble. The following paragraphs summarize the additional information specific to the printing and publishing rule that should be included in the notification of compliance status and the type of information to be included in the periodic reports.

a. Publication Rotogravure. The notification of compliance status should identify the control devices that were used to demonstrate that the facility was in compliance. Specific reporting requirements are dependent on how an owner or operator chooses to comply with the regulation. If solvent recovery systems are used and liquid-liquid material balances are conducted, semiannual reports would be required that contain information on all months when the material balances were not in compliance with the standards.

If incinerators are used, semiannual reports would be required that contain information on all days when any 3-hour average temperature was below the average temperature established during the most recent performance test during which compliance was demonstrated. The first three hour period will commence when the affected source begins operation or restarts following a shutdown period. Subsequent three hour periods commence every three hours of operation. When an affected source shuts down during a three hour period, the average temperature for the period between the commencement of the three hour period and shut down would be used for the purpose of compliance demonstration.

If incinerators are used, or if solvent recovery systems are used but liquid-liquid material balances are not conducted, semi-annual reports would be required that contain information on all days when for any three hour period, the average value of the site-specific operating parameter used to monitor capture system performance was greater than or less than (as appropriate) the operating parameter value established for the capture system.

If a semiannual report is required for the period covered by the first semiannual report of the reporting year, a semiannual report would be submitted for the following semiannual period even if no exceedances occurred in that period. If no exceedances occur during the entire reporting year, each owner and operator would submit annual statements indicating that each affected facility has been in compliance.

b. Packaging and Product Rotogravure and Wide-web Flexography. The notification of compliance status should identify whether low-HAP materials or control devices were used to demonstrate that the facility was in compliance, and, for control devices and capture systems, what operating parameters were identified for continuous monitoring in order to ensure compliance with the proposed standards. Specific reporting requirements are dependent upon how an owner or operator chooses to comply with the regulation.

Owners and operators complying using low-HAP materials would be required to report each exceedance of the organic HAP content level or the low solids organic HAP content level. These reports would be submitted on a semiannual basis.

If incinerators are used, semiannual reports would be required that contain information on all days when any 3-hour average temperature was below the average temperature established during the most recent performance test during which compliance was demonstrated. The first three hour period will commence when the affected source begins operation or restarts following a shutdown period. Subsequent three hour periods commence every three hours of operation. When an affected source shuts down during a three hour period, the average temperature for the period between the commencement of the three hour period and shut down would be used for the purpose of compliance demonstration.

If solvent recovery systems are used, and the owner or operator chooses to demonstrate compliance by means of a liquid-liquid mass balance, semiannual reports would be required that contain information on all months when the material balances were not in compliance with the standards.

Owners or operators of affected sources complying with the HAP emission limitation using a combination on control devices and low HAP materials would be required to submit semiannual reports containing information on control device exceedances as described above, in addition to reports of exceedances of monthly calculated HAP emission limitations.

If incinerators are used, or if solvent recovery systems are used but liquid-liquid material balances are not conducted, semi-annual reports would be required that contain information on all days when for any three hour period, the average value of the site-specific operating parameter used to monitor capture system performance was greater than or less than (as appropriate) the operating parameter value established for the capture system.

If a semiannual report is required for the period covered by the first semiannual report of the reporting year, a semiannual report would be submitted for the following semiannual period even if no exceedances occurred in that period. If no exceedances occur during the entire reporting year, each owner and operator would submit annual statements indicating that each affected facility has been in compliance.

III. Summary of Environmental, Energy, and Economic Impacts of the Proposed Standards

A. Emission Reductions

1. Existing Facilities

For the existing publication rotogravure printing industry (27 facilities), the nationwide baseline HAP emissions are estimated to be 17,500 Mg/yr (19,200 tpy). Implementation of the proposed regulation would reduce these emissions by 4,750 Mg/yr (5,220 tpy), or 27 percent. For the existing product and packaging rotogravure and wide web flexographic printing industry (approximately 1,200 facilities), the nationwide baseline HAP emissions are estimated to be 4,200 Mg/yr (4,620 tpy). Implementation of the proposed regulation would reduce these emissions by 1,940 Mg/yr (2,140 tpy), or 46 percent.

2. New Facilities

It is expected that any new facilities would be designed to meet the proposed standards because of other federal, state and local environmental and occupational safety regulations. No net emission reduction from new facilities is expected as a result of the proposed regulation.

B. Secondary Environmental Impacts

Secondary environmental impacts are considered to be any air, water, or solid waste impacts, positive or negative, associated with the implementation of the proposed standards. These impacts are exclusive of the direct organic HAP air emission reductions discussed in the previous section.

Most of the organic HAP are VOC. Capture and control of HAP which is presently emitted will result in a decrease in VOC emissions. It is expected that some product and packaging rotogravure and wide-web flexographic facilities will comply with the proposed standard by substituting non-HAP materials for HAP presently in use. In some cases, the non-HAP materials will be VOC, however, in other cases, non-VOC (e. g. water) materials will be used.

The use of newly installed or upgraded control devices will result in greater electricity consumption. Increases in emissions of sulfur dioxide, nitrogen oxides and carbon dioxide from electric utilities could result. In the product and packaging rotogravure and wide-web flexographic printing segments, some plants will comply by installing or upgrading incinerators. Supplemental fuel, typically natural gas, will be used, particularly for thermal incinerators. Combustion of this fuel will result in additional carbon dioxide emissions and may result in additional emissions of nitrogen oxides.

Facilities converting to waterborne materials as a means or partial means of compliance may have reduced RCRA hazardous waste disposal if the status of the waste ink changes from hazardous to nonhazardous. An increase in wastewater discharge may occur if waste ink and waterborne washup materials are discharged to publicly owned treatment works (POTW). There is no assurance that facilities converting to low-HAP formulations will adopt waterborne, rather than non-HAP VOC based materials. While EPA expects wastewater and solid waste impacts in general to be insignificant, it is aware of a frequent practice in the printing and publishing industry of using shop towels for cleaning. This generates a waste load which may be sent to industrial laundries (and ultimately to POTW) in the case of cloth towels, or to landfills in the case of disposable towels. EPA invites submission of comments and data on how effluent from industrial laundries may be affected by this regulation.

New and upgraded catalytic incinerators will require catalyst. Catalyst life is estimated to be in excess of ten years. Spent catalyst will represent a small amount of solid waste and in some cases the spent catalyst will be regenerated by the manufacturer for reuse. Activated carbon used in solvent recovery systems is returned to the manufacturer at the end of its useful life and converted to other salable products. No solid waste impact is expected from this source.

C. Energy Impacts

The operation of new and upgraded control devices will require additional energy. Capture and control of increased volumes of solvent laden air will require additional fan horsepower. Operation of incinerators, particularly thermal incinerators will require supplemental fuel (typically natural gas). Operation of solvent recovery systems will require steam regeneration of the activated carbon; boilers are typically fired with natural gas or fuel oil.

The total additional electrical energy required to meet the proposed standard is estimated to be 55 million kilowatt-hours (kWh) per year. This includes 32 million kWh for publication rotogravure, 20 million kWh for product and packaging rotogravure and 3.0 million kWh for wide web flexography. Fuel requirements total 1.0 trillion Btu per year. This includes 580 billion Btu for publication rotogravure, 370 billion Btu for product and packaging rotogravure and 58 billion Btu for wide web flexography.

D. Cost Impacts

The total capital and annualized costs (1993 dollars) attributable to compliance with the proposed standards have been estimated for existing sources. It is expected that new facilities would meet the proposed regulations as a result of other federal, state and local environmental and occupational safety regulations.

1. Capital Costs

Capital costs would be incurred in upgrading existing capture and control systems at those facilities presently operating control devices that do not meet the proposed standards. Facilities which do not presently operate control devices would be expected to capitalize a period of downtime necessary to convert to low-HAP materials. Total capital costs are estimated at $133 million. These costs include $92 million at publication rotogravure facilities for improved capture and upgrades to solvent recovery systems to handle increased volumes of pressroom air.

Capital costs at product and packaging rotogravure facilities are estimated at $34 million. These costs include improved capture and upgrades to control devices for facilities presently operating control devices. For facilities not presently operating control devices the costs are based on capitalized downtime.

Capital costs at wide-web flexographic facilities are estimated at $7.2 million. These costs include improved capture and upgrades to control devices for facilities presently operating control devices.

2. Annual Costs

Annual costs of the proposed standards have been estimated at $42 million per year. These costs include capital recovery over a ten year period, operating costs for the newly installed and upgraded capture and control systems, and costs for recordkeeping, reporting and monitoring. These are net costs after taking into account the costs presently being incurred for the baseline control level. The annual costs include $21 million per year for publication rotogravure, $17 million per year for product and packaging rotogravure and $3.6 million per year for wide-web flexography.

E. Economic Impacts

The preliminary economic impact analysis for the selected regulatory alternative shows that the estimated

price increases for printing products produced by the affected industries is an average of 1.34 percent for those using publication and product/packaging rotogravure presses, and less than 0.01 percent on average for those using wide-web flexographic presses. The estimated decreases in the quantity of printing production is an average of 3.85 percent and 0.53 percent, respectively. No firms or facilities are at risk of closures as a result of the standard.

For more information, consult the background information document.

IV. Process Descriptions and Control Technologies

A. Process Descriptions

1. Rotogravure Printing

Nearly all gravure printing is done by rotogravure. Gravure printing is a printing process in which an image (type and art) is etched or engraved below the surface of a plate or cylinder. On a gravure plate or cylinder, the printing image consists of millions of minute cells. Rotogravure requires very fluid inks which will flow from the cells to the substrate at high press speeds. In addition to inks, other materials including adhesives, primers, coatings and varnishes may be applied with rotogravure cylinders. These materials dry by evaporation as the substrate passes through hot air dryers.

Different colored inks, or other materials are applied in succession as the web passes from station to station. A separate cylinder, ink supply and dryer are required for each station. After the ink is applied at each station, the web is dried before being printed by the next station. Solvent borne or waterborne ink systems can be used but these ink systems are not interchangeable. Both the printing cylinders and the drying systems are specific to the ink system in use. The evaporated components of the ink and other materials may contain HAP to varying extents. Rotogravure can be divided into the publication and product/packaging segments. Because of the expense and complexity of rotogravure cylinder engraving, it is particularly suited to long run printing jobs.

a. Publication Rotogravure. Publication rotogravure printing focuses on magazine, catalog and advertising insert printing. All U. S. publication rotogravure plants presently use toluene/xylene based ink systems, and operate solvent recovery systems based on carbon adsorption with steam regeneration. Recovered solvent is sold back to the ink manufacturers. Press capture systems vary depending on the age of the press. Typically, four stations are required to print each side of the web. Publication rotogravure presses in operation in the U. S. have up to 16 stations. It is generally believed in the industry that publication rotogravure equipment is capable of higher quality printing than competing processes.

The primary solvent in publication rotogravure ink is toluene, a HAP. At some plants xylenes and ethyl benzene, also HAP, and non-HAP aliphatic solvents are present in the solvent blend and are used, emitted, recovered and handled in the same manner as toluene. The plants purchase ink containing solvent and add additional solvent to obtain the desired viscosity.

HAP emissions result from incomplete recovery of captured HAP, and from incomplete capture. Activated carbon solvent recovery systems are suitable for control of toluene and similar aromatic solvents. High control efficiencies can be achieved, however some solvent is unavoidably emitted as a result of thermodynamic limitations (the toluene-carbon/toluene-air equilibrium) and flow irregularities (e.g. channelling through the carbon bed). Some HAP is not captured in the dryer exhaust. This includes HAP which evaporates from the ink fountains into the pressroom, HAP which is evaporated from the web in the dryers but is then swept out of the dryer as the web travels towards the succeeding press station, HAP which remains in the web after the last dryer which evaporates during additional processing (slitting, folding, stitching, etc.) and HAP which leaves the plant trapped in the magazine, catalog or advertising insert.

b. Packaging and Product Rotogravure. The rotogravure printing operation is, in many cases, a relatively small part of the total package or product production process. This section briefly describes the various types of packages and products that include rotogravure printing in their manufacture, and notes what production steps are required in addition to the rotogravure printing step.

Folding Cartons. Folding carton packages are used for a wide variety of products including wet and dry foods, beverages, bakery items, and candy. They are also used for nonfood products such as detergents, hardware, paper goods, cosmetics, medical products, tobacco products, and sporting goods.

The folding carton is made from one of several grades of paperboard. It may be printed, laminated or coated, or may be shipped unprinted to be used with another label or wrapper. Besides printing, operations in the manufacture of folding cartons include creasing, trimming, die-cutting, coating, and gluing. The cartons are shipped flat, to be assembled and filled by the customer.

Flexible Packaging. Flexible packaging materials start out as rolls of paper or foil, or beads of plastic resin, and are ''converted'' into a package or roll of packaging material. Flexible package manufacturers are sometimes referred to as ''converters''. Converters produce a wide range of non-rigid packages made of paper, plastic film, foil laminates, and combinations of these substrates.

One portion of the flexible packaging industry provides fully printed packaging materials (designated ''preformed specialty bags'') to contract packagers. Another portion provides combination or laminated materials (converted wrap) for printing and/or final packing by captive packaging operations.

Labels and Wrappers. Labels and wrappers include roll and sheet labels applied to cans, unprinted cartons, composite cans, bottles and other containers, tags, and self-adhesive label products. Paper is the common substrate, but laminates and foil are also used. The industry makes a distinction between labels and wrappers, which are package components, from a product that becomes the entire package and should be called a flexible package.

Gift Wraps. About 90 percent of all gift wraps are printed. They are produced by greeting card companies and by label and flexible packaging firms. Rotogravure printing is particularly suitable for producing the continuous patterns used on gift wrap.

Wallcoverings. The wallcovering industry is a traditional user of rotogravure. The principal types of wallcoverings are prepasted paper, prepasted paper-backed vinyl, fabric-backed vinyl, and specialty items (e.g., metallics, grass cloth, rice paper). The steps in manufacturing wallcoverings include printing the paper and laminating it to the backing sheet.

Vinyl Printing. These products consist of auto upholstery, furniture upholstery, tablecloths, decorative trim, and shower curtains. Rotogravure dominates this product area because of the complex repeat patterns (e.g., woodgrain), and the requirement, in many cases, for overcoating that is readily applied using a rotogravure cylinder. Printing is performed on unsupported vinyl, supported vinyl (backed with fabric or paper), and paper substrate that is then coated with vinyl.

Decorative Laminates. These products consist of solid, thermoset laminates used in furniture and construction, and other laminates, principally wood grain veneers, widely used in furniture.

Floor Coverings. Rotogravure presses are used to decorate and apply texture and finish to sheet vinyl floor coverings. Rotary screen printing is sometimes used in combination with gravure. Rotogravure is also used to print transfer papers used to decorate vinyl tile.

Tissue Products. Some type of printing process is used to apply color patterns to paper towels, bathroom tissue, and napkins. The older paper mills producing tissue products were typically equipped with rotogravure presses.

Product and packaging rotogravure differs from publication rotogravure with respect to the materials used, the applicable control devices, and the decreased importance of the actual printing process in an overall manufacturing process. Packaging and product rotogravure printing uses a wide variety of different ink systems, including the aromatic HAP based ink systems common to publication rotogravure, solvent based non-HAP ink systems, and waterborne ink systems. Numerous specially mixed colors are applied at various times in this industry segment, in contrast to the publication segment which primarily applies four basic colors. In addition, a wider range of materials are applied with rotogravure cylinders in this segment of the industry. A variety of coatings, adhesives and primers are applied at print stations on rotogravure presses. Because of the variety of materials applied, the approach to HAP and VOC control in packaging and product rotogravure facilities varies. In addition to the activated carbon based solvent recovery systems used by the publication segment, packaging and product gravure facilities also use a variety of thermal and catalytic oxidizers. Many facilities operate without significant HAP use and do not have control devices.

In product and packaging rotogravure facilities, HAP is contained in both the printing inks and in other materials (adhesives, coatings) that are applied as part of a continuous manufacturing process. The predominant type of ink is based on nitrocellulose resin, with some polyamide inks. Solvent systems include aromatic, aliphatic and oxygenated hydrocarbon solvent inks, and water-based inks.

2. Wide-Web Flexography

Flexographic printing is considered to be the application of words, designs and pictures to a substrate by means of a printing technique in which the pattern to be applied is raised above the printing plate and the image carrier is made of rubber or other elastomeric materials. For the purposes of the proposed regulation, flexographic presses capable of printing substrates of 18 inches in width or greater are wide-web flexographic presses. Because of the ease of plate making and press set up, flexographic printing is more suited to short production runs than gravure.

Flexographic inks must be very fluid to print properly. Flexographic inks include both waterborne and solvent based systems. Solvents used must be compatible with the rubber or polymeric plates; thus, aromatic solvents are not used. Some of the components of solvent based flexographic ink include ethyl, n-propyl and i-propyl alcohols; glycol ethers, aliphatic hydrocarbons, and esters.

Wide web flexographic presses are used to print flexible and rigid packaging; newspapers, magazines, and directories; paper towels, tissues etc; and printed vinyl shower curtains and wallpaper. Substrates include polyolefins, polystyrene, polyesters, glassine, tissue, sulfite, kraft and other paper stocks, aluminum foil, paperboard and corrugated cardboard.

Flexographic presses can be divided into three main types depending on the relative relationship of the print stations. *Stack presses* have individual print stations oriented vertically with the unwind and rewind sections on the same side of the print stations. Stack presses are easily accessible for rapid changeovers between press runs. *Common impression presses* have the print stations around the circumference of a single large impression cylinder. The web is constantly supported between print stations, which is an advantage for printing on stretchable materials. *In-line presses* have the print stations in a horizontal row (the geometry is similar to rotogravure presses). Most flexographic printing (including all flexographic newspaper and corrugated carton printing) is done with waterborne inks. Waterborne inks which contain no HAP are available for some applications. Some waterborne inks contain relatively low proportions of HAP, principally ethylene glycol and glycol ethers. Most solvent based flexographic inks contain little or no HAP. Capture and control devices used with solvent based inks are usually designed, permitted and operated for VOC control.

B. Control Techniques

There are two approaches to limitation of HAP in the printing and publishing industry. The first approach is to improve capture and control systems or to add control devices where none are in use. Capture and control can be addressed separately, although in many cases, improved capture is achieved through an increase in the amount of air handled. This can necessitate upgrades to existing control devices. The second approach, focusing on pollution prevention, is to substitute low HAP or HAP-free materials for materials (inks, coatings, varnishes, adhesives, primers, etc.) presently in use.

1. Capture Systems

Capture systems are designed to collect solvent laden air and direct it to a control device. In rotogravure and flexographic printing, solvent is removed from the printed substrate by evaporation in a dryer. The exhaust from the dryer can be ducted to a control device. Additional systems are often used to collect solvents which evaporate from other parts of the printing press, as well as those which escape from the dryer. In addition, pressroom ventilation air can be exhausted to a control device.

Differences in capture efficiency contribute much more to the variation in overall efficiencies than the choice of control device. Reported capture efficiencies ranged from estimates of less than 50 percent to the 100 percent capture which is assumed for systems meeting the requirements of permanent total enclosures. Capture systems can be improved through collection of additional solvent laden air from the press area and through construction of additional hooding and press enclosures. A capture efficiency of 100 percent can be assumed for presses that meet the requirements of a permanent total enclosure.

a. Publication Rotogravure. Within the publication rotogravure industry, all presses have dryer exhaust gases routed to the solvent recovery system. Additional capture systems include dryer hood systems, partial upper deck enclosures, full upper deck enclosures, enclosed presses, permanent total enclosures, room enclosures, rooms operated under negative pressure and floor sweeps. Typically, solvent laden air captured from several presses is combined and treated with a common solvent recovery system. The individual presses may have different capture devices, and different capture efficiencies.

b. Product and Package Gravure. In the product and package gravure industry, many facilities use low VOC (and low-HAP) inks and coatings. Dryer exhausts from these facilities may be captured and vented to the atmosphere without the use of a control device. Where solvent based inks are in use, more elaborate capture and control systems may be present. Capture systems in use at product and packaging gravure facilities include combinations of dryer exhausts, floor sweeps, collection ducting, hoods, press enclosures, permanent total enclosures, room enclosures, negative pressure pressrooms, partial enclosures and ink pan covers. With the exception of permanent total enclosures, none of these technologies has a precise definition with regard to capture efficiency. In many cases terms are used interchangeably. Where control devices are in use, solvent laden air from several presses may be combined and ducted to a common control device.

c. Wide-web Flexographic Printing. Capture systems in use at flexographic printing facilities include combinations of dryer exhausts, floor sweeps, hoods, and permanent total enclosures. Many facilities, including most sheetfed corrugated box facilities have no capture systems and rely on pressroom exhaust to the atmosphere to dilute the small amount of HAP present in the ink.

2. Control Devices.

a. Carbon adsorbers. Adsorption systems are used to remove organic compounds from gas streams when strict limits on the outlet concentration must be met, or when recovery of the compound is desired. Adsorption is effective on inlet concentrations ranging from a few parts per billion to several thousand parts per million, and flow rates of several hundred to several hundred thousand cubic feet per minute. Carbon adsorbers typically have a removal efficiency of 95 to 99 percent.

Once the carbon reaches saturation, it can be regenerated with steam within the adsorber vessel. This allows for the recovery of the organic compounds for reuse.

b. Incinerators. Two basic types of incinerators, thermal and catalytic, are used by package and product rotogravure and flexographic printers to remove organic contaminants. Each type is discussed below.

(1) *Thermal incinerators.* Thermal incinerators can be generally used on air streams with a wide concentration range of organics. These control devices have minimal dependence on the characteristics of the organic contaminants, so they can be used to control a wide variety of emission streams. Thermal incinerators can achieve removal efficiencies of 98 percent and higher.

The basic operation of thermal incinerators involves raising the inlet air stream to the incineration temperature of the contaminants and maintaining the temperature for a specific residence time. The waste heat content of the incinerator exhaust stream is used to preheat the inlet air stream. An auxiliary fuel is then typically required to raise the air stream temperature to the incineration temperature.

(2) *Catalytic incinerators.* Catalytic incinerators are similar to thermal incinerators except that they use a catalyst (a substance that accelerates the rate of oxidation without undergoing a chemical change itself) to assist in the oxidation of organic compounds to carbon dioxide and water. The removal efficiency of catalytic incinerators can be as high as 98 percent. Catalytic incinerators typically operate at lower temperatures than thermal incinerators to achieve equivalent efficiencies. For this reason, auxiliary fuel requirements and operating costs are lower for catalytic incinerators than thermal incinerators when used to control relatively dilute air streams.

V. Rationale for the Proposed Rule

A. Regulatory Development Process for NESHAP

During development of a NESHAP, the EPA collects information about the industry, including information on emission source characteristics, control technologies, data from HAP emission tests at well-controlled facilities, and information on the cost, energy, and other environmental impacts of emission control techniques. The EPA uses this information in the development of possible regulatory approaches.

If the source category contains major sources, then a MACT standard is required. Section 112(d)(3) of the Act defines the minimum stringency requirements of the MACT standard for new and existing sources. This level of control is referred to as the MACT ''floor,'' which needs to be determined as a starting point for developing the regulatory alternatives.

Once the floor has been determined for new and existing sources for a category or subcategory, the Administrator must set MACT standards that are no less stringent than the floor level. Such standards must then be met by all sources within the category or subcategory. However, in establishing standards, the Administrator may distinguish among classes, types, and sizes of sources within a category or subcategory (section 112(d)(1) of the Act). Thus, for example, the Administrator could establish two classes of sources within a category or subcategory based on size and establish a different emission standard for each class as long as each standard is at least as stringent as the floor. The Act also contains provisions for regulating area sources. However, except for certain recordkeeping requirements contained in the General Provisions, these are not relevant to the proposed standards for printing and publishing sources, which apply only to major sources.

The next step in establishing a MACT standard is the development and analysis of regulatory alternatives. First, information about the industry is analyzed to develop model plant populations for projecting national impacts, including HAP emission reduction levels, costs, and energy and secondary environmental impacts. Several regulatory alternatives (which may be different levels of emission control, different applicability criteria, or both, and one of which is the MACT floor) are then evaluated to determine the most appropriate regulatory alternative to reflect the MACT level.

In addition, although NESHAP are normally structured in terms of numerical emission limits, alternative approaches are sometimes necessary. Section 112(h) of the Act provides that if it is not feasible to prescribe or enforce an emission standard, then a design, equipment, work practice, or operational standard may be established. For example, in some cases source testing may be impossible or at least not practicable due to technological and economic limitations.

In the EPA's decision-making process, the regulatory alternatives considered for new versus existing sources may be different and each alternative must be technically achievable. In selecting a regulatory alternative to represent MACT, the EPA considers the achievable reduction in HAP emissions (and possibly other pollutants that are co-controlled), the cost of control, and economic, energy, and other nonair quality health and environmental impacts. The overall objective is the achievement of the maximum degree of emission reduction without unreasonable economic or other impacts.

The selected regulatory alternative is then translated into a proposed regulation. The regulation implementing the MACT decision typically includes sections addressing applicability, standards, test methods and compliance

demonstration, monitoring, reporting, and recordkeeping. The preamble to the proposed regulation, published in the **Federal Register**, provides an explanation of the rationale for the decision. The public is invited to comment on the proposed regulation during the public comment period. Following an evaluation of these comments, the EPA reaches a decision and promulgates the final standards.

B. Determining Maximum Achievable Control Technology (MACT) ''Floors''

Once the EPA has identified the specific major source categories or subcategories that it intends to regulate under section 112, MACT standards are set at a level at least as stringent as the ''floor.'' Congress has provided directives to guide the EPA in the process of determining the regulatory floor.

Congress specified that the EPA must establish standards which require ''the maximum degree of reduction in emissions of the hazardous air pollutants * * * that the Administrator * * * determines is achievable * * *'' (section 112(d)(2) of the Act). In addition, Congress limited the Agency's discretion by defining the minimum baseline (floor) at which standards may be set, as follows:

(1) 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,''; and

(2) For existing sources, the standards ''may be less stringent than standards for new sources * * * but shall not be less stringent, and may be more stringent than: (A) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information) * * * or (B) 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).

C. Selection of Pollutants and Source Category(ies)

Section 112(b) of the Act lists the HAP to be regulated with standards established under section 112. Section 112(d), as amended, requires the EPA to promulgate emission standards for each category or subcategory of major sources and area sources of the HAP listed in section 112(b). For the purpose of developing these standards, the EPA may distinguish among classes, types, and sizes of sources within a category or subcategory. The NESHAP are to be developed to control HAP emissions from both new and existing sources pursuant to section 112(c) of the Act.

The initial source category list (57 FR 31576, July 16, 1992), required by section 112(c) of the Act, identifies source categories for which NESHAP are to be established. This list includes all major source categories of HAP known to the EPA at this time, and all area source categories for which a finding of adverse effects warranting regulation has been made.

The source category list identifies ''Printing/Publishing (Surface Coating)'' as a source category because it contains major sources which have the potential to emit at least 10 tons of any one HAP or at least 25 tons of any combination of HAP annually.

The printing and publishing industry encompasses printing by a variety of graphic arts techniques applied to a variety of substrates. Printing operations are included as one or more steps in the overall manufacturing process for a wide variety of end products. Packaging and product printing often makes up only a small part of the value of the end product. For purposes of this rule, the EPA has defined the source category as consisting of all facilities engaged in publication rotogravure and product and packaging rotogravure and wide-web flexographic printing.

D. Selection of Emission Points Covered by the Proposed Rule

The proposed rule would limit organic HAP emissions that result from publication rotogravure and product and packaging rotogravure and wide-web flexographic printing. The standard applies to HAP present in inks, ink extenders, solvents, coatings, varnishes, primers, adhesives, and other materials applied on publication rotogravure and product and packaging and wide-web flexographic presses. Emission points in the publication rotogravure segment of the printing and publishing industry include but are not limited to ink and solvent storage tanks, ink mixing, printing, press and parts cleaning, proof and production presses and solvent recovery. Within the product/package rotogravure and wide-web flexography industry the standard applies to inks and all other materials applied with rotogravure or wide-web flexographic printing presses.

A discussion of the rationale for including or excluding basic processes from this proposed rule is given below.

1. Operations for Which Standards Are Being Proposed

EPA is proposing organic HAP emission standards for rotogravure and wide-web flexographic printing operations. Within the publication rotogravure segment of the industry, all organic HAP emitting operations are covered by the standard. Current industry practices instituted for compliance with applicable regulations pertaining to VOC emissions include accounting for solvent use on a facility-wide or control system wide basis determined by a periodic liquid-liquid mass balance. Organic HAP emissions at points other than production printing presses are relatively minor compared to press emissions. These operations, including ink storage and mixing, parts cleaning and proof presses can be controlled or uncontrolled provided that the overall facility or control system meets the proposed standard. Based on information provided by all U.S. publication rotogravure facilities, there are readily available techniques to achieve substantial organic HAP emissions reduction from the presses. Adequate information is available to establish MACT for these facilities.

Within the product and packaging rotogravure and wide-web flexographic printing segment of the industry, emission of organic HAP from rotogravure and flexographic presses is covered.

Based on the information obtained from the industry in response to information collection requests, in addition to information provided voluntarily and during meetings with industry trade organizations, there are several readily available techniques (including carbon adsorption and thermal and catalytic incineration) to achieve substantial emission reductions in these operations. While inks and other materials containing organic HAP are being used at many facilities, alternative formulations containing no organic HAP, or very low concentrations of organic HAP are available for many specific applications. Adequate information exists for establishing MACT for capture and control devices and for alternate low-HAP formulations.

2. Excluded Operations

a. Inorganic HAP Emissions. Inorganic HAP are present in pigments and film forming components of some inks. These components make up less than 1 percent of the total HAP content of the materials. These components remain on the substrate for the life of the publication, product or package and are not expected to be emitted to the air.

b. Non-press Operations at Product and Packaging Rotogravure and Wide-web Flexographic Printing Facilities. Operations related to press and parts cleaning, proof presses, ink mixing and

storage, film lamination and flexographic platemaking have the potential to emit organic HAP. Organic HAP emissions from these operations make up only a small fraction of HAP emissions from the presses. Very few data are available regarding the extent of emissions from these sources and applicable control techniques. Adequate information is not available to establish MACT for these potential emission points.

EPA is not proposing regulations at this time pertaining to off-line rotogravure coating because these emission points will be covered in a future standard for ''Paper and Other Web Coating''.

c. Narrow-web Flexography. Thousands of narrow web flexographic printing facilities exist which primarily print tags and labels. No major sources of this type have been identified based on a search of the Toxic Release Inventory System, and it is unlikely that there are any such facilities. Very few data are available regarding the extent of emissions from these sources and applicable control techniques. Narrow web flexographic printing facilities are typically very small and predominantly use low HAP, low VOC inks. Adequate information is not available to establish MACT for these potential emission points.

E. Selection of the Basis for the Proposed Rule

Section 112 of the Act defines a major source 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 considering controls, 9.1 Mg/yr (10 tpy) or more of any one HAP or 22.7 Mg/yr (25 tpy) or more of any combination of HAP. The Act states that new major sources must achieve the maximum achievable control technology (MACT), which is the level of emission control already achieved in practice by the best controlled similar source. The Act further states that emission standards promulgated for existing sources may be less stringent than standards for new sources; however, standards for existing sources must not be less stringent than the average emission limitation achieved by the best performing 12 percent of the existing sources.

For all operations being covered by the proposed rule, the EPA has determined that, taking into account nonair quality health and environmental impacts, and energy impacts, MACT is equal to the MACT floors for both existing and new sources. In addition, MACT for new sources was found to be equal to MACT for existing sources. The EPA has determined that no further emission reductions can be achieved for new sources through the use of demonstrated technology than the level of reduction represented by MACT for existing sources.

To evaluate the regulatory alternatives, model plants were developed based on market segment (publication rotogravure, package and product rotogravure and wide-web flexography), and size. These characteristics were examined to determine whether any technological justification existed to differentiate the proposed standards by market segment or size. Based on this examination, the EPA has decided that different market segments operate in different ways and that there is justification to differentiate between the two market segments identified on the basis of these characteristics. No compelling reasons were identified as to why a facility of one size could not incorporate the technology used by a facility of another size.

1. Publication Rotogravure.

Data were obtained from all of the 27 U. S. publication rotogravure facilities. All of the control systems employ activated carbon based solvent recovery systems. All facilities calculate overall efficiencies on the basis of liquid-liquid mass balances. All facilities use toluene based ink systems, although some facilities have replaced a portion of the toluene with non-HAP organic solvents. Waterborne ink systems are not technically feasible at this time for the high quality, high speed printing which these facilities produce.

The average emissions limitation achieved by the best performing 5 facilities was 92 percent. This limitation is based on the level of control achieved in each of twelve monthly material balances at the 5 plants with the best annual solvent recovery rates. The solvent recovery data were analyzed on a plantwide basis. Some facilities operated more than one solvent recovery system and it was not possible to reliably isolate the individual systems. Annual average emission limitations were higher, and facilities meeting the standard each and every month will achieve annual emissions limitations of 92 percent or greater.

To achieve 92 percent solvent recovery each month, a facility may need a permanent total enclosure and an efficient solvent recovery system. No more efficient alternative technologies are available. Higher solvent recovery rates may not be achievable on a consistent basis due to month-to-month variations in solvent accounting and due to solvent retention in the printed substrate. Therefore the floor for new sources was determined to be the same as the floor for existing sources and no more stringent regulatory alternatives were found to exist.

2. Package and Product Rotogravure and Wide-web Flexography

Data were obtained from approximately 103 product and package rotogravure printing facilities, and approximately 500 wide-web flexographic facilities. Industry representatives believe that there are approximately 400 product and package rotogravure facilities operating in the U.S. There are approximately 800 wide-web flexographic printing facilities in the United States. Different types of incinerators and solvent recovery systems were operated by 146 of the reporting facilities. The balance of the facilities had no control device. In all cases where control devices were in operation, they were designed and operated to control VOC emissions. It is assumed that the performance of these control devices with respect to VOC and organic HAP is equivalent.

The same types of control devices and capture systems were generally applicable even though the materials applied, products, substrates, and web widths of the controlled presses varied considerably. The overall control efficiency data for the facilities with the greatest emissions limitations were generally provided based on tests conducted to comply with permit conditions. Where permanent total enclosures were in place, capture efficiencies of 100 percent were assumed and tests across control devices were conducted. The emissions limitation achieved by the average of the best controlled 12 percent of the facilities was 95 percent.

To achieve 95 percent control of organic HAP a facility may need to operate a permanent total enclosure and an efficient control device. At present there are no technologies which can consistently achieve a greater overall control efficiency than this. For this reason, the floor for new sources was determined to be equal to the floor for existing sources and no more stringent regulatory alternatives were found to exist.

F. Selection of the Format of the Proposed Rule

Emission standards for control of HAP have been prescribed in accordance with section 112(d) of the Act. Where control devices are in place, emissions standards are proposed on the basis of

overall efficiency, taking into account both capture and control device efficiencies.

To encourage the use of non-HAP materials in the publication rotogravure industry as an alternative to toluene (and ethylbenzene and xylene) based materials, an alternate means of compliance allows credit for 100 percent recovery of that portion of the solvent which is replaced with non-HAP compounds. Thus, a facility achieving 90 percent overall efficiency, using a solvent system which is 70 percent toluene and 30 percent non-HAP solvent would comply on the basis of an equivalent emissions limitation of 93 percent.

Based on the potential HAP content of the materials applied by the best controlled 12 percent of the product and package rotogravure and wide-web flexographic printing facilities, alternate standards were proposed yielding equivalent emissions limitations. Sources applying materials containing 0.20 kg organic HAP or less per kg of solids applied on package and product rotogravure and wide-web flexographic presses will not be required to operate a control device to comply with the standard. Facilities operating systems with overall efficiencies less than 95 percent would be able to comply by limiting the HAP content of the inks, coatings, primers, adhesives, solvents, and other materials applied such that the HAP emissions from the affected source are 0.20 kg per kg of solids applied or less.

Certain press lines are used to apply low solids materials which contain relatively low proportion of organic HAP relative to the mass of material applied. Sources applying materials containing 0.04 kg organic HAP per kg of material applied will not be required to operate a control device to comply with the standard.

G. Selection of Emission Test Methods and Monitoring Requirements

1. Emission Test Methods

In addition to the specific test methods described below for affected sources, the proposed rule adopts the provisions specified in 40 CFR 63.7.

a. Publication Rotogravure. Where a carbon adsorber is used, the EPA is proposing to use a mass balance procedure for determining the overall control efficiency. The proposed rule contains procedures as specified in 40 CFR 60.433 for using a mass balance approach that would calculate the amount of organic HAP and VOC applied and the amount recovered. This information would then be used to calculate the overall control efficiency of the carbon adsorber.

In determining compliance with the alternate standard for sources that have substituted non-HAP VOC for a portion of the HAP in their ink, the EPA is proposing that Method 24A be used for determining the volatile matter content. This is a long-standing method for such determinations. This determination may be conducted by the manufacturer and provided to the owner or operator. The EPA is proposing that the organic HAP content level be determined by proposed EPA Method 311. This method was proposed (see Solicitation of Comments) as part of the NESHAP for Wood Furniture Manufacturing Operations on December 6, 1994 (59 FR 62652). The EPA requests comment on the suitability of Method 311 for determination of HAP used in the printing industry.

b. Package and Product Rotogravure and Wide-web Flexography. If control devices (e.g., incinerators, carbon adsorbers) are used the proposed standards require them to achieve an overall control efficiency of at least 95 percent, or a HAP emission limitation of no more than 0.20 kg HAP per kg solids applied. It is necessary, therefore, to identify the capture efficiency of the capture system, the destruction or recovery efficiency of the control device, and, where feasible, operational parameters that would be monitored to ensure continuous compliance. The proposed standards also include provisions for determining the capture and removal efficiencies. The test methods and procedures being proposed for determining the capture and removal efficiencies are those that are typical for control devices.

The EPA is proposing that capture efficiency be determined by one of two methods depending on whether or not the capture system is a permanent total enclosure or not. A permanent total enclosure would be verified according to the provisions specified in 40 CFR 52.741, appendix B, Procedure T (and, thus would have a capture efficiency of 100 percent). The capture efficiency of all other systems would be determined according to the procedures specified in 40 CFR 52.741(a)(4)(iii).

The EPA is proposing that the removal efficiency of a control device be determined based on three runs, each run lasting one hour. Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, would be used for selection of the sampling sites, and the gas volumetric flow rate would be determined using Methods 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate. Method 25 or 25A of 40 CFR part 60, appendix A, would then be used to measure either the organic concentration or the total organic HAP concentration before and after the control device. Alternatively, any other test method or data that has been validated according to the applicable procedures in Method 301 of 40 CFR part 63, appendix A, may be used.

Owners or operators complying with the standard on the basis of average HAP content of materials applied on the press would be required to determine the HAP content of each material applied. The EPA is proposing that the organic HAP content level be determined by proposed EPA Method 311. This method was proposed (see *Solicitation of Comments*) as part of the NESHAP for Wood Furniture Manufacturing Operations on December 6, 1994 (59 FR 62652).

2. Monitoring Requirements

In accordance with paragraph (a)(3) of section 114 of the Act, monitoring of stationary sources is required to determine the compliance status of the sources, and whether compliance is continuous or intermittent. Enhanced monitoring shall be capable of detecting deviations from each applicable emission limitations or standard with sufficient representativeness, accuracy, precision, reliability, frequency, and timeliness to determine if compliance is continuous during a reporting period. The monitoring in this regulation satisfies the requirements of enhanced monitoring.

For affected sources complying with the proposed standards through the use of control devices, initial compliance is determined through the initial compliance test, and ongoing compliance through continuous monitoring. The EPA has proposed the parameters to be monitored for certain types of control devices now used in the industry. The values of these parameters that correspond to compliance with the proposed standards are set by the owner or operator during the initial compliance test. If future monitoring indicates that control equipment is operating outside of the range of values established during the initial performance test, then the owner or operator is out of compliance with the proposed standards, except as specified for malfunctions in 40 CFR 63.6(e)(3).

Owners or operators using incinerators, and owners or operators using solvent recovery systems and demonstrating compliance with continuous emissions monitoring must identify the operating parameter to be monitored to ensure that the capture efficiency measured during the initial

compliance test is maintained, and conduct monitoring of this parameter in accordance with the plan submitted with the compliance status report. If future monitoring indicates that capture system is operating outside of the range of values established during the initial performance test, then the owner or operator is out of compliance with the proposed standards, except as specified for malfunctions in 40 CFR 63.6(e)(3).

a. Publication Rotogravure Sources Using Solvent Recovery Systems. Publication rotogravure facilities operating solvent recovery systems would be required to demonstrate continuing compliance by conducting a liquid-liquid mass balance each and every month.

b. Other Sources Complying by Means of a Control Device. Product and packaging rotogravure and wide-web flexographic sources complying by means of a solvent recovery system would be required to demonstrate continuing compliance either through the use of continuous emission monitors or by conducting a liquid-liquid mass balance each and every month.

Sources complying through the use of a thermal incinerator would be required to install, calibrate, operate and maintain a temperature monitoring device equipped with a continuous recorder to monitor the temperature in the combustion chamber downstream of the combustion zone. Sources complying through the use of a catalytic incinerator would be required to install, calibrate, operate and maintain a temperature monitoring device equipped with a continuous recorder to monitor the temperatures at the inlet to the catalyst bed and the outlet from the catalyst bed.

The rationale for selecting the control device parameters for thermal and catalytic incinerators in this proposed rule is long standing, and for more information see the proposal notice for the SOCMI reactor processes NSPS (55 FR 26966 through 26969, June 29, 1990). The EPA is, therefore, simply proposing to adopt the same monitoring parameters as have been required for previous standards.

H. Selection of Recordkeeping and Reporting Requirements

1. Recordkeeping

In addition to the specific recordkeeping requirements described below for each affected source, the proposed rule adopts the provisions specified in § 63.10 (a), (b), (c)(1), (c)(5–8), (c)(10–15), (d)(1–2), (d)(4–5), and (f). These were the only paragraphs from § 63.10 that were considered to be applicable to the proposed rule.

Each owner or operator would be required to maintain records of each applicability determination as described above in section II. A., each continuous monitoring system operated as described above in section V. G., and each liquid-liquid mass balance as described above in section V.

G. These Records Would Be Maintained in Accordance With the Requirements of § 63.10(b)

As called for by the General Provisions, each owner or operator of an affected source would be required to develop a start-up, shut-down, and malfunction plan, and keep it on record to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the affected source is no longer subject to the provisions of the proposed rule.

If an owner or operator of a product or packaging rotogravure or wide-web flexographic source elects to comply on the basis of use of low HAP materials, or on the basis on HAP emission limitation, the EPA is proposing that records of the monthly mass-weighted average organic HAP content for all inks, coatings, primers, adhesives, solvents and other materials applied on the press be kept as well as all of the data and calculations used to calculate these values. This would include the mass and organic HAP content as applied of each material. This level of information is required for an inspector to determine whether the facility was in compliance and whether the proper data and calculations were being used.

If a thermal or catalytic incinerator is used, each owner or operator would be required to keep a record of the control device operating parameters being monitored. Since for some control devices compliance with the proposed standards is dependent on the control device being operated properly, these records are necessary to determine compliance. Specifically, a source would be out of compliance if the recorded parameters were out of range. Thus, the EPA is requiring these records for compliance determinations.

2. Reporting Requirements

In addition to the specific reporting requirements described below for each affected source, the proposed rule adopts the provisions specified in § 63.9(a) through § 63.9(e) and § 63.9(g) through § 63.9(j) and § 63.10 (a), (b), (d), and (f).

The proposed rule would require an owner or operator to submit the following five types of reports:

(1) Initial notification,
(2) notification of performance tests and continuous emission monitor evaluation periods,
(3) notification of compliance status,
(4) periodic reports, and
(5) other reports.

The purpose and contents of each of these reports are described in this section. The wording of the proposed rule requires all reports to be submitted to the ''Administrator.'' The term Administrator refers either to the Administrator of the EPA, an EPA regional office, a state agency, or another authority that has been delegated the authority to implement this rule. In most cases, reports will be sent to state agencies. Addresses are provided in the General Provisions of 40 CFR part 63, subpart A.

Records of reported information and other information necessary to document compliance with the regulation are required to be kept for 5 years. As required under the General Provisions, the two most recent years must be kept on-site; the other three years may be kept off-site. Records pertaining to the design and operation of the control and monitoring equipment must be kept for the life of the equipment.

a. Initial Notification. The proposed standards would require owners or operators who are subject to this subpart to submit an initial notification. As outlined in the General Provisions under § 63.9, this report serves two basic purposes: (1) Notifies the EPA that an existing facility is subject to the proposed standards and (2) notifies the EPA of the construction of a new facility. A respondent must also report any facility modifications as defined in § 63.5. This report will include the mass of HAP used at the facility during the previous twelve months, as well as the mass of HAP expected to be used at the facility during the next twelve months.

This report will establish an early dialogue between the source and the regulatory agency, allowing both to plan for compliance activities. The notice is due no later than 120 days after the effective date of the proposed standards. Under the proposed rule, the initial notification is not required from any source that has submitted a permit application under title V of the Act, provided that the permit application has been submitted by the same due dates as for the initial notification and that the state to which the permit application has been submitted has a permit program in place and has received delegation of authority from the EPA.

b. Notification of Performance Tests and Continuous Emission Monitor

Evaluation Periods. As adopted through the General Provisions, § 63.7 and § 63.9(g), owners or operators would be required to notify the Administrator in advance of conducting performance tests of control devices and evaluating continuous emissions monitors.

c. Notification of Compliance Status. As adopted through the General Provisions, owners or operators who are subject to this subpart would be required to submit a notification of compliance status. This report contains the information necessary to demonstrate that compliance has been achieved, such as the results of performance tests, and average organic HAP contents, as well as the methods that will be used for determining continuing compliance as outlined under § 63.9. Another type of information to be included in the notification of compliance status is the specific range of each monitored parameter for each affected source, the rationale for why this range indicates compliance with the emission standard, and whether each source has operated within its designated operating parameters. The report would be due within 60 days after the final compliance date as specified in the General Provisions.

d. Periodic Reports. The EPA is proposing to adopt a standard basis for submitting periodic reports for each of the operations for which standards are being proposed. Semiannual reports would be required whenever an operation was found to be in non-compliance or whenever a monitored parameter exceeded its value. For example, for a publication rotogravure source, a semiannual report would be triggered for any monthly period covered by the semiannual report in which the overall efficiency of the solvent recovery system failed to meet the standard.

Semiannual reports would also be required whenever a change occurred at a facility that might affect a source's compliance status or that introduces a new element to the operation that was required to be reported in the notification of compliance status. For example, conversion of a press requiring a control device to operate with low-HAP materials would require monthly averaging of materials applied to maintain compliance. This change in compliance status would trigger a semiannual report. For operations that did not experience any exceedances or changes, the EPA is proposing that annual reports be submitted to this effect.

The EPA is proposing to adopt the above schedule of reporting because it provides a fair balance between the need to know certain information in a timely fashion and reduces the burden to industry and provides consistency within this regulation. The following paragraphs discuss in more detail the specific types of information to be included in these various periodic reports. The information being requested is that which the EPA believes is necessary in the enforcement of the proposed rule.

(1) Sources Operating Solvent Recovery Systems. A semiannual report would be required whenever a monthly liquid-liquid mass balance failed to meet the standard. Owners or operators choosing to demonstrate compliance using CEM would be required to submit a semiannual report for any semiannual period in which the calculated average efficiency, including capture efficiency and control device efficiency failed to meet the standard during any three hour period.

(2) Sources Operating Thermal and Catalytic Incinerators. A semiannual report would be required for any semiannual period when a monitored temperature parameter, averaged over a three hour period, falls outside its appropriate range during any three hour period. A semiannual report would be required for any semiannual period when a monitored site-specific capture system parameter, averaged over a three hour period, falls outside its appropriate range during any three hour period.

(3) Package and Product Rotogravure and Flexographic Sources Complying by Means of Low-HAP Materials. A semiannual report would be required for any semiannual period in which the materials applied, when averaged over a monthly period, exceed the standard for organic HAP content based on solids applied or on materials applied during any month.

e. *Other Reports.* The only ''other reports'' in the proposed rule are those that are required under the General Provisions, subpart A of 40 CFR part 63. Of particular note is the report required in response to periods of startup, shutdown, and malfunction. When the procedures used during such periods are completely consistent with the plan, a report stating such is to be delivered or postmarked by the thirtieth (30th) day following the end of each calendar half. If the procedures are not completely consistent with the plan, an owner or operator is to report the actions taken within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event.

I. Selection of Compliance Deadline

The proposed standards would require the owner or operator of an existing rotogravure or wide-web flexographic printing operation to comply with these standards within three years after they are promulgated in the **Federal Register**. Section 63.7(a)(2) of the General Provisions then allows a source 180 days after the compliance date to demonstrate compliance through an initial performance test. A shorter compliance time was not selected because the proposed timeframe is necessary for those sources that will be required to install new capture and/or control devices to purchase and install the equipment. The proposed timeframe will also provide the greatest opportunity for developing and adopting low HAP content materials. Administrative procedures are established in § 63.6(i) to implement compliance extensions for existing sources that are unable to install controls by the required compliance dates.

Owners or operators of new sources that commence construction after the standards are proposed but before the standards are promulgated will have to comply immediately upon startup, unless the promulgated regulation is more strict than the proposed regulation. In accordance with Section 112(i)(2) of the Act, if the promulgated standards are more stringent than the proposed standards, the compliance date for construction after proposal but before promulgation will be 3 years after the promulgation date, provided the owner or operator complies with the standards as proposed until the compliance date. The owner or operator would then be required to conduct a performance test within 120 days after the compliance date. All other new sources will have to comply with the proposed standards immediately upon startup.

J. Operating Permit Program

Under 40 CFR part 70, all major sources of HAP will be required to obtain an operating permit. Emission limits, monitoring, and reporting and recordkeeping requirements are typically scattered among numerous provisions of State implementation plans (SIP's) or Federal regulations. As discussed in the rule for the operating permit program, this new permit program would include in a single document all of the requirements that pertain to a single source. Once a state's permit program has been approved, each printing and publishing facility that is a major source within that state

must apply for and obtain an operating permit. If the state wherein the printing and publishing facility is located does not have an approved permitting program, the owner or operator of a printing and publishing facility must submit a part 71 permit application if requested under 40 CFR part 71.

K. Pollution Prevention Considerations

The Pollution Prevention Act of 1990 establishes the following management hierarchy as national policy:

1. Pollution should be prevented or reduced at the source whenever feasible;
2. Pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible;
3. Pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and
4. Disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

The Pollution Prevention Act considers ''source reduction'' a fundamental aspect of pollution prevention. Source reduction is any practice that reduces the amount of any hazardous substance entering the waste stream or otherwise released into the environment prior to recycling, energy recovery, treatment, or disposal. Practices such as recycling, energy recovery, treatment, and disposal are not considered pollution prevention measures under the Pollution Prevention Act.

The proposed rule provides strong incentives for pollution prevention. Within the publication rotogravure segment, substitution of non-HAP materials for organic HAP is encouraged by allowing sources to claim credit for recovery of 100 percent of non-HAP volatile matter (including water) used in the calculation of equivalent overall organic HAP control efficiency.

Within the product and package rotogravure and wide-web flexographic segments, use of non-HAP materials is encouraged by expressing the overall organic HAP limitation in terms of kg of organic HAP emitted per kg of solids applied. Use of low HAP materials decreases the required overall control efficiency. If materials averaging less than 0.20 kg organic HAP per kg solids applied are used, no control device is required. This provision makes the use of waterborne materials without control devices feasible for most applications.

L. Solicitation of Comments

The Administrator welcomes comments from interested persons on any aspect of the proposed standards, and on any statement in the preamble or the referenced supporting documents. In particular, the Administrator solicits comments on (1) The suitability of EPA Method 311 for determination of HAP in ink and other printing materials; (2) the mechanism by which owners or operators may accept case-by-case operating restrictions that would ensure that the potential to emit of their facility does not exceed the major source threshold; and (3) the effect of this regulation on effluent from industrial laundries.

The EPA Method 311 was proposed as part of the NESHAP for Wood Furniture Manufacturing Operations on December 6, 1994 (59 FR 62652). The comment period for the Wood Furniture NESHAP and Method 311 was scheduled to close on February 21, 1995. On February 22, 1995 (60 FR 35), the comment period for the proposed Wood Furniture NESHAP was extended to March 23, 1995 and the comment period for the proposed Method 311 was extended to April 24, 1995. Persons who submit comments on the suitability of Method 311 for determination of HAP in ink and other printing materials in response to the proposed Printing and Publishing Industry NESHAP should consider also submitting comments in response to the proposed Method 311. For information on the address and docket number for submitting comments on the proposed Method 311, see the February 22, 1995 **Federal Register** notice.

The proposed standards were 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.

VI. Administrative Requirements

A. Public Hearing

A public hearing will be held, if requested, to discuss the proposed standards in accordance with section 307(d)(5) of the Act. Persons wishing to make an oral presentation on the proposed standards for printing and publishing 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 and Radiation Docket address given in the ADDRESSES section of this preamble, and should refer to Docket No. A–92–42.

A verbatim transcript of the hearing and any written statements will be available for public inspection and copying during normal working hours at the EPA's Air and Radiation Docket in Washington, D.C. (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 this proposed rulemaking. 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) of the Act).

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 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, OMB has notified EPA that it considers this a ''significant regulatory action'' within the meaning of the Executive Order. EPA has submitted this action to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented 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. State and local air pollution control associations participated in work group meetings and made comments which were incorporated in the proposed rule.

E. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to 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. 1739.01) 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 251 hours per respondent for the first year after the date of promulgation of the rule, 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 20460; and to the Office of Management and Budget, Washington, DC 20503, marked ''Attention: Desk Officer for the 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 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.

In addition to the requirement above, the Agency requires a final RFA if any small business impacts are attributed to a regulatory action for any action initiated after April 1992. In this case, the regulatory action began before April 1992, so the former RFA requirements are pertinent.

Consistent with Small Business Administration (SBA) size standards, a firm is classified as a small entity if it has less than 500 employees for most of the affected industries at the 4-digit SIC code level, 750 for 3 affected industries at that level (2656—sanitary food containers, 2657—folding paperboard boxes, and 3221—glass containers), and 1,000 for 1 affected industry (3411—metal cans); and is unaffiliated with a larger entity.

Using the information above, none of the firms in the publication gravure sector are small. For the packaging and product gravure sector, 29 out of 60 firms, or 48.3 percent are classified as small. For the flexographic sector, virtually all of the affected firms are small.

Data were available to examine all four of the criteria.

For the first criterion, the maximum increase in the total cost of production from compliance with the standard is, on average, 1.4 percent for affected small entities. This is not a significant increase. For the second, annual compliance costs as a percentage of sales were calculated to be 9 percent higher for small entities, and this is not significant. For the third criterion, the increase in costs from compliance as a percentage of assets and as a percentage of equity was negligible (less than 1 percent). For the fourth and final criterion, no small firms are at risk of closure due to the standard.

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 document.

G. Clean Air Act Section 117

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 welcomes comment on all aspects of the proposed regulation, including health, economic, technological, or other aspects.

H. Regulatory Review

In accordance with sections 112(d)(6) and 112(f)(2) of the Act, this regulation will be reviewed within 8 years from the date of promulgation. This review may include an assessment of such factors as evaluation of the residual health risk, 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.

VII. Statutory Authority

The statutory authority for this proposal is provided by sections 101, 112, 114, 116, and 301 of the Clean Air Act, as amended; 42 U.S.C., 7401, 7412, 7414, 7416, and 7601.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements, Standard for printing and publishing industry.

Dated: March 1, 1995.

Carol M. Browner,

Administrator.

[FR Doc. 95–5983 Filed 3–13–95; 8:45 am]

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40 CFR Part 70

[AD-FRL–5172–5]

Clean Air Act Proposed Full/Interim Approval of Title V Operating Permits Program; Clark County Health District, Nevada

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The EPA proposes interim approval of the Operating Permits Program submitted by Nevada's Clark County Health District. Alternatively, EPA proposes to grant full approval if specified changes are made. Clark