

consider potential impacts of proposed regulations on small entities. It is currently the EPA policy to perform a regulatory flexibility analysis of the potential impacts of proposed regulations on small entities whenever it is anticipated that any small entities may be adversely impacted. Because it was anticipated that some small wood furniture manufacturers could be adversely impacted from implementation of the proposed standards, a regulatory flexibility analysis was performed. A copy of the Economic Impact Regulatory Flexibility Analysis is included in the docket.

While the majority of the approximately 11,000 wood furniture operations are small businesses, the vast majority of the smaller operations would not be directly affected by this proposed standard. Only approximately 7 percent of the 11,000 manufacturers are expected to be directly impacted. The estimate of 7 percent is based on EPA's estimate of the number of sources that are major based on actual emissions. It is anticipated that the remainder of the industry will take a Federally enforceable limit on their emissions.

As discussed under the summary of impacts (section IV.C of the preamble), the economic analysis predicted a slight increase in wood furniture prices. Therefore, the vast majority of small manufacturers, which will not be subject to the proposed rule may benefit from these slightly increased prices. If these costs are not offset by newer, less expensive technologies in the future, this benefit may be sustained.

For the smaller facilities that would be directly impacted by implementation of the proposed standards, an analysis of the potential impact of this proposed standard by plant size was performed. The results from this analysis indicate that implementation of this proposed rule would generally have a small impact on the net revenues of facilities of all size groups and that smaller plants would not be systematically impacted more severely than larger operations.

Pursuant to the provisions of 5 U.S.C. 605(b), I hereby certify that this proposed rule, if promulgated, will not have a significant economic impact on a substantial number of small business entities.

F Miscellaneous

In accordance with section 117 of the Act, publication of this proposal was preceded by consultation with appropriate advisory committees, independent experts, and Federal departments and agencies within the framework of a regulatory negotiation.

The Administrator will welcome comments on all aspects of the proposed regulation, including health, economic and technological issues, and on the proposed test methods.

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

G. 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.

Dated: November 21, 1994.

Carol M. Browner,
Administrator.

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40 CFR Part 63

[AD-FRL-5116-1]

RIN 2060-AD98

National Emission Standards for Hazardous Air Pollutants; Proposed Standards for Shipbuilding and Ship Repair

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule and notice of public hearing.

SUMMARY: The proposed standards would limit emissions of hazardous air pollutants (HAP) from surface coating operations from any new or existing shipbuilding and ship repair facilities at a major source (defined in part V A). The proposed standards implement section 112(d) of the Clean Air Act (Act), which requires the Administrator to regulate emissions of those chemicals designated as HAP in section 112(b). The intent of the proposed standards is to protect the public health by requiring new and existing major sources to limit HAP emissions to levels attainable by use of maximum achievable control technology (MACT).

In addition, this document contains draft recommended best available control measures (BACM) for volatile organic compound (VOC) and particulate emissions from this category. The draft BACM implements section 183(b)(4) of the Act.

DATES: Comments. Comments must be received on or before February 6, 1995.

Public Hearing. If anyone contacts the EPA requesting to speak at a public hearing by December 27 1994, a public hearing will be held on January 18, 1995, beginning at 10 a.m.

ADDRESSES: Comments. Interested parties may submit written comments (in duplicate if possible) to Public Docket No. A-92-11 at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (6102), 401 M Street, SW., Washington, DC 20460. The Agency requests that a separate copy also be sent to the contact person listed below.

Public Hearing. If anyone contacts the EPA requesting a public hearing, the hearing will be held at the EPA Office of Administration Auditorium in Research Triangle Park, North Carolina. Persons interested in attending the hearing or wishing to present oral testimony should notify 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.

Background Information Document. The background information document (BID) and other documents supporting the proposed standards may be obtained from the docket or from the U.S. EPA Library (MD-35), Research Triangle Park, North Carolina 27711, telephone number (919) 541-2777. Please refer to "Surface Coating Operations at Shipbuilding and Ship Repair Facilities—Background Information for Proposed Standards," EPA-450/D-94-011a.

Docket. Docket No. A-92-11, containing supporting information used in developing the proposed standards, is located at the EPA's Air and Radiation Docket and Information Center at the above address in Room M-1500, Waterside Mall (ground floor), and may be inspected from 8 a.m. to 4 p.m., Monday through Friday. The proposed regulatory text and other materials related to this rulemaking are available for review in the docket. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: For information concerning regulatory decisions and the proposed standards,

contact Dr. Mohamed Serageldin, Coatings and Consumer Products Group, Emission Standards Division (MD-13), U. S. Environmental Protection Agency Research Triangle Park, North Carolina 27711, telephone number (919) 541-2379.

SUPPLEMENTARY INFORMATION: The information presented in this preamble is organized as follows:

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The proposed regulatory text is not included in this **Federal Register** notice, but is available in Docket No. A-92-11 or by request from the EPA contact persons designated earlier in this notice, free of charge. The proposed regulatory language is also available on the Technology Transfer Network (TTN), one of the 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) 541-5742 for up to a 14,400-bps modem. If more information on TTN is needed, call the HELP line at (919) 541-5384.

I. Description of the Source Category

Section 112 of the Act requires the EPA to 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) for major source categories and such minor sources as deemed appropriate that emit HAP Pursuant to section 112(c) of the Act, the 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 both "major" and "area" sources (as defined by the Act) that the EPA intends to regulate before November of the year 2000. The initial list of source categories includes "Shipbuilding and Ship Repair (Surface Coating), the major sources only as a source category."

For the purpose of the proposed rule, shipbuilding and ship repair refers to all facilities that build, repair, paint, repaint, convert, or alter ships. (Hereafter, this industry will be referred to as "shipbuilding.") A ship is defined as any marine or fresh-water vessel used for military or commercial operations, including self-propelled vessels, those towed by other craft (barges), and navigational aids (buoys). This definition includes, but is not limited to, all military vessels, commercial cargo and passenger (cruise) ships, ferries, barges, tankers, container ships, patrol and pilot boats, and dredges. It does not include offshore oil and gas drilling platforms, although it is believed that identical coating systems would be appropriate for them also.

II. Background

The proposed rule represents the EPA's first extensive regulation of air pollutants from the shipbuilding and ship repair industry. Essentially all volatile organic hazardous air pollutants (VOHAP) are a subset of a category of pollutants referred to as volatile organic compounds (VOC). The VOC is a class

of pollutants that are photochemically reactive precursors of ozone. Emissions of VOC (and consequently VOHAP as well) from "marine coating operations" have been regulated by some State and local district rules. California and Louisiana have defined VOC limits for a wide range of marine coating categories. The California limits being generally more stringent than those of Louisiana. Other States have limited VOC emissions from the industry's spray booths as one of many "miscellaneous metal coating operations," using guidance presented in the EPA's control techniques guidelines (CTG) document "Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VI: Surface Coating of Miscellaneous Metal Parts and Products" (June 1978) EPA 450/2-78-015. Outdoor painting of ships' hulls was specifically exempt from this guidance, but some States have rules that limit shipyard painting done inside buildings and on the interior of ships based on the guidance.

Control Techniques Guidelines

Section 183(b)(4) of the Act, as amended in 1990 (1990 Amendments), requires the Administrator to issue CTG's for VOC and particulate emissions from coatings (paints) and solvents used in shipbuilding and ship repair facilities, to such level as the Administrator determines may be achieved through the adoption of BACM. Volatile organic compounds react in the atmosphere to form ozone, a criteria air pollutant for which primary and secondary-air quality standards have been established. The EPA is required to take into account the applicable requirements of section 112 in developing the guidelines.

The organic HAP emissions described in the remainder of this document are, with only one exception, a subset of the VOC emissions from coatings and solvents used in shipbuilding and ship repair facilities. Thus the control techniques evaluated for the MACT standard are also applicable to VOC emissions.

The EPA has traditionally issued draft CTG's containing recommended control levels for public comment. Rather than issue a separate draft CTG in this case, the EPA is using this document to request public comment on a draft recommended by BACM. The recommended BACM is identical to the proposed MACT for coatings and solvents, stated in terms of VOC units rather than VOHAP units (where a VOHAP means any compound of carbon, excluding metallic carbides and carbonates, that is listed in or pursuant

to section 112(b) of the Act; this includes both VOC and exempt compounds that are listed as HAP). For those options using VOC as a surrogate for VOHAP for the MACT standard, compliance would be based on the Agency's reference Method 24. For any compliance option involving measurement of actual VOHAP content, the test method used by the source must be documented and approved by the Administrator. Comments received on the proposed MACT rule will also be considered in formulating a final recommended BACM and vice-versa.

Meanwhile, States are in the process of developing VOC rules for these sources to meet other Act requirements. The EPA published an alternative control techniques (ACT) document in February 1994 to provide guidance to the States for these efforts. The recommended BACM described here is consistent with information in the ACT. Also, as explained in the ACT, although control technologies for particulate emissions at shipyards are in development, none are sufficiently demonstrated at this time to recommend as BACM. Therefore, the Agency has no recommendation for BACM for particulate emissions at this time.

III. Summary of the Proposed Rule

A. Applicability

1. Description of the Source Category

The proposed rule would apply to each shipbuilding facility whose total activities emit or have the potential to emit, considering controls, 9.1 megagrams per year (Mg/yr) (10 tons per year [tons/yr]) or more of any HAP or 22.7 Mg/yr (25 tons/yr) or more of any combination of HAP.

In general, the shipbuilding industry covered by the proposed rule is represented by SIC Code 3731, "Shipbuilding and Repairing." This industry consists of establishments that build, repair, repaint, convert, and alter ships. However, SIC Code 3731 includes the manufacture of both offshore oil and gas well drilling and production platforms; marine coatings used on such platforms will not be subject to this rule, but rather to limitations imposed by the EPA's Federal rule on Architectural and Industrial Maintenance Coatings.

Based on information obtained through the U. S. Maritime Directory Listings (June 1992), there are an estimated 437 facilities of varying capabilities involved in the construction and repair of ships in the United States. Of the 437 facilities, an estimated 25 qualify as major sources of HAP emissions and would be subject to the proposed rule. The total VOHAP

emissions from surface coating operations at the 25 facilities that would be subject to the proposed rule are estimated at 1,155 Mg/yr (1,272 tons/yr).

The EPA requests comment on the appropriate timing of the shipbuilding and ship repair facility's applicability determination, and on whether all facilities, regardless of their past emissions or HAP usage, should be eligible to qualify as area sources under the HAP usage limits. The Agency also seeks comment on whether a facility that is initially determined to be subject to the rule should be able subsequently to escape applicability and if so, under what circumstances.

2. Affected Sources

For purposes of this rulemaking, the affected source would be considered the aggregate of all operations at a shipbuilding facility. A new operation at a shipbuilding facility would not be considered a new source. Instead, it may qualify as a modification of the existing source.

The proposed standards would limit VOHAP emissions from indoor and outdoor coating operations. The VOHAP emissions result largely from solvent evaporation from the coatings. These emissions occur during application and drying/curing. Due to the size of ships and their components, most coatings are applied outdoors.

The proposed standards would also reduce VOHAP emissions from handling, transfer, use, and storage of VOHAP-containing materials through work practice measures. These emissions also occur as a result of solvent evaporation.

B. Standards

The proposed standards would be the same for new and existing facilities. (See section VII.B. for discussion on the basis for the standards.) The proposed standards would impose limits on the VOHAP content of 23 types of coatings used at shipbuilding facilities. (See section VII.C. for a list of the proposed limits.) The limits would be stated in terms of mass of VOHAP per volume of coating less water and less negligibly photochemically reactive (exempt) compounds. Compliance with the VOHAP limits must be demonstrated on a monthly basis.

The proposed standards would allow for an alternative means of compliance other than using compliant coatings, if approved by the Administrator.

The proposed standards would also require that all handling and transfer of VOHAP containing materials to and from containers, tanks, vats, vessels, and piping systems be conducted in a

manner that minimizes spills and other factors leading to emissions. In addition, containers of thinning solvent or waste that hold any VOHAP must be normally closed (to minimize evaporation) unless materials are being added to or removed from them.

C. Compliance Dates

The proposed rule would require compliance for existing-affected sources within 1 year after the effective date of the rule. An existing unaffected area source that increases its HAP emissions (or potential to emit) such that it becomes a major source would be required to comply within 1 year after becoming a major source.

Any new or reconstructed sources would be required to adhere to the compliance schedule in the General Provisions § 63.6(b) of subpart A without any modification. For new or reconstructed affected sources whose startup date is before the effective date of the rule, the compliance date is the effective date of the rule. For new or reconstructed affected sources whose startup date is after the effective date of the rule, the compliance date is the startup date. A new unaffected area source that increases its emissions (or potential to emit) such that it becomes a major source would be required to comply immediately upon becoming a major source.

D. Compliance Procedures

The proposed rule would allow affected sources to choose among five options for demonstrating compliance with the VOHAP standards. Their choice will be influenced by the perceived need to add "thinning" solvent (thinner) to alter the viscosity of the coating in order to spray effectively (For the purposes of this proposed regulation, thinner is defined as any liquid material added to a coating.) Regardless of the option(s) chosen, affected sources would first be required to determine the coating category (e.g., general use, air flask, antenna, etc.), the applicable VOHAP limit, and the VOC content for each batch of coating received from the manufacturer.

A source may demonstrate compliance either by showing that the VOC content is less than the VOHAP limit (options 1-4) or by the use of option 5 (discussed below) which would measure the actual VOHAP content. If the shipyard is subject to regulatory limits on the VOC content of its coatings, the primary compliance method for this rule would be to certify the VOC content of each container of coating, as applied. (That information would then be used to determine

compliance with the applicable VOHAP limit using any of the options 1-4.) Certification of VOC content is done by: (1) using Method 24 of 40 CFR part 60, appendix A, (2) using forms similar to those included in the certification procedure published in EPA-450/3-84-019 (revised 6/86), "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings" or (3) an alternative method approved by the Administrator. Option 5 may be used for demonstrating compliance when a shipyard is not subject to VOC limits.

Affected sources would be allowed to use the following methods to demonstrate compliance to avoid testing every container of coating; however, any analysis of an individual container of coating using the Agency's Method 24 would take precedence to determine or to verify a violation. Paragraphs (i) through (iii) are summaries of options 1, 2, and 3.

(i) Shipyards can demonstrate compliance of the as-supplied VOC content as certified by the manufacturer. If the as-supplied coating is used without adding thinning solvent, shipyards can certify that the as-applied VOC content of the batch of coating is identical to the as-supplied VOC content, if it were certified by the manufacturer. If the certified VOC content is less than the VOHAP limit, compliance is demonstrated. ("As applied" means after any thinning by the user or just prior to application to the substrate. "As supplied" means as supplied by the coating manufacturer.)

(ii) Shipyards can demonstrate compliance if the actual volume of thinner used is less than the maximum allowable volume of thinner on a coating-by-coating basis.

(iii) Shipyards can demonstrate compliance by comparing the actual volume of thinner used to the maximum allowable volume on a "group" basis. A group of coatings would be defined as those which use the same thinner. (See section VII.E. for more explanation.)

Compliance with options 1 through 4 is based on the VOC content of each container of coating, as applied. If the as-applied VOC content is less than or equal to the VOHAP limit, then compliance would be demonstrated (See part III.E. for how "exempt" compounds which are HAP are considered in compliance determinations and other details).

Shipyards can also demonstrate compliance by measuring the actual VOHAP content of a coating. If the as-applied VOHAP content is less than or equal to the alternate VOHAP limit, then compliance would be

demonstrated. (See II.E., Option 5, for how alternate VOHAP limits are determined). (Concurrently with this rule, the Agency is preparing requirements for sample preparation and the performance specifications required of an acceptable analytical procedure.)

An affected source may choose to use only one of the options for all coatings at the facility or a combination of options. Each option is discussed in more detail below.

E. Test Methods and Procedures

The proposed rule would require Method 24 be used as the reference method to determine compliance if the VOC content is used as a surrogate for VOHAP. Manufacturers whose coatings do not release reaction by-products may request an alternative or equivalent method to be approved by the Administrator. If it is demonstrated to the satisfaction of the Administrator that a specific coating does not release VOC by-products from the cure reaction (all VOC emissions are evaporated solvent), then she may approve use of batch solvent formulation data to certify the as-supplied VOC content of that paint. In the event of any inconsistency between the VOC content as measured by Method 24 and formulation data, however, the Method 24 test shall govern.

A few coatings may contain HAP which are (or through subsequent formal action may become) excluded from EPA's definition of VOC because these HAP have negligible photochemical reactivity and do not contribute to tropospheric ozone formation. These non-VOC HAP are nonetheless of regulatory concern as toxic chemicals. Therefore, for the purposes of this rule the mass of VOHAP determined by Method 24 would be the mass of VOC plus exempt compounds; hence, unlike for a VOC determination, the total mass loss of these organic volatiles must be used in subsequent calculations. However, the volume of exempt compounds should be subtracted (from the total coating volume) just as water, as indicated by the units for VOHAP presented in Method 24. Manufacturers and affected sources would be required to certify the VOHAP of paints using a form similar to that published in the EPA's "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings" (Revised June 1986) EPA-450/3-84-019 [Docket A-92-11, II-B-27]. If the shipyard chooses to demonstrate compliance using the VOHAP content of the coating(s), the manufacturer or affected

source would need to provide details on how the VOHAP values were determined.

F. Monitoring Requirements

Section 114(a)(3) of the amended CAA 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 limitation 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.

The test methods and procedures described in the previous section will be used to determine compliance. Failure to meet the emission limits as measured by these procedures would be an enforceable violation of the emission limits of the standard. When add-on controls are used, monitoring shall be capable of detecting deviations from each applicable emission limitation or other standard with sufficient reliability and timeliness to determine continuous compliance over the applicable reporting period.

Although the term "continuous" generally means at all times, the Agency has determined that less frequent measurements or determinations of compliance can ensure continuous compliance. The potential variability of the emissions or parameters is a primary factor in establishing the frequency of measurements.

G. Notification Requirements

The proposed rule would require affected sources to follow the notification requirements in §§ 63.9(a)-(d) and (h)-(j) of subpart A of the general provisions. In addition to the initial notification requirements in §§ 63.9(b)(2) and (3) of subpart A, sources would be required to include in the initial notification: (1) the compliance procedure(s) that they intend to use; (2) procedures for ensuring compliance with the handling, transfer, and storage standard; and (3) procedures for maintaining records. These are subject to the approval of the Administrator. In addition, they would be required to submit a notification of compliance status on a quarterly basis, with any exceedances reported on a quarterly basis. Following the first year, the owner or operator of a source that has had no exceedances for a full year

(can be any year after the first year), may request Administrator approval to reduce the frequency of notification to semiannual.

H. Recordkeeping and Reporting Requirements

The proposed rule would require affected sources to follow the general recordkeeping and reporting requirements in §§ 63.10(a)-(b) and (f) of subpart A of the general provisions. Sections 63.10(c)-(e) of subpart A do not apply unless a source uses a control device to comply with the standards except for the excess emission report required by § 63.10(e)(3) which applies regardless of how emissions are controlled.

In addition, each owner or operator of an affected source would be required to certify annually that all personnel involved with coatings, thinning of coatings, keeping coating records, or handling/transferring VOHAP containing materials have received the training required by the regulation. A record of the certification is required, but no report is required. The purpose of the certification is to ensure that the training does occur at least once per year, and that documentation does exist for an enforcement official to review.

Affected sources would be required to keep all records needed to demonstrate compliance with the standards, including calculations and records of any Method 24 or alternate VOHAP tests. All records would be compiled each calendar month and compliance status determined every month. In addition, a source is required to report on a quarterly basis any exceedances to the EPA and to provide in the excess emissions report the data needed to confirm and quantify the reported exceedance. All records must be maintained for a minimum of 5 years.

The quarterly report should include:

1. A summary of the number and duration of deviations during the reporting period classified by reason, including known causes for which a Federally-approved or promulgated exemption from an emission limitation or standard may apply;

2. Identification of the data availability achieved during the reporting period, including a summary of the number and total duration of incidents during which the monitoring protocol failed to operate in accordance with design or produced data that did not meet minimum data accuracy and precision requirements (classified by reason);

3. Identification of the compliance status as of the last day of the reporting period and whether compliance was

continuous or intermittent during the reporting period;

4. If, pursuant to (2) of this section, the owner or operator identifies any deviation as resulting from a known cause for which no Federally-approved or promulgated exemption from an emission limitation or standard applies, the monitoring report shall also include all records that the source is required to maintain that pertain to the periods during which such deviation occurred and:
 - a. The magnitude of each deviation;
 - b. The reason for each deviation;
 - c. A description of the corrective action taken for each deviation, including action taken to both minimize it and prevent recurrence; and
 - d. All quality assurance activities performed on any element of the monitoring protocol.

IV Summary of Estimated Environmental, Energy and Economic Impacts of the Proposed Standards

The nationwide impacts presented below are the impacts the proposed standards would have on existing facilities. Because of downsizing of military forces, no new major sources are expected to be built in the next five years. Therefore, impacts on new sources are expected to be zero.

IV Summary of Estimated Environmental, Energy and Economic Impacts of the Proposed Standards

The nationwide impacts presented below are the impacts the proposed standards would have on existing facilities. Because of downsizing of military forces, no new major sources are expected to be built in the next five years. Therefore, impacts on new sources are expected to be zero.

A. Number and Type of Affected Facilities

Approximately 437 facilities (shipyards) are involved in the construction and repair of ships nationwide. Based on industry information and data reported in the U.S. Department of Commerce's "U.S. Industrial Outlook '92—Shipbuilding and Repair" (January 1992) and the U.S. Maritime Directory Listings (June 1992). It is estimated that only 25 qualify as major sources of HAP emissions and would be affected by the proposed rule.

B. Air Emission Reductions

The nationwide baseline VOHAP emissions for the approximately 25 major shipbuilding facilities from surface coating operations are estimated to be 1,155 Mg/yr (1,272 tons/yr). Implementation of the proposed standards would reduce these emissions by approximately 24 percent to 883 Mg/yr (972 tons/yr).

C. Secondary Environmental Impacts

No environmental impacts to water, solid waste, noise, or secondary air impacts are associated with implementation of the proposed standards, as explained below

1. Water

There are no negative water pollution impacts resulting from transition to compliant coatings.

2. Solid Waste

There are no negative solid waste impacts associated with the proposed standards. No additional or new types of solid or hazardous waste will be generated. Because the compliant (higher solid) coatings are more concentrated, fewer containers will require disposal when the same volume of solids is applied.

3. Noise

There is no additional noise associated with the proposed standards. Pumps and compressors, the source of the majority of the noise in paint operations, is not expected to change.

4. Secondary Air Impacts

There are no significant secondary air pollution impacts. Use of compliant coatings avoids use of any type of control device or equipment that would consume large amounts of energy. Furthermore, any reduction in VOC emissions that result from compliance with the HAP rule will reduce both ozone formation and CO₂, a greenhouse gas (VOC that remain airborne react to form ozone and are ultimately oxidized to CO₂).

D. Energy Impacts

Paint heaters are now used in some shipyards. Some sources may use paint heaters in lieu of solvent to reduce paint viscosity. Although some secondary air impacts would result from the power requirements of the electrical heaters, the amount of electricity that they draw is insignificant.

E. Cost Impacts

The incremental nationwide annual costs associated with the proposed standards (MACT cost minus baseline cost) is approximately \$1.7 million per year. The use of compliant coatings will not require different equipment. Because lower-VOC (and presumably lower VOHAP) coatings are more concentrated, less coating volume is required to cover the same surface area to the same dry film thickness. Some of these compliant coatings, however, may be more expensive both on a dollar-per-gallon basis, but also in cost-per-volume solids (nonvolatiles). Therefore, the annual costs associated with the proposed standards reflect the difference between the costs of higher-priced coatings and the savings associated with the decreased volume of

coatings (because of the higher solids content) and labor to apply them.

Minor costs would be incurred by any source that purchases paint heaters or other minor equipment necessary to comply with the handling, transfer, and storage standard. These costs are expected to be insignificant.

F Economic Impacts

Economic impacts were calculated on a facility-specific basis as well as on a market segment basis (i.e., military construction, commercial repair, etc.). Economic impact indicators examined included price, output, and employment impacts. The economic impact analysis calculated economic impacts for six market segments within the shipbuilding and repair industry. Two methods were used to calculate the potential price impacts; therefore, these impacts will be provided in terms of ranges.

Twenty major-source yards were identified as first-tier shipyards (facilities that have the capability to construct, drydock, and/or topside repair vessels with a minimum overall length of 400 feet). Two market segments in the first tier, facilities engaging in construction of military ships and privately owned facilities engaging in repair of military ships, are each estimated to increase their prices 0.1 percent or less to recover increased costs of the rule. The cost for the third market segment, government-owned shipyards engaging in repairing military ships, will be negligible.

The remaining five major-source shipyards are categorized into the "second tier" (facilities building and repairing ships less than 400 feet in length). Within this tier, the market segment consisting of facilities constructing ships for the military is estimated to require a price increase between 0.1 and 0.2 percent. The market segment consisting of facilities engaging in construction of ships for the commercial sector is estimated to require a price increase of 0.3 percent or less. Lastly, the market segment consisting of facilities performing repair on ships in the commercial sector is expected to require little or no price increase.

The facility-specific impact calculations estimate the maximum price increase necessary for a regulated facility to fully recoup its annualized control costs. For the purposes of the analysis, a facility's price increase was considered significant if greater than 1 percent and deviated considerably from its corresponding market segment price increase.

The facility-specific price increase calculations indicated that 23 of the 25 major-source shipyards are expected to experience price increases of 0.1 percent or less. Of the two remaining, one is expected to experience a 0.2 percent price increase and the other, 0.3 percent.

The above data indicate that none of the regulated facilities are expected to experience price increases greater than 1 percent. In addition, a comparison of each facility's price increase to its corresponding market segment price increase reveals that the results of each analysis are not significantly different. Therefore, implementation of the NESHAP is not expected to have a significant impact on the 25 major-source facilities in the shipbuilding and repair industry.

The economic analysis also examined the impact of the NESHAP on industry output and employment. The industry is expected to experience a negligible reduction in output as a result of implementing the regulation. Assuming a one-to-one relationship between output and employment, the same conclusion can be applied to the NESHAP impact on the industry's employment level.

V National Emission Standards for Hazardous Air Pollutants (NESHAP) Decision Process

A. Source of Authority for NESHAP Development

Section 112 of the Act gives the EPA the authority to establish national standards to reduce HAP emissions from sources that emit one or more HAP. Section 112(b) contains a list of the specific HAP to be regulated by NESHAP. Section 112(c) directs the EPA to use this pollutant list to develop and publish a list of source categories for which NESHAP will be developed. The Act defines major sources as those that emit or have the potential to emit considering controls, in the aggregate, 9.1 Mg/yr (10 tons/yr) or greater of individual HAP or 22.7 Mg/yr (25 tons/yr) or greater of any combination of HAP. The initial list of source categories was published on July 16, 1992 (57 FR 31576). Shipyards (major sources only) appear on this list.

Area sources are those sources that are not major sources. Area source categories selected by the EPA for NESHAP development will be based on the Administrator's judgment that the sources in a category individually or in the aggregate, pose a "threat of adverse effects to health and the environment." The EPA will continue to evaluate whether area source shipyards should

be added to the list of area source categories.

B. Criteria for Development of NESHAP

The NESHAP are to be developed to control HAP emissions from both new and existing sources according to section 112(d) of the Act. The standards are to reflect the maximum degree of reduction that is achievable for new or existing sources. The NESHAP must reflect consideration of the cost of achieving the emission reduction, nonair quality health and environmental impacts, and energy requirements for control levels more stringent than the MACT floor (described below). The Act specifies that emission reduction may be accomplished through application of measures, processes, methods, systems or techniques, including, but not limited to, measures which:

1. Reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials, or other modifications;
2. Enclose systems or processes to eliminate emissions;
3. Collect, capture, or treat such pollutants when released from a process, stack, storage, or fugitive emission point;
4. Are design, equipment, work practice, or operational standards including requirements for operator training or certification as provided in section 112(h); or
5. Any combination of the above [section 112(d)(2)].

To develop 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 to analyze possible regulatory approaches.

Although NESHAP are normally structured in terms of numerical emission limits, alternative approaches are sometimes necessary. In some cases, physically measuring emissions from a source may be impossible or at least impracticable due to technological and economic limitations. Section 112(h) authorizes the Administrator to promulgate a design, equipment, work practice, or operational standard or combination thereof, in those cases where it is not feasible to prescribe or enforce an emissions standard.

If any sources in the source category are considered major (based on their emissions), then a MACT standard is required. To establish a MACT standard, the level of control corresponding to the

MACT floor needs to be determined as a starting point for developing the regulatory alternatives.

C. Categorization/Subcategorization: Determining MACT "Floors"

Section 112 of the Act provides certain very specific directives to guide the EPA in the process for establishing MACT standards. It states that the EPA shall establish standards that require "the maximum degree of reduction in emissions of the hazardous air pollutants * that the Administrator, taking into consideration the cost of achieving such emission reduction, and any nonair quality health and environmental impacts and energy requirements, determines is achievable ** [section 112(d)(2)]. In addition, a minimum baseline or "floor" for a standard is specified. For new sources, the standard for a source category or subcategory "shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator" [section 112(d)(3)].

Further, standards for existing sources shall be no less stringent than: (1) the average emission limitation achieved by the best performing 12 percent of the existing sources in the category or subcategory for categories and subcategories with 30 or more sources; or (2) the best performing five sources for categories or subcategories with fewer than 30 sources [section 112(d)(3)].

Once the floor has been determined for new or existing sources for a category or subcategory, the Administrator must set MACT standards no less stringent. 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 and establish a different emission standard for each class, provided all standards are at least as stringent as the MACT floor.

The EPA has determined that there are less than 30 major shipbuilding sources. Consequently, the MACT floor for existing categories or subcategories was calculated to be the arithmetic average (the mean) of the emission limitation achieved by the best performing five sources.

D. Regulatory Approach and Regulatory Alternatives

The next step in establishing standards is the investigation of regulatory alternatives. With MACT

standards, only alternatives at least as stringent as the floor may be considered. Information about the industry is analyzed to develop model plant populations for projecting national impacts, including HAP emission reduction levels, costs, energy and secondary impacts. Several regulatory alternative levels (which may be different levels of emissions control or different levels of applicability or both) are then evaluated to determine the most appropriate regulatory alternative to serve as the basis for the standard.

The regulatory alternatives for new versus existing sources may be different, and separate regulatory decisions must be made for new and existing sources. For both source types, the selected alternative may be more stringent than the MACT floor. However, the control level selected as the name maximum achievable control technology indicates, must be available, i.e., technically achievable. In selecting a regulatory alternative, the Agency considers the achievable reduction in emissions of HAP (and possibly other pollutants that are co-controlled), the cost and economic impacts, the energy requirements, and other environmental impacts.

The selected regulatory alternative is then translated into a proposed regulation. The regulation implementing the decision typically includes the following sections: applicability standards, test methods, compliance demonstration, monitoring, reporting, and recordkeeping. The preamble to the proposed regulation provides an explanation of the rationale for the decisions embodied in the rule. The public is invited to comment on the proposed regulation. Based on an evaluation of these comments, the EPA promulgates the final standard.

VI. Process Description and Control Technologies

This section describes the painting process and technologies that can be used to control organic HAP emissions from painting operations at shipyards. For more detailed description of the process and control technologies, consult the BID for the proposed standards (see ADDRESSES at the beginning of this Preamble).

Over 99 percent of HAP emissions at shipyards are organic solvents associated with paints and cleaning. Other activities that collectively contribute the remaining 1 percent include welding, metal forming/cutting, and abrasive blasting. The proposed standards will affect operations involving the use of paint and organic solvents.

A. Painting Process

Marine coatings are applied to the surface of ship components to form a protective, functional or decorative films. The basic components of a coating are the vehicle (resin or binder), solvent, pigment (except in clear coatings), and a variety of additives. Different coatings are used for different purposes; depending on where it is applied, the intended use of the ship, ship activity, travel routes, desired time between coatings (service life), aesthetic desires of the ship owner or commanding officer, and fuel costs.

Marine coatings are vital for protecting the ship from corrosive and biotic attacks from the water environment. Many marine coatings serve specific functions, such as corrosion protection, heat/fire resistance, or antifouling (to prevent the settlement and growth of marine organisms on the ship's underwater hull).

The most popular techniques for applying coatings to marine vessels are brushing, rolling, air-atomizing, and airless spraying. Brushing and rolling are primarily used for touchup and recessed surfaces where spraying is not practical. Spraying is used for all other surfaces because of its high application speed.

Thinning solvent is sometimes added to coatings before application even though paint manufacturers state that it is unnecessary. Temperature, reportedly can play a big part in the decision to thin; cold increases paint viscosity. For such cases, the appropriate solvent to use for each coating is specified by the manufacturer. Typically these paints and thinning solvents contain one or more of the following HAP: xylene, toluene, and/or methyl ethyl ketone.

B. Control Technologies for Painting Operations

Emissions of VOC/HAP result primarily from solvent evaporation—both solvent in the paint "as supplied" by the manufacturer and any solvent used by the shipyard to thin the paint. Reaction by-products released during the cure of some coatings may also contain HAP. Essentially, all organic solvents, including those which are HAP, are emitted either as the paint is applied or when it dries/cures. The shipyard may limit emissions of HAP from, "as supplied" or "as applied, coatings as discussed below.

1. Paints As-Supplied by the Manufacturer

Since the Agency began its program to reduce emissions of volatile organics in

the late 1970's, the coating industry has made significant progress in research of new products with increased solids: organic solvent ratios. These liquid paints are of two primary types: waterborne and higher solids. Although many new waterborne products have been developed, manufacturers of marine coatings have reduced solvent primarily by increasing the solids (nonvolatile) content of their products. Use of these concentrated or "higher solids" coatings reduce solvent emissions per surface area painted (at same film thickness). Because most hazardous air pollutants are also volatile organics, the VOC program has tended to also reduce HAP.

In addition, some coating manufacturers have reportedly been able to reduce the HAP content of certain paints by merely substituting a solvent not on the HAP list yielding paints that contain little or no HAP solvents. A coating reformulated in this manner may have the same or even higher VOC content than the one it replaces. In some cases, the HAP to VOC ratio may even increase when a company develops a new reformulation with lower VOC. (Note, the absolute HAP emissions are likely to go down.)

2. Paints As-Applied by the Shipyard

There are several alternatives a shipyard may follow to minimize HAP emissions from as-applied paints. One is to avoid diluting the paint and apply it as-supplied. Another is to only use thinners that contain little or no HAP. A third is to reduce paint viscosity by heating the paint to avoid or minimize the need for thinning. (Paint heaters are heating elements placed in the paint delivery line upstream of the spray gun. Depending on the length of the delivery line, the coating characteristics, and ambient temperature, multiple paint heaters may be required at intervals along the line. These decrease the ease of portability and flexibility of the application system.)

"Add-on" pollution control systems are often used to control emissions from spray booths when coatings are applied in factory operations. Such systems are not now a practical alternative for many shipyard operations because the size of ship components is too large to enable capturing of the emissions with an enclosure. (There is currently under development a mobile enclosure that, if successful, will offer shipyards a method of capturing both particulate and volatile organics. Metro Machine shipyard in Norfolk, Virginia has developed a prototype portable enclosure that mounts adjacent to the ship and supports an omni-directional

elevator platform used by the operator to abrasive blast and paint ship's hulls. The method shows promise of containing particulate and volatile organics of concentrations great enough to make recovery available at reasonable cost. It also provides weather protection thereby allowing work to continued in inclement weather. Final evaluation will likely be completed in 1996.)

C. Handling, Transfer, and Storage of Volatile Organic HAP Containing Materials

Volatile organic emissions (including HAP) result from storage, handling, and transfer of solvents and paint wastes that contain VOHAP. These solvents, typically stored in 55-gallon drums, are frequently transferred by pump or spigot into small buckets or 1 gallon containers for transport to the painting site. Waste solvent and HAP also evaporate from solvent-laden rags and spent solvent used in cleaning activities and coating operations.

These HAP emissions may be minimized with appropriate work practices including managed chemical (paint and solvent) distribution systems designed to curb the volume of material exposed to the atmosphere and the length of the exposure. For example, solvent-soaked cleaning rags should be kept in impervious bags or containers that are normally closed when not in use.

VII. Selection Rationale

A. Selection of Emission Points to be Covered

The proposed standards would limit VOHAP emissions from surface coating operations at shipbuilding facilities that are major sources in accordance with the EPA's list of source categories published in the *Federal Register* on July 16, 1992 (57 FR 31576). Standards are being proposed to limit the VOHAP content of 23 categories of coatings used in shipyards. In addition, the proposed standards would require work practice measures for handling, transfer, and storage of solvent and paint wastes.

Welding, gas freeing (tank degassing), metal fabrication, fuel combustion, flame cutting, cooling towers, asbestos removal, and cleaning would not be regulated under the proposed rule, although their emissions must be included in determining if a facility qualifies as a major source. Asbestos removal is covered in 40 CFR part 61, subpart M; cooling towers are treated in the industrial process cooling tower rule proposed on August 12, 1993; and chromium emissions by the rule for hard and decorative electroplating and

anodizing operations proposed on November 30, 1993. Methodology for determining and managing emissions from cleaning solvents is detailed in the ACT document—Industrial Cleaning Solvents, EPA-453/R-94-015.

B. Selection of the Basis for the Proposed Standards

The general methodology for selecting the basis for MACT standards was discussed in section V. A more detailed discussion specific to this industry is presented below.

1. Coating Operations

No emission control measures are known to have previously been implemented specifically to reduce HAP emissions from this industry. Regulations that reduce VOC emissions will limit HAP emissions since almost all organic HAP are VOC.

At shipyards, the only VOC control measure that has been fully demonstrated for outdoor coating operations is the use of coatings with inherently lower emissions. Such coatings have and are being developed by an enlightened industry to reduce its environmental impact. The new products are used for compliance with VOC regulations in Louisiana and some California jurisdictions. There are as yet no known cases where add-on pollution control systems have been used to control VOC emissions from outdoor coating operations at shipyards.

The California and Louisiana regulations limit the allowable quantity of VOC in each of several categories of coatings, as applied. Because VOHAP are VOC (with the exception noted above), such regulations also reduce, or at a minimum, put a ceiling on the allowable HAP content of these coatings.

The California regulations (VOC limits) are more stringent than those in Louisiana. Thus, the major sources subject to those California rules represent the "best controlled sources." Because three major source facilities are located in California, the single best controlled facility and the median facility of the best performing five sources are both subject to the stringent California regulations. Therefore, the Agency has determined that the MACT floor for both new and existing sources is identical to the current California VOC limits on marine coatings, except for one additional paint category [weld-through (shop) primer].

A variety of more stringent alternatives were considered, including more restrictive limits based on HAP content (rather than VOC content), more stringent VOC limits, and requiring use

of pollution control equipment. These alternatives are discussed below.

To evaluate other potential limits, the EPA gathered existing data on HAP content from marine coating manufacturers and shipyards. Information compiled from a material safety data sheet (MSDS) was used to determine (estimate) the HAP content of each paint. Most of the data came from MSDSs and product data sheets. Based on these data, the percentage of VOC in marine coatings that are HAP varies from zero to 100 percent and averaged 30 percent by weight for all paints in the project data base. (The HAP content could exceed the VOC content in coatings containing non-VOC HAP.)

Industry subsequently informed EPA that the quality of HAP-specific data on MSDSs is poor. The MSDSs are prepared primarily to meet Occupational Health and Safety Administration (OSHA) requirements. Although one section addresses hazardous constituents, the industry indicated that information and format required for OSHA purposes are not as detailed or accurate as would be desired for development of a regulation. Further, the list of hazardous materials that OSHA regulations require must be addressed in MSDSs is different from the HAP list in section 112(b) of the Act. In addition, it is acceptable to give a concentration range on the MSDS, rather than a specific value. Finally many entries on the MSDS are generic petroleum solvents, such as mineral spirits, which are mixtures of many organics (some of which may be HAP) and vary in composition from lot to lot.

Because of these drawbacks in MSDS data, the EPA considered it not accurate enough to be used in setting limits for VOHAP. The Agency believes, however, that the resulting data base is sufficiently accurate for use in estimating broad parameters, such as the potential reduction associated with limitations on VOC content.

Enforcement of a limit on HAP content would require an EPA reference test method. Although one is under development by the Agency it has not yet been published. Based on the quality of the HAP content data on the MSDSs and the lack of an approved test method for speciating and quantifying HAP the EPA has determined that VOC will be used as a surrogate to limit HAP emissions. Consequently the proposed rule would establish the VOHAP limit at the VOC limit of the California rules using VOC as a surrogate for HAP and the Agency's VOC test method, Method 24, for determining compliance.

The EPA considered requiring limits more stringent than the existing

California limits. The data base indicates that within each category of coatings there are coatings with VOC contents below the California limit. (Some may have been developed in response to the technology-forcing provisions of the California regulations that provide for more stringent limits to come into effect in September 1994 for some coating categories.)

Although coatings with lower VOC contents than the rule requires are marketed in each category, they reportedly would not perform for the full range of potential applications within a coating category.

An important consideration in examining control requirements for this industry is U.S. Navy military specifications or "milspecs." Because of the need for coatings for specialized applications and the demand for predictable performance, the Navy oversees exhaustive performance testing procedures. Naval personnel indicate an ongoing program to qualify lower VOC coatings. The California rules were developed with considerable input from the Navy, and according to a Naval representative, reflect the "state of the art" for lower-VOC shipbuilding coatings. Volatile organic compound limits more stringent than proposed would require that the Navy use paints for which they have not yet completed long term testing, hence are not milspec approved. Given these considerations, the EPA is proposing MACT emission levels based on the 1992 California regulations that limit the total VOC as-applied paint.

The EPA also evaluated the potential of add-on VOC control devices (i.e., carbon adsorbers and incinerators). Although no cases are known where add-on controls are used for outdoor painting at shipyards, they have been used to reduce spraybooth emissions by many other industries. Most coating operations at shipyards take place outdoors, primarily because of the size of parts painted. This makes capture of emissions difficult and expensive. Use of add-on controls for outdoor painting was not selected as the basis for MACT for these reasons. It should be noted, however, that a portable enclosure that will contain particulate and VOC during abrasive blasting and coating of ships' hulls is under commercial development. Should these enclosures prove technically and economically feasible, their performance should be considered by any State or the Federal Government in developing future rules for this industry.

Two types of coating operations at shipyards where emissions are more available to capture were examined

more closely for the feasibility of add-on controls: indoor coating operations and painting inside of ship's tanks or other internal enclosed spaces. Based on a brief screening analyses, using the limited available data that assumes all spray areas are continually drafted to the control device (whether painting operations are underway in all areas or not), add-on control was estimated to be on the order of \$150,000/Mg of VOHAP removed. The EPA believes that this cost is not reasonable for this source category. As a result, add-on controls were not investigated further nor selected as the basis for MACT.

In reality, the amount of VOC and HAP controlled at a site is dependent on the rate of paint application, the concentration of these compounds in the exhaust air stream during the painting operation, the flow rate of the air stream flowing into the add-on control unit and a host of other factors. The suitability of add-on controls can only be determined on a case-by-case basis.

After review of alternatives more stringent than the MACT floor, the EPA is proposing to set the MACT standard at the floor based on the California marine coatings rule which is for both new and existing sources. The costs of the control option for new and existing sources is expected to be the same. The Agency solicits comments on this determination.

"Models" of shipyards were developed to help determine the need to differentiate among classes of shipyards in identifying the MACT. Models were developed for classes of yards based on market segment (yards that construct ships versus those that only repair) and size (large versus medium). The EPA concluded there is no basis for differentiating among classes of major source shipyards, but specifically solicits comments on whether this category should be subcategorized; and if so, how.

2. Handling, Transfer, and Storage of VOHAP Containing Material

Based on information received from industry a variety of "work practice" measures are used to reduce evaporative losses of VOC from transfer, handling, and storage of solvent and paint wastes. These include spill minimization techniques (use of spouts, funnels, or catch basins during transfer of liquids from one container to another), the use of normally closed containers or piping to transport liquids, and the use of close-fitting or tight covers on containers for solvent, wet rags, and waste.

Many more than five facilities employ some type of work practice measures. Facilities in California are subject to regulations to minimize evaporative emissions; other facilities employ such measures to decrease solvent usage or to minimize exposure of workers. However, data to quantify accurately the emission reductions achievable by different work practice measures is unavailable. The beneficial effect of a specific change is largely a function of the previous plant practice being remedied. As a result, even though such activities obviously reduce emissions, there is no way to distinguish between the "best controlled source" and the "best performing five existing sources. Therefore, the EPA has designated the same select work practice measures as the MACT floor for control of emissions from handling and transfer of VOHAP containing material at both new and existing facilities. For emissions from storage containers, the MACT floor is use of tight-fitting covers that must be normally closed; that is, in place except when materials are being added to or withdrawn. The Agency believes that this is a reasonable approach. Because work practice measures typically entail negligible cost, any emission reduction that is achieved is believed to be worthwhile. The EPA specifically solicits comments on this determination.

No other more effective control options for these VOHAP emissions from cleaning activities were found. Use of lower-HAP or lower-vapor-pressure substitutes to minimize evaporative losses may be feasible, although this option depends on the availability of a suitable replacement cleaning material.

Capture and control of fugitive emissions from the many transfer, handling, and storage of solvents (and operation wastes) although conceivable, is impractical, making it difficult to invoke any quantifiable standard other than work practice requirements. Associated monitoring and

recordkeeping are included for determining compliance. In an attempt to ensure that employees understand and comply with the requirements, the proposed standards also require each source to implement a training program for all involved personnel.

C. Selection of the Format of the Proposed Standards

1. Coating Operations

Most HAP emissions from coating operations in this industry occur outdoors where the technology for their capture has not been demonstrated. As a result the only available technology for reducing emissions is to require use of coatings with lower volatile content. Virtually all of the HAP and VOC contained in marine coatings are emitted to the atmosphere during the course of application and drying. Thus, an emission standard based on limiting both HAP and VOC content of the coatings, as applied, is appropriate for these operations, particularly because any additional HAP and VOC that may be formed and emitted during the curing process are detected and measured by the reference measurement methodology

As a result, the types of coatings used by the industry were identified and maximum, never-to-be-exceeded HAP limits were selected for each of the several coating categories. To allow additional flexibility the ability to average limits across categories was also considered. Under an averaging approach, any coating regardless of volatile organic content, can be used as long as the volume weighted average as applied VOHAP content; i.e., as measured by the reference method, of all coatings does not exceed the average calculated from their individual limits. In developing the limits, the Agency considered two types of averages: (1) Separate averages for coating within each of the coating categories and (2) a single average for all coatings used by a

facility. The option of establishing limits based on weighted averages of various coatings of different pollution content was abandoned when the industry indicated that time and effort to plan, track, and demonstrate compliance would be too burdensome. As a result, the limits are based on never-to-be-exceeded VOHAP contents for 23 categories of coatings and permits "averaging" for purposes of compliance under certain conditions. The proposed coating categories and associated HAP limits are presented in Table 1.

2. Handling, Transfer, and Storage of VOHAP Containing Material

The proposed work practice standards require that these operations be carried out in such a manner that minimizes spills. For storage and transport, the proposed standards require use of containers that are normally closed.

To provide a measure of enforceability to these standards, each source will be required to indicate how it intends to comply with the standards as part of the initial notification that is required of all sources under the part 63 general provisions. After the Administrator or her designee negotiates and approves these compliance measures as part of the operating permit program, each source will have a specific set of requirements for which compliance can be determined by monitoring, observation and/or inspection.

D. Selection of Compliance Dates

The proposed rule would require that existing sources comply within 1 year after the effective date of the rule. This provides time for shipyards and coating manufacturers to deplete most existing inventories of contemporary coatings. An existing unaffected area source that increases its emissions (or potential to emit) such that it becomes a major source would be required to comply within 1 year after becoming a major source.

TABLE 1 — PROPOSED VOLATILE ORGANIC HAP (VOHAP) CONTENT LIMITS FOR MARINE COATINGS

Coating category	VOHAP limits ^{a,d}		VOHAP _{alt} limits ^{c,d}	
	Grams per liter (g/L)	Pounds per gallon (lb/gal) ^b	Grams per liter (g/L)	Pounds per gallon (lb/gal) ^b
General use	340	2.83	571	4.76
Specialty:				
Air flask	340	2.83	571	4.76
Antenna	530	4.42	1,439	12.00
Antifoulant	400	3.33	765	6.38
Heat resistant	420	3.50	841	7.00
High gloss	420	3.50	841	7.00
High temperature	500	4.17	1,237	10.31
Inorganic zinc high-build primer	340	2.83	571	4.76

TABLE 1 —PROPOSED VOLATILE ORGANIC HAP (VOHAP) CONTENT LIMITS FOR MARINE COATINGS—Continued

Coating category	VOHAP limits ^{a,d}		VOHAP _{alt} limits ^{c,d}	
	Grams per liter (g/L)	Pounds per gallon (lb/gal) ^b	Grams per liter (g/L)	Pounds per gallon (lb/gal) ^b
Military exterior	340	2.83	571	4.76
Mist	610	5.08	2,235	18.63
Navigational aids	550	4.58	1,597	13.31
Nonskid	340	2.83	571	4.76
Nuclear	420	3.50	841	7.00
Organic zinc	360	3.00	630	5.25
Pre-treatment wash primer	780	6.50	11,095	92.46
Repair and maintenance of thermoplastic coating of commercial vessels	550	4.58	1,597	13.31
Rubber camouflage	340	2.83	571	4.76
Sealant coat for thermal spray aluminum	610	5.08	2,235	18.63
Special marking	490	4.08	1,178	9.82
Specialty interior	340	2.83	571	4.76
Tack coat	610	5.08	2,235	18.63
Undersea weapons systems	340	2.83	571	4.76
Weld-through (shop) primer	650	5.42	2,885	24.04

Volatile organic HAP limits (for compliance options 1 through 4) are expressed in units of mass of VOHAP per volume of coating less water and non-HAP "exempt" solvents, as applied. Volatile compounds classified by EPA as having negligible photochemical reactivity are listed as "exempt" in 40 CFR 51.100(s) (except those on the HAP list).

To convert from g/L to lb/gal, multiply by: [(3.785 L/gal)/(lb/453.6 g)] or (lb-L/120 g-gal).

Alternate volatile organic HAP (VOHAP_{alt}) limits (for compliance option 5) are expressed in units of mass of VOHAP per volume of solids, a value that assumes the volumes of all components within a coating are additive.

^d For compliance purposes, the metric limits are the standard.

Any new or reconstructed sources would be required to adhere to the compliance schedule in § 63.6(b) of subpart A of the general provisions. For new or reconstructed sources whose startup date is before the effective date of the rule, the compliance date would be the effective date of the rule. For new or reconstructed sources whose startup date is after the effective date of the rule, the compliance date would be the startup date. A new unaffected area source that increases its emissions (or potential to emit) such that it becomes a major source would be required to comply immediately upon becoming a major source.

Many shipyards in California have been complying with VOC limits equal to those in the proposed BACM since September 1991. Hence, coatings that meet the limits should be readily available.

E. Selection of Compliance Procedures

The proposed rule would allow affected sources to choose from five options for demonstrating compliance with the VOHAP standards. Regardless of the option(s) chosen, for each coating, affected sources would be required to first determine: (1) its coating category in Table 1 (e.g., general use, air flask, antenna, etc.), (2) the applicable VOHAP limit, and (3) the VOC (or VOHAP) content for each manufactured batch of coating. The VOC (or VOHAP) content of the batch would be determined through certification as explained in part III.D. (It is in the best interest of

affected sources to use manufacturers that certify their coatings.)

For options 1 through 4 involving VOC content determinations, the compliance method is the Agency's Method 24. Affected sources would be allowed any of the methods described below to avoid testing every container. The ultimate referee method, however, is Method 24. Option 5 involves VOHAP content determinations; the compliance method has to be approved by the Administrator and comply with EPA requirements for sample preparation.

The proposed rule does not specify compliance procedures for the handling, transfer, and storage standard. Each affected source would be required to develop and include specific compliance procedures for their facility in the initial notification to the Administrator.

An affected source would be allowed to select any of the following methods for compliance and may choose to use only one of the options for all coatings at the facility or use a combination of options.

Option 1. Certification of Each Container or Coating, As-Applied

Procedures for certifying the quantity of VOC emitted by paints, ink, and other coatings are combined in the EPA publication 450/3-84-019 (revised 6/86). Compliance with the VOHAP content limits would be achieved by sampling, testing, and certifying the VOC content of each container of

coating, as applied. If the as-applied VOC content is less than or equal to the VOHAP limit in Table 1, the coating complies.

Option 2. Coatings To Which Thinning Solvent Will Not Be Added

If thinning solvents will not be added to the coating under any circumstances, the affected source may demonstrate compliance with the VOHAP content limit by certifying the as-applied VOC content by manufacturer's batch. The as-applied certification may be based on a coating that has been certified by the manufacturer as to the as-supplied content and simply requires documentation that no thinning solvent was added to the coating. No additional testing would be necessary.

All painters would have to be notified that no thinning solvent may be added to the coating before application. This notification may be accomplished through a label affixed to each container in the batch or through another means of notification specified in the source's initial notification that is required in § 63.9(b) of subpart A of the general provisions. Other means of notifying painters may include use of a bar coding system or posting of a list of coatings that should not have thinning solvents added.

This option is the least burdensome to affected sources, but it may only be used for coatings that will not be thinned. However, any Method 24 tests on individual containers of coating, as applied, that show noncompliance with

the standards would take precedence and indicate a violation.

Option 3. Coatings to Which Thinning Solvent Is Added—Coating-by-Coating Compliance

If thinning solvents are added to the coating, the affected source could determine the allowed level of dilution for purpose of demonstrating compliance on a coating-by-coating basis. The source would determine the as-supplied VOC content of each type of thinning solvent. Then, using the as-supplied certification for the coating and the maximum allowable limit from Table 1, the source would calculate the maximum allowable thinning ratio that would not violate the VOHAP content limit.

The persons responsible for applying each coating shall be notified of the designated thinner and maximum allowable dilution ratio for that coating by affixing a label to each container of coating in the batch or through another means as discussed in the rule.

(A) For coatings and thinning solvents that do not contain water or exempt compounds, use Equation 1 as follows:

$$R_d^+ = \frac{\text{HAP} - \text{VOC}_s}{D_d^+ - \text{HAP}} \quad \text{Equation 1}$$

where:

R_d^+ =Maximum allowable thinning ratio (L thinner/L coating as supplied);

VOC_s =As-supplied VOC content of the coating (g VOC/L coating as supplied, less water and exempt solvents);

HAP_a =Allowable as-applied VOHAP content of the coating (g VOHAP/L coating as applied, less water and exempt solvents);

D_d^+ =Density of the thinners (g thinner/L thinner);

(B) For coatings or thinners that contain water or exempt compound(s), use Equation 2 as follows:

$$R_d^+ = \frac{[1 - (V_w)_s] [\text{HAP}_a - \text{VOC}_s]}{D_d^+ [1 - (W_w)_d] - \text{HAP}_a [1 - (V_w)_d]} \quad \text{Equation 2}$$

where:

$(V_w)_s$ =Volume fraction of water and exempt solvents in the coating as supplied (L water and exempt solvents/L coating as supplied);

$(V_w)_d$ =Volume fraction of water and exempt solvents in the thinner (L water and exempt solvents/L thinner); and

$(W_w)_d$ =Weight fraction of water and exempt solvents in the thinner (g water and exempt solvents/g thinner).

(C) The procedures specified under test methods and procedures may be used to determine the values of variables defined in this paragraph, as necessary.

A source is to determine the total allowable volume of thinner for each coating for the month using the following equation.

$$V_d = \sum_{i=1} (R_d^+ \times V_i) \quad \text{Equation 3}$$

where:

V_d =Total allowable volume of thinner for the coating for the previous month (L thinner);

V_i =Volume of each batch of the coating, as supplied, used during the month (L coating as supplied);

i =Each batch of coating; and

n =Total number of batches of the coating.

If the actual thinner volume used for a coating is less than or equal to the total allowable thinner volume for that coating then compliance is presumed for that coating for the month, unless a violation is revealed using Method 24. (If it is greater, the facility must report a violation.) Any Method 24 test on individual containers of coating, as applied, that shows noncompliance with the standards would take precedence and indicate a violation.

Option 4. A Group of Coatings To Which the Same Thinning Solvent Is Added—Group Compliance

Inasmuch as shipyards may use the same solvent to reduce more than one category of coating, this option was created to minimize recordkeeping in such cases. The group compliance option is similar to the coating-by-coating compliance option, except the source does not need to maintain thinner usage by individual paint category; it would be allowed to calculate the total allowable volume of thinner used for a group of coatings. A group would be constituted based on use of common thinner. A group could consist of two or more different batches of the same coating or different coatings. For example, a group may consist of a certain batch of antenna coating combined with all batches of general use coatings. However, a group may not contain any coating to which thinning solvent will not be added.

Affected sources would calculate the maximum allowable dilution ratio for each coating using equation 1 or 2. All painters would have to be notified of the maximum allowable dilution ratio for each coating. Beginning with the recorded amount of coating used during

the previous month, the facility would calculate the net allowable volume of thinner that could have been used by each coating in the group. If the actual usage was less than or equal to the net allowable volume for the group, the source is in compliance. However, any Method 24 test on individual containers of coating, as applied, that shows noncompliance with the standards would take precedence and indicate a violation. Equations 1 through 3 were derived from the EPA's "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings" (Revised June 1986), EPA-450/3-84-019.

Option 5. Coatings with Noncompliant VOC Contents Used in Areas Without VOC Limits

In those facilities located in areas without required VOC limits for marine coatings (i.e., ozone attainment areas; all 25 of the existing major source facilities are located in current ozone nonattainment areas), the affected source may measure the HAP content using the following techniques and using alternate limits derived from the limits in the regulation to demonstrate compliance on a coating-by-coating basis. The $\text{VOHAP}_{\text{alt}}$ limits were calculated using the maximum allowable VOHAP limits (see Table 1) and an assumed average density for all solvents. To demonstrate compliance, the source would determine (using formulation data from the coating manufacturer) the as-supplied VOC content and volume solids (V_s) of each coating.

Then, using the measured (via any approved test method) VOHAP content divided by the volume solids, compliance can then be determined with the calculated $\text{VOHAP}_{\text{alt}}$ limit. The following equations were used to calculate the alternate VOHAP limits (for coatings that do not contain any exempt solvents or water):*

$$V_s = 1 - \frac{\text{VOC}}{(D_{\text{avg}})} \quad \text{Equation 5*}$$

where:

V_s =Volume fraction of solids in the coating as supplied (L solids/L coating as applied);

VOC=Applicable as-supplied VOC content of the coating (g VOC/L

* Equation 5 only applies to those coatings containing only VOC's and (volume) solids.

** For purposes of this general discussion and example calculation, volume solids (V_s) has been used interchangeably with the term "nonvolatiles."

coating as supplied, less water and exempt solvents; and
 D_{avg} =Average density of solvents in the coating (to demonstrate compliance of a marine coating, use the solvent mixture in the coating to calculate D_{avg} .)

In order to calculate $VOHAP_{alt}$ limits, the VOC content was assumed to be equal to the $VOHAP$ limit for each coating category in Table 1, therefore:

$$V = 1 - \frac{VOHAP \text{ limit}}{D_{avg}}$$

where:

$VOHAP_{limit}$ =Applicable as-applied $VOHAP$ limit of the coating category (g $VOHAP/L$ coating as applied, less water and non-HAP exempt solvents);

D_{avg} =840 g/L (for conversion purposes, the average density of solvents used in all marine coatings).

The $VOHAP_{alt}$ limits were then calculated using the following equation:

$$VOHAP_{alt} = \frac{VOHAP \text{ limit}}{V}$$

Equation 6

where:

$VOHAP_{alt}$ =Allowable as-applied alternate $VOHAP$ content of the coating (g $VOHAP/L$ solids as applied)

V_s =Volume fraction of solids in the as applied coating (L solids/L coating)

If the measured $VOHAP$ contents for a coating divided by the volume solids (V_s) is less than or equal to the calculated $VOHAP_{alt}$ limit in Table 1, then compliance is demonstrated.

An example calculation for determining the $VOHAP_{alt}$ limit for a "general use" coating follows:

First, the $VOHAP$ limit=340 g/L and based on the assumption that the coating is only comprised of VOC and (volume) solids,

$$V = 1 - \frac{VOC}{840 \text{ g/L}}$$

Then,

$$V = 1 - \frac{340 \text{ g/L}}{840 \text{ g/L}} = 0.595$$

$$VOHAP_{alt} = \frac{VOHAP \text{ limit}}{V}$$

$$V = 1 - \frac{392 \text{ g/L}}{880 \text{ g/L}} = \frac{0.555 \text{ L solids}}{\text{L coating}}$$

$$VOHAP \text{ content} = \frac{288 \text{ g/L less water}}{V} = \frac{288 \text{ g/L less water}}{0.555 \text{ L solids/L coating}}$$

$$VOHAP \text{ content} = 519 \text{ g } VOHAP/L \text{ solids}$$

Compliance for the coating is therefore demonstrated because the $VOHAP$ content of 519 g/L solids is less than the $VOHAP_{alt}$ limit of 571 g/L solids.

F. Selection of Test Methods and Procedures

Since the EPA does not yet have a published reference method for analyzing for the amount of $VOHAP$ in a coating, the measure of total VOC is to be used as a surrogate. Method 24 is the Agency's reference method for determining the total volatile organic content (the total amount of $VOHAP$ and other volatile organics). The proposed rule would use the VOC content of as-applied coatings to determine compliance with the $VOHAP$ content limits (see section VII.B.1).

Most, if not all, major shipbuilding facilities are believed to be located in ozone nonattainment areas. These facilities are likely to be required to

meet State VOC regulations requiring BACM. As explained earlier in this notice, the EPA's draft recommended BACM for the draft CTG contains VOC limits equivalent to the $VOHAP$ limits being proposed. Thus, using Method 24 to measure compliance with both the VOC and HAP rules (i.e., one test to satisfy two concerns) should be the least burdensome route of any source having to meet VOC rules in addition to HAP rules. However, in case there are any sources which are not required to meet VOC rules and have a desire to determine compliance through measuring $VOHAP$ instead of VOC, an approach as outlined in option 5 is being proposed. (Comments are requested.)

The proposed rule would require that affected sources use forms and procedures comparable to those in the EPA's "Procedures for Certifying Quantity of Volatile Organic

When the as-applied coating contains thinner and/or exempt compounds, special allowances (calculations) must be

$$VOHAP_{alt} = \frac{340 \text{ g/L}}{0.595} = \frac{571 \text{ g } VOHAP}{\text{L solids}}$$

used to determine $VOHAP_{alt}$ limits. These special allowances and procedures for compliance testing are covered in a June 30, 1994, memo to the project file [Docket A-92-11, II-B-26] from Dr. Mohamed Serageldin.

To further illustrate the $VOHAP_{alt}$ limit calculations, the following example is provided: A shipyard wants to use (demonstrate compliance using option 5) a general use coating with a VOC content of 392 g/L less water and exempt solvents, a measured $VOHAP$ content of 288 g/L less water, and an average solvent density of 880 g/L. Since the $VOHAP$ limit for general use coatings is 340 g/L less water, the $VOHAP_{alt}$ limits were calculated to be 571 g $VOHAP/L$ solids (see Table 1).

Compounds Emitted by Paint, Ink and Other Coatings, (Revised June 1986) EPA-450/3-84-019 for all certifications needed for compliance demonstrations. Consistent use of these forms and procedures will provide uniform and complete records that will allow determination of "continuous" compliance with the standards.

Procedures other than test methods would be required to demonstrate compliance with the handling, transfer, and storage standard. Each source is required to submit an implementation plan that will include specific procedures to ensure compliance.

G. Selection of Notification, Recordkeeping, and Reporting Requirements

1. Notification Requirements

The proposed rule would require affected sources to submit an initial notification and subsequent quarterly

notifications of compliance status. Exceedances (violations) should be reported on a quarterly basis. The notification requirements in §§ 63.9 (a)–(d) and (h)–(j) of subpart A would apply to all affected sources in addition to the source category-specific requirements in the proposed rule. Sections 63.9 (e)–(g) of subpart A would not apply unless an affected source installs an add-on control device.

Section 63.9(b) of subpart A contains the initial notification requirements. The initial notification would alert the Administrator of: (1) The applicability for existing facilities or of construction for new facilities, (2) how the source plans to comply with the proposed standards, and (3) if any delays in compliance are expected. This notification would be due no later than 120 calendar days after the effective date of the rule for existing sources; for new or reconstructed sources, the due date would be within 120 days after initial startup if approval of construction or reconstruction is not required under § 63.5(d) of subpart A. In addition to the items listed in § 63.9(b) of subpart A, sources would be required to include in the initial notification: (1) The compliance procedure(s) that they intend to use for the coating operation standards; (2) procedures for ensuring compliance with the handling, transfer, and storage standard; and (3) procedures for maintaining records.

Section 63.9(h) of subpart A contains the requirements for notification of compliance status. These would notify the Administrator of whether compliance has been achieved over the past 3 months. These notifications would be due before the 60th day following completion of each 3-month period. If there are no violations within the first year, compliant sources may request permission from the Administrator to go to 6-month notifications. Because records would be compiled on a monthly basis, 60 days should provide sufficient time to prepare these notifications. In addition to the items listed in § 63.9(h) of subpart A, affected sources would be required to include in these notifications all other records that the source is required to maintain and compile on a monthly basis according to the proposed rule.

2. Recordkeeping and Reporting Requirements

The proposed rule would require affected sources to maintain adequate records to verify the compliance status of the source on a monthly basis. The recordkeeping and reporting requirements of the general provisions in §§ 63.10 (a)–(b) and (f) of subpart A

would apply to all affected sources. The source category-specific requirements in the proposed rule also apply. Sections 63.10 (c)–(e) of subpart A would not apply unless an affected source installs an add-on control.

Affected sources would be required to keep records for 5 years of all VOC content certifications, VOHAP content certifications, maximum allowable dilution ratios, quantities of coatings and thinner consumed, and compliance calculations needed to determine compliance with the standards. These records would vary slightly depending on the method(s) of determining compliance under § 63.784 that the source chooses to use. Records of any Method 24 tests (or VOHAP tests) conducted on individual coatings, as applied, would also be maintained. These records are required in case the results of any such test conflicts with the results of any compliance determination conducted in accordance with the other allowable methods.

The Administrator believes that the records required under the proposed rule are necessary for a regulatory agency to determine the compliance status of an affected source efficiently and effectively. All records would be compiled each calendar month and maintained for a minimum of 5 years.

H. Operating Permit Program

Under the operating permit regulations codified at 40 CFR part 70, any source that is considered major under the Act or any nonmajor source subject to a standard under sections 111 or 112 of the Act must obtain an operating permit [see § 70.3(a)(1)]. Often, emission limits, monitoring, and reporting and recordkeeping requirements are scattered among numerous provisions of State implementation plans or Federal regulations. As discussed in the promulgated regulation for the operating permit program published on July 21, 1992 (57 FR 32250), this new permit program includes all of the air pollution control requirements that pertain to a single major stationary source in a single document. Sources subject to the program are required to submit complete permit applications within a year after a State operating permit program is approved by the EPA; if a State program is not approved, sources will submit applications to the EPA within a year after the Federal program is promulgated.

I. Solicitation of Comments

The Administrator solicits comments on all aspects of this proposal. However, the Administrator is specifically

requesting comment on the topics discussed in this section. Commenters should provide available data and rationale to support their comments on each topic.

The Administrator specifically requests comments on the MACT floor determination, subcategorization, and claims by some shipyards on the need for thinning solvents beyond levels indicated by the manufacturer because of viscosity problems attributable to extremely cold weather. Specifically, comments are requested on: (1) Are such needs compulsory or more convenience, (2) why in-line heaters would not provide sufficient viscosity control, (3) what extreme climatic conditions (e.g., temperature, humidity etc.) would justify excess thinning, (4) how such additional solvent could be linked in quantity (e.g., dilution to a preapproved viscosity setpoint), and (5) any other information that would help the Agency in this matter.

The Administrator also requests comments on the timeframe for submitting items in the initial notification that are not required under the General Provisions §§ 63.9(b) (2) and (3) of subpart A. These items are the compliance procedure(s) that the source intends to use to demonstrate compliance; procedures for ensuring compliance with the handling, storage, and transfer standards; and procedures for maintaining records. Specifically comments are requested on whether 120 days is sufficient time to prepare and submit these items.

VIII. 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 oral presentation on the proposed standards for coating operations at shipbuilding facilities 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 and Information Center address given in the ADDRESSES section of this preamble, and should refer to Docket No. A-92-11.

A transcript of the hearing and written statements will be available for public inspection and copying during normal working hours at the EPA's Air and Radiation Docket and Information

Center in Washington, DC (see ADDRESSES section of this preamble).

B. Docket

The docket is an organized and complete file of all the information submitted to or otherwise considered by the EPA in the development of 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))].

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. The proposed rule for coating operations at shipbuilding facilities does not meet any of the criteria in the Executive Order and is therefore not subject to the requirement for a regulatory impact analysis.

It has been determined that this rule is not a "significant regulatory action" under the terms of the E.O. 12866 and is therefore not subject to OMB review.

D. Paperwork Reduction Act

The information collection requirements in the 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 document has been prepared by the EPA (ICR No. 1712.01), and a copy may be obtained from Ms. Sandy Farmer, Information Policy Branch, U.S. Environmental Protection

Agency, 401 M Street SW (Mail Code 2136), Washington, DC 20460 or by calling (202) 260-2740.

The public reporting burden for this collection of information is estimated to average 845 hours per source 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. The cost for this additional burden per source is estimated to be \$27,158 during the first year.

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 Information and Regulatory Affairs, 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.

E. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires the EPA to consider potential impacts of proposed regulations on small business "entities." If a preliminary analysis indicates that a proposed regulation would have a significant economic impact on 20 percent or more of small entities, then a regulatory flexibility analysis must be prepared.

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. Using the Small Business Administration's definition of small business for SIC Code 3731 of less than 1,000 employees, and examining the result of the economic impact analysis it has been determined that no small entities will be affected by the proposed rule. Therefore, a preliminary assessment of the impact of today's proposed rule on small entities indicated that a regulatory flexibility analysis is not required.

F. 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 will welcome comments on all aspects of the proposed rule,

including health, economic, technological, or other aspects.

G. 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 reporting and recordkeeping requirements.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements, Standard for shipbuilding and ship repair facilities.

X. 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.

Dated: November 22, 1994.

Carol M. Browner,
Administrator.

[FR Doc. 94-29824 Filed 12-5-94; 8:45 am]
BILLING CODE 6560-40-P

GENERAL SERVICES ADMINISTRATION

41 CFR Parts 201-1, 201-2, 201-3, 201-4, 201-6, 201-7, 201-9, 201-17, 201-18, 201-20, 201-21, 201-22, 201-24, and 201-39

RIN: 3090-AF31

Amendment of FIRMR Provisions to Ensure Currency and Relevancy

AGENCY: Information Resources Management Service, GSA.

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes to amend selected Federal Information Resources Management Regulation (FIRMR) provisions to ensure the currency and relevancy of the FIRMR. It is issued in accordance with Executive Order 12866 of September 30, 1993, which requires agencies to periodically review their significant regulations to determine whether they should be modified or eliminated.

This rule will make a number of changes to the FIRMR. Among the more significant changes, are the following:

add, change, or remove FIRM definitions and acronyms including redefining "outdated equipment" to mean FIP equipment over six years old that is no longer in current production; revise provisions pertaining to accessibility by individuals with disabilities to implement the new focus in Pub. L. 102-569 on information rather than equipment; permit agency heads to grant exceptions to the mandatory use of a Federal Standard (FED-STD) after notification to GSA, clarify the intent of the FIRM requirement for agencies to conduct requirements analyses "commensurate with the size and complexity of the need"; allow agencies to substitute similar documentation prepared in response to programmatic needs for requirements analyses; establish a threshold below which agencies do not have to prepare a requirements analysis or analysis of alternatives; clarify that agencies should only perform an analysis of alternatives for those alternatives most feasible to implement; raise the threshold from \$50,000 to \$1,000,000 for doing an analysis of alternatives limited to demonstrating that the benefits of the acquisition will outweigh the costs; require agencies that conduct telephone monitoring to use some form of oral notice or a beep tone at the beginning of a call; remove the reporting requirements to GSA for listening-in to or recording telephone conversations and toll-free telephone service; clarify procedures for economical capability and performance validation; revise the scope of obsolescence reviews to include equipment that may be obsolescing; expand the exception from \$300,000 to \$1,000,000 for award based on lowest offered purchase price; clarify that agencies must submit post delegation information to GSA for specific acquisition delegations; clarify procedures for evaluating outdated and obsolete information technology and remove an antiquated clause concerning warranty exclusion and limitation of damages.

DATES: Comments are due: February 6, 1995.

ADDRESSES: Comments may be mailed to GSA/KMR, 18th & F Streets, NW., Room 3224, Washington, DC 20405, Attn: Margaret Truntich, or delivered to that address between 8 a.m. and 4:30 p.m.

FOR FURTHER INFORMATION CONTACT: Margaret Truntich, GSA, Office of Information Resources Management Policy Regulations Analysis Division (KMR), 18th & F Streets, NW., Room 3224, Washington, DC 20405, telephone

FTS/Commercial (202) 501-0837 (v) or (202) 501-0657 (tdd).

SUPPLEMENTARY INFORMATION: (1)

Explanation of changes being made by this issuance are shown below:

(a) Sections 201-1.003(a), 201-3.000, 201-3.001(a), 201-3.101, 201-3.201(d), 201-3.3 and the title to part 201-3 are amended by deleting references to the FIRM system. The FIRM system was established to permit agencies to issue regulations that implement or supplement the FIRM as part of the CODE of Federal Regulations (CFR). GSA has determined that agencies have not issued such regulations in the CFR since the establishment of the FIRM, and that a FIRM system is therefore, unnecessary. Removal of this provision does not mean that agencies may not issue internal agency directives or orders to implement or supplement FIRM provisions.

(b) Section 201-1.003 paragraph (d) is amended by deleting responsibilities of the Archivist of the United States. It is the intent of the FIRM to only implement GSA's authorities and responsibilities. Including the Archivist's responsibilities in the FIRM is, therefore, unnecessary.

(c) Section 201-2.001 paragraphs (a) (1) through (6) are removed. The original text was taken from the Paperwork Reduction Act. However, not all provisions were excerpted. This resulted in some confusion. Accordingly, the text is being removed so that agencies will refer to the Paperwork Reduction Act to learn the specific responsibilities of the designated senior official.

(d) Section 201-2.001 paragraph (b) is amended by removing the last sentence which pertained to agencies not subject to the Paperwork Reduction Act. This information is adequately covered in § 201-2.002.

(e) Section 201-2.002 is amended by changing the sequence of paragraphs (a) through (c). The revised sequence more accurately aligns the responsibilities of the agency designated senior official (DSO).

(f) Section 201-3 discuss the organization of the FIRM, how it is supplemented with other guidance issuances, and its relationship to the Federal Acquisition Regulation (FAR). Section 201-3.001 is amended to remove unnecessary details which pertain to circumstances giving rise to interim rules. This information is more appropriately discussed in § 201-3.203. Section 201-3.203 paragraph (c) replaces the term "temporary change" with the words "interim rule" to standardize terminology pertaining to

revising the FIRM. Also removed for brevity is a redundant sentence that lists the various types of guidance material already described. For consistency, the enumeration of the types of guidance issuances contained in the FIRM (§ 201-3.001(b) (1) through (3)) is changed to small roman numerals.

(g) Section 201-3.001 paragraph (b)(1) is amended to reflect the current availability of the FIRM on CD-ROM.

(h) Section 201-3.204 paragraph (a) is amended to update the phone number for the Government Printing Office (GPO) Bookstore.

(i) In §§ 201-4.001 and 201-39.201, the definition for outdated FIP equipment is revised to shorten the period for determining when FIP equipment is outdated. The FIRM defines outdated FIP equipment as any FIP equipment over eight years old, based on the initial commercial installation date of that model of equipment, and that is no longer in current production. This definition has been in existence since 1986 when the product cycle of computer equipment was four years. Since that time, the product life cycle has decreased to about three years, and industry spokesmen state that this figure is decreasing even more. When microcomputers are upgraded, the product cycle may be even less since typically they are upgraded by replacing internal computer equipment has little or no market value. In recognition of these facts, the definition for outdated equipment is being revised to shorten the time interval from eight to six years after the first commercial installation at which point equipment no longer produced is considered to be outdated.

(j) Section 201-4.001 is amended by adding a new definition for "Records management." The FIRM discusses records management in subpart 201-9.1, but has never included a definition. The definition added is the same as contained in OMB Circular A-130. Also, the existing definitions of "application software" and "common-use software" are designated (a) and (b) respectively of the larger term, "Software" for consistency of format.

(k) Section 201-4.002 is revised to include the following new acronyms: CBD, FED-STD, FSTS, GAO, GSBGA, IRPMR, MIL, OAC, and POTS. These acronyms were used in the FIRM index, but previously were not defined.

(l) Section 201-4.003, Applicable OMB Circulars, is being added. In order to avoid future changes to FIRM text caused by revisions of OMB Circular titles, this new section is added to include the current titles of all OMB Circulars referenced in the FIRM.