ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 372

[OPPTS–400104D; FRL–5578–3]

RIN 2070–AC71

Addition of Facilities in Certain Industry Sectors; Revised Interpretation of Otherwise Use; Toxic Release Inventory Reporting; Community Right-to-Know

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is adding seven industry groups to the list of facilities subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and section 6607 of the Pollution Prevention Act of 1990 (PPA). These industry groups are metal mining, coal mining, electric utilities, commercial hazardous waste treatment, chemicals and allied products-wholesale, petroleum bulk terminals and plants-wholesale, and solvent recovery services. EPA believes that the addition of these industry groups to the EPCRA section 313 list will significantly enhance the public's knowledge about releases, transfers, and other waste management of toxic chemicals. EPA is taking this action pursuant to its authority to add to the list those facilities that meet the standard of EPCRA section 313(b)(1)(B). Reporting for facilities within these industry groups will be effective beginning with the 1998 reporting year. The first reports from the added facilities must be submitted to EPA and the States by July 1, 1999. EPA is also revising its interpretation of the threshold activity, ``otherwise use'' and this interpretation is reflected in the revised definition. This change is effective beginning with the 1998 reporting year. The first reports from any covered facilities using the revised interpretation must be submitted on or before July 1, 1999. Finally, EPA is announcing it will initiate an intensive stakeholder process to comprehensively evaluate the current reporting forms and reporting practices.

EFFECTIVE DATE: This rule is effective December 31, 1997, for the reporting year beginning on January 1, 1998.

FOR FURTHER INFORMATION CONTACT: Tim Crawford at 202-260-1715, e-mail: crawford.tim@epamail.epa.gov for specific information regarding this final rule. For further information on EPCRA section 313, contact the Emergency Planning and Community Right-to-Know Information Hotline, Environmental Protection Agency, Mail Stop 5101, 401 M St., SW., Washington, DC 20460, Toll free: 1-800-535-0202, in Virginia and Alaska: 703-412-9877 or Toll free TDD: 1-800-553-7672.

SUPPLEMENTARY INFORMATION:

I. Introduction

A. Regulated Entities

Entities regulated by this final action are those facilities within the Standard Industrial Classification (SIC) codes being added by this rule and certain facilities in SIC codes 20 through 39, which manufacture, process, or otherwise use chemicals listed at 40 CFR 372.65 and meet the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), 42 U.S.C. 13106. The potentially regulated categories and entities include:

Category	Examples of regulated entities
Industry; facilities that manufacture, process, or otherwise use certain chemicals	Metal mining, Coal mining, Electric utilities, Commercial hazardous waste treatment, Chemicals and allied products-wholesale, Petroleum bulk terminals and plants-wholesale, Solvent recovery services, Manufacturing.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility is regulated by this action, you should carefully examine this final rule and the applicability criteria in part 372 subpart B of Title 40 of the Code of Federal Regulations.

B. Statutory Authority

This final rule is issued under sections 313(b) and 328 of EPCRA, 42 U.S.C. 11023(b) and 11048. EPCRA is also referred to as Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) (Pub. L. 99-499).

Section 313 of EPCRA requires certain facilities manufacturing, processing, or otherwise using listed toxic chemicals to report certain facility-specific information about such chemicals, including the annual quantities of the chemicals entering each environmental medium. Beginning with the 1991 reporting year, such facilities also must report source reduction and recycling data for such chemicals, pursuant to section 6607 of the Pollution Prevention Act (PPA), 42 U.S.C 13106. The information reported under section 313 of EPCRA and section 6607 of PPA provides the input for a publicly available data base, the Toxics Release Inventory (TRI). Section 313(b)(1)(A) specifically applied these reporting requirements to owners and operators of facilities that have 10 or more full time employees (FTEs) and that are in SIC codes 20 through 39. EPCRA section 313(b) authorizes EPA to add facilities and industry groups to the EPCRA section 313 list. The purpose of this final rule is to expand the universe of facilities that are subject to reporting under EPCRA section 313 and PPA section 6607.

II. Background of this Rulemaking

A. General Background

On June 27, 1996 (61 FR 33588) (FRL± 5379±3), EPA issued a proposal in the **Federal Register** to add seven industry groups to the list of facilities subject to the reporting requirements of section 313 of EPCRA and section 6607 of PPA (hereafter collectively referred to as ``EPCRA section 313 reporting requirements''). Those industry groups are metal mining, coal mining, electric utilities, commercial hazardous waste treatment, chemicals and allied products-wholesale, petroleum bulk plants and terminals-wholesale, and solvent recovery services. As discussed in the proposed rule (at 61 FR 33592), Congress gave EPA clear authority to expand TRI, both in terms of the chemicals reported and the facilities required to report. The initial list of chemicals and facilities identified in the original legislation was meant as a starting point. Congress recognized that the TRI program would need to evolve to meet the information needs of a better informed public and to fill information gaps that would become more apparent over time. The information EPA is seeking to provide to the public through this action is generally unavailable at present. While many of these non-manufacturing facilities may be subject to various reporting requirements at the Federal, State, and local levels, none of these reporting systems are comparable to TRI.

EPA first announced its intention to consider the expansion of TRI to include facilities in additional industry groups at a public meeting held on May

29, 1992 (57 FR 19126). EPA's initiative to expand the coverage of TRI to include additional industry groups was undertaken to more completely account for the use, management, and disposition of EPCRA section 313 toxic chemicals in the U.S., and to provide the public, all levels of government, and the regulated community with information that will improve decision making, measurement of pollution, and the understanding of the environmental and health consequences of toxic chemical releases and other waste management activities. EPA's proposal was intended to address this issue. The industry groups being finalized today are responsible for the ``manufacture,'' ``process,'' ``otherwise use,'' release and other waste management of substantial quantities of EPCRA section 313 chemicals, and are engaged in activities similar to or related to activities conducted at facilities within the manufacturing sector that currently report.

B. Outreach

Prior to the proposed rule, EPA engaged in a significant and comprehensive outreach effort. This outreach served to inform interested parties, including industry groups under consideration, state regulatory officials, environmental organizations, labor unions, community groups, and the general public of EPA's intention to propose adding industry groups to the EPCRA section 313 list. The outreach effort also allowed EPA to gather additional information that assisted in the development of the proposed rule. EPA held two formal public meetings in 1992 and 1995 prior to the proposed rule (57 FR 19126 and 60 FR 21190), and held three public meetings during the comment period for the proposal (61 FR 33619 and 61 FR 40637). In addition, EPA used the regularly-held public meetings of the Forum on State and Tribal Toxics Action (FOSTTA), which represents state environmental agencies, and the National Advisory Council on Environmental Policy and Technology, which includes members from industry, environmental organizations, states, and academia, to discuss the expansion of EPCRA section 313 reporting requirements to new industry groups.

EPA used a number of other approaches to gather and share information regarding the expansion of EPCRA section 313 reporting requirements prior to publication of its proposal. Beginning in 1994, EPA held a considerable number of meetings with interested parties regarding this initiative, including what were referred to as ``focus group meetings,'' and routinely met with interested parties. EPA also provided considerable information regarding its intentions to expand EPCRA section 313 reporting requirements through the annual TRI Data Release, notices in the **Federal Register**, public statements by EPA officials, media coverage, data and analytical analyses provided to industry, and significantly, a Presidential address on August 8, 1995, that set out very clearly the Administration's commitment to the expansion of community right-to-know. EPA received substantial public comment prior to the proposal, and considered these comments in its deliberations to develop the proposal. Additional information regarding EPA's outreach may be found at Unit II.B. of the proposal (61 FR 33590) and in supporting documents included in the Public Docket.

C. Development of Industry Group Candidates

Prior to the proposed rule, EPA designed and executed a screening process intended to identify those industry groups potentially most relevant to the purposes of EPCRA section 313. EPA began its screening process by analyzing what limited chemical use, release and waste management information was already available for those industries. EPA reviewed several existing EPA data systems, including the Aerometric Information Retreival System (AIRS), the Biennial Report System (BRS), and the Permit Compliance System (PCS). The initial screening activity ranked industries at the 2-digit SIC code level by the volume of EPCRA section 313 chemicals identified in these systems which could be estimated for each of the data reporting systems (see 61 FR 33591). Those 2-digit SIC codes that made up 99 percent of the matched EPCRA section 313 chemical release volumes for non-manufacturing facilities were selected from each reporting system. This list of 25 2-digit SIC codes was referred to as the ``Tier I'' list for further consideration.

The Tier I list represented an extremely large number of diverse individual industries. EPA collected and compiled information detailing the specific activities conducted by facilities within each of the 2-digit SIC codes, identified on the Tier I list with emphasis on those activities that may involve section 313 chemicals. This industry-specific information for each 2-digit SIC code, as well as chemical-specific data were integrated into documents referred to as ``industry profiles.'' The next phase in the screening process compared the types of activities they perform to the EPCRA section 313 threshold activities and the services these industry groups provide to the manufacturing sector. To further refine the analysis, EPA collected and assessed data reported in EPA data systems at the more specific 4-digit SIC code level. These data were then incorporated into a ranking model that allowed the analysis of large volumes of information, further increasing the level of specificity and detail of this analysis. The last stage in the screening process overlayed regulatory definitions, existing program guidance, and any exemptions pertinent to activities identified for the primary candidates. This stage of the analysis allowed EPA to evaluate the degree to which EPCRA section 313 reporting would be expected to occur for these ``candidate industry groups.'' Additional detail regarding the screening process is provided in Unit II.C. of the proposal (see 61 FR 33591).

EPA did not include certain industry groups for consideration in the proposal based on a number of unresolved issues, which were referred to as ``additional considerations'' in the proposal. Among these issues included significant intergovernmental impacts; economic considerations; non-listed primary chemical association (i.e., questions remain regarding the industry's routine involvement with EPCRA section 313 listed toxic chemicals); and the definition of a standard facility unit. Discussion of these issues is found at Unit II.D. of the proposal (see 61 FR 33592).

D. Statutory Construction

Congress provided EPA with explicit statutory authority to expand the categories of facilities required to report to TRI beyond those specified in section 313(b)(1)(A), which applies EPCRA section 313 to facilities that are in SIC codes 20 through 39. The seven additional industry groups were proposed based on the authority provided in EPCRA section 313(b)(1)(B), which states:

> The Administrator may add or delete Standard Industrial Classification Codes for purposes of subparagraph (A), but only to the extent necessary to provide that each Standard Industrial Classification Code to which this section applies is relevant to the purposes of this section.

EPA believes that this provision grants the Agency broad, but not unlimited, discretion to add industry groups to the facilities subject to EPCRA section 313 reporting requirements where EPA finds that reporting by these industries would be relevant to the purposes of EPCRA section 313. Thus, the statute directs

EPA, when adding industry groups, to consider and be guided by the ``purposes'' of EPCRA section 313. EPCRA section 313(h) states that:

> The release forms required under this section are intended to provide information to the Federal, State, and local governments and the public, including citizens of communities surrounding covered facilities. The release form shall be available... to inform persons about releases of toxic chemicals to the environment; to assist governmental agencies, researchers, and other persons in the conduct of research and data gathering; to aid in the development of appropriate regulations, guidelines, and standards; and for other similar purposes.

Based on the Agency's reading of the statute, pertinent legislative history, and a General Accounting Office (GAO) report critically analyzing the TRI program, the proposal identified several purposes of the EPCRA section 313 program, as envisioned by Congress, including: (1) Providing a complete profile of toxic chemical releases and other waste management activities; (2) compiling a broad-based national data base for determining the success of environmental regulations; and (3) ensuring that the public has easy access to these data on releases of toxic chemicals to the environment. EPA considered these purposes when exercising its discretion to add particular industries to EPCRA section 313. Additional discussion of EPA's statutory authority for its proposed action can be found at Unit III.A. of the proposal (see 61 FR 33592).

III. Summary of Proposal

A. Interpretation of Statutory Standard

For purposes of the proposed rule, which was EPA's first use of section 313(b)(1)(B), EPA identified three primary factors to consider in determining whether the statutory standard would be met by addition of the candidate facilities in industry groups under EPCRA section 313(b)(1)(B). The three primary factors identified by EPA are the following: (1) Whether one or more toxic chemicals are reasonably anticipated to be present at facilities within the candidate industry group (``chemical'' factor); (2) whether facilities within the candidate industry group ``manufacture,'' ``process,'' or ``otherwise use'' these toxic chemicals (``activity'' factor); and (3) whether facilities within the candidate industry group can reasonably be anticipated to increase the information made available pursuant to EPCRA section 313, or otherwise further the purposes of EPCRA section 313 (``information'' factor). Additional discussion of this interpretation of statutory standard may be found at Unit III.B. of the proposal (see 61 FR 33593).

B. Clarification of Threshold Activities

EPA proposed to modify its interpretation of activities considered ``otherwise used'' as it applies to activity thresholds under EPCRA section 313(f). In 1988, EPA promulgated a definition of ``otherwise use'' that recognized the purposes of the statute and the statutory definitions of ``manufacture'' and ``process.'' The definition of ``otherwise use'' included certain activities that were not ``manufacturing'' or ``processing.'' See 40 CFR 372.3.

However, given that section 313 originally applied to those facilities which principally operate in the manufacturing sector, past reporting guidance was tailored to address the principal activities conducted by manufacturing facilities. That guidance instructed facilities not to include the amounts treated (including treatment for destruction and waste stabilization) or disposed toward the ``manufacture,'' ``process,'' or ``otherwise use'' threshold. However, as EPA considered its interpretive guidance on ``otherwise use'' for purposes of its industry expansion initiative, EPA was concerned that, as a result of its past guidance, the public may not have access to information relating to the use and releases and other waste management activities of toxic chemicals by facilities within SIC codes 20 through 39 that are receiving materials for purposes of treatment for destruction, stabilization, or disposal. This guidance would also result in information gaps relating to the use and releases and other waste management activities of toxic chemicals by facilities within the candidate industry groups.

Therefore, EPA proposed modifying its interpretation of activities considered ``otherwise used'' to include treatment for destruction, disposal, and waste stabilization when the EPCRA section 313 facility engaged in these activities receives materials containing any chemical (not limited to EPCRA section 313 listed toxic chemicals) from one or more other facilities (regardless of whether the generating and receiving facilities have common ownership) for purposes of further waste management.

EPA proposed to define ``treatment for destruction'' to mean the destruction of the toxic chemical such that the substance is no longer a toxic chemical subject to EPCRA section 313 reporting requirements. EPA proposed to define ``waste stabilization'' consistent with the definition at 40 CFR 265.1081, the definition that is used in the Resource Conservation and Recovery Act (RCRA) program. For purposes of EPCRA section 313, the definition would be interpreted to apply to any EPCRA section 313 listed toxic chemical or waste containing any EPCRA section 313 listed toxic chemical. Also, for purposes of the EPCRA section 313 ``otherwise use'' reporting threshold, EPA proposed to interpret disposal to include underground injection, placement in landfills/surface impoundments, land treatment, or other intentional land disposal. A more thorough discussion of this clarification of threshold activities is found at Unit IV. of the proposal (see 61 FR 33595).

C. Technical Review

For each industry group proposed for addition to EPCRA section 313, EPA conducted an extensive assessment. The information summarized in the proposed rule for each industry group describes the key data elements upon which EPA relied to determine that the addition of facilities in the industry group was relevant to the purposes of EPCRA section 313. This information may be found at Units V.A through V.G. in the proposed rule (see 61 FR 33598). EPA's assessment of these industries is based on the Office of Management and Budget Standard Industrial Classification (OMB SIC) Manual, 1987 (Ref. 4). EPA is aware that OMB has recently revised the classification system (see 62 FR 17288). EPA will issue a notice in the **Federal Register** that will cross reference the OMB SIC Manual 1987 and OMB's recent revisions to identify manufacturing sector groups and industry groups added to today's rule. The following is a brief summary for each of the proposed industry groups:

EPA proposed to require that facilities operating in SIC code 5169, Wholesale Nondurable Goods– Chemicals and Allied Products, Not Elsewhere Classified (hereafter ``Chemicals and Allied Products''), be subject to the EPCRA section 313 reporting requirements. Facilities within this industry group receive EPCRA section 313 chemicals in bulk, take possession of those chemicals and reformulate, blend, and repackage materials containing section 313 chemicals for further distribution in commerce.

EPA proposed to require that petroleum facilities in SIC code 5171 be subject to the EPCRA section 313 reporting requirements. This industry group includes facilities that receive petroleum products and petroleum additives that contain EPCRA section 313 chemicals, take possession of those chemicals and reformulate, blend, and

repackage petroleum products prior to distribution in commerce.

EPA proposed to require that coal and oil-fired electric utility plants in SIC code 49 be subject to the EPCRA section 313 reporting requirements. These facilities are classified in SIC code 4911-Electric Services, SIC code 4931-Electric and Other Services Combined, and SIC code 4939-Combination Utilities, Not Elsewhere Classified. EPA requested additional comment on whether to add SIC code 4960-Steam and Air Conditioning Supply.[1] Nuclear, hydroelectric, gas and other non coal/oil-fired electric generating stations typically do not generate power for distribution in commerce by combusting fuel containing EPCRA section 313 listed toxic chemicals. EPA proposed to add only those facilities within this industry group which combust fuels containing EPCRA section 313 listed toxic chemicals. While EPA recognized that non coal/oil-fired electric generating stations may otherwise use EPCRA section 313 chemicals in maintenance, cleaning, and purifying operations, and that information on releases and other waste management data from these activities may have some value, these support activities are not the primary function of the facility. Thus, EPA chose, at this time, to limit its proposal to the addition of coal and oil-fired plants in the proposed rulemaking.

EPA also proposed to require that facilities engaged in metal mining be subject to the EPCRA section 313 reporting requirements. The proposed addition was limited to facilities in SIC code 10-Metal Mining except SIC code 1081-Metal Mining Services. Facilities in SIC code 1081 generally do not conduct threshold activities; activities performed by facilities in SIC code 1081 primarily consist of contracted services for mining operations in the other SIC codes.

EPA also proposed to require that facilities engaged in coal mining be subject to the EPCRA section 313 reporting requirements. The proposed addition was limited to facilities in SIC code 12-Coal Mining except SIC code 1241-Coal Mining Services. EPA does not believe that SIC code 1241 includes facilities which conduct threshold activities or routinely handle large volumes of EPCRA section 313 chemicals.

EPA believed that activities associated with beneficiation in both metal and coal mining operations include EPCRA section 313 threshold activities and would result in reports relevant to the purposes of EPCRA section 313. As a result of EPA's evaluation of coal mining, the Agency believes, based on currently available data, that facilities in this industry which conduct only extraction are unlikely to submit reporting information. EPA based this conclusion on its belief that EPCRA section 313 chemicals are not present above *de minimis* concentration levels during coal extraction, and the use of EPCRA section 313 chemicals in coal extraction activities in concentrations above *de minimis* is unlikely to occur. Therefore, EPA proposed to exempt extraction activities conducted by facilities in SIC code 12 from all EPCRA section 313 reporting requirements. EPA proposed to interpret "extraction" for purposes of EPCRA section 313 to mean the physical removal or exposure of ore, coal, minerals, waste rock, or overburden prior to beneficiation, and encompasses all activities related to extraction prior to beneficiation.

EPA also requested comment regarding whether a similar exemption should be applied to metal mining extraction as well. Based on existing data, EPA believed that metal mining extraction and coal mining extraction are similar types of operations, and that the use of EPCRA section 313 chemicals in concentrations above *de minimis* during extraction is unlikely in both industries. However, EPA recognized that the composition of extracted material is different in metal mining and coal mining and EPA believed that EPCRA section 313 chemicals can be present above *de minimis* concentrations in metal ore.

EPA proposed to require that facilities classified within SIC code 4953, which are also regulated under the RCRA Subtitle C program, be subject to the EPCRA section 313 reporting requirements. Facilities operating in SIC code 4953 that are regulated under RCRA (the primary federal law addressing waste management) subtitle C, are engaged primarily in the collection, transportation, treatment for destruction, stabilization, and/or disposal of hazardous waste containing EPCRA section 313 toxic chemicals and include incinerators, underground injection facilities, waste treatment plants, hazaradous waste landfills, and other facilities designed for the treatment for destruction, stabilization, and disposal of hazardous waste.

EPA proposed to require that facilities engaged in solvent recovery operations be subject to the EPCRA section 313 reporting requirements. These facilities are classified in SIC code 7389 Business Services, Not Elsewhere Classified, and are primarily engaged in solvent recovery activities involving EPCRA section 313 chemicals.

D. Comment Period

Upon publication of the proposed rule, EPA initially provided a 60±day comment period. EPA then granted an additional 30 days to allow interested parties further time for preparation of their comments. During the comment period, EPA held three public meetings: August 7, 1996, in San Francisco; August 14, 1996, in Washington, DC (61 FR 33619) (FRL±5382±3); and August 19, 1996, in Chicago (61 FR 40637) (FRL±5390±9). While the meetings held in San Francisco and Washington, DC were intended to solicit comment from all interested parties, the meeting held in Chicago was primarily intended to provide an opportunity for comment on the potential impacts on small entities of the proposed action. The public docket includes summaries of these public meetings, unedited transcripts, and copies of written statements provided by speakers. In addition, at the request of some interested parties, EPA staff met with representatives of several firms, trade associations, and non-governmental organizations to discuss the proposed rule. Summaries of these meetings are also included in the public docket.

IV. Summary of Final Rule

In this action, EPA is adding seven industry groups to the list of facilities subject to the EPCRA section 313 reporting requirements. These industry groups are metal mining ((SIC code 10 (except 1011, 1081, and 1094)), coal mining ((SIC code 12 (except 1241)), electric utilities (SIC codes 4911 (limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce), 4931 (limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce), 4939 (limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce)), commercial hazardous waste treatment (SIC code 4953 (limited to facilities regulated under the RCRA Subtitle C, 42 U.S.C. section 6921 *et seq.*)), chemical and allied products-wholesale (SIC code 5169), petroleum bulk terminals and plants (also known as stations)-wholesale (SIC code 5171), and solvent recovery services (SIC code 7389 (limited to facilities primarily engaged in solvents recovery services on a contract or fee basis)). EPA finds that each of these industry groups meets the

[1] This SIC code was misnumbered although correctly described in the proposal; the correct SIC code is 4961.

EPCRA section 313(b)(1)(B) standard. EPA believes that the addition of these industry groups will further the goals of EPCRA section 313 and significantly add to the public's knowledge about the use and disposition of toxic chemicals in their communities.

The proposed rule and the record supporting the rulemaking contain information on EPA's review of these industry groups. That background information will not be repeated here. However, to the extent that comments were received on these issues, those comments are briefly addressed in this document. In addition to general comments and comments pertaining to a number of the proposed industry groups, EPA received specific technical comments on each of the industry groups. Detailed responses to comment are contained in *Response to Comments Received on the June 27, 1996 Proposed Rule to Expand the EPCRA Section 313 List of Industry Groups* (hereinafter *Response to Comments* document, Ref. 15).

EPA is not including SIC code 1011 (Metal Mining: Iron Ores) in this rulemaking based on the information available to EPA as discussed in Unit V.H.2. of this preamble. EPA received comments requesting that EPA specifically exclude SIC Code 1011 Iron Ore Mining. EPA may reconsider the addition of this industry segment at a future date in light of additional information.

In addition, EPA is deferring final action on SIC code 1094 (Metal Mining: Uranium-Radium-Vanadium Ores) until a later date. EPA received comments during the inter-agency review process under Executive Order (E.O.) 12866 for this expansion initiative that raised difficult technical and policy issues which will require additional time to address. The Agency does not believe that it would be in the spirit of community right-to-know to delay final action on all of the remaining industry groups, pending completion of work on SIC code 1094. EPA will make a final determination as to whether this industry group should be added to EPCRA section 313. If EPA's final decision is to add this industry group, EPA will accomplish this through a future rulemaking. The public comment that has been received specific to this deferred industry segment will be addressed as part of the future rulemaking discussed above.

These additions are effective beginning on January 1, 1998, as discussed in Unit V.D. of this preamble. EPA believes that this schedule permits the preparation of sector-specific guidance and sufficient time for newly affected facilities to become familiar with the rule.

V. Summary of Public Comments

The public comment period for the proposed rule (61 FR 33588) closed September 25, 1996. EPA received 2,715 comments, including 470 from industry, 86 from trade associations, 60 from environmental groups, 1,875 from private citizens, 5 from Federal agencies, 43 from State agencies, 108 from public interest groups, 18 from labor groups, 14 from universities, and 36 from associations. Detailed responses to these comments are contained in the *Response to Comments* document (Ref. 15).

In addition to comments supporting the proposed expansion of industry groups, EPA received comments in the following major areas: EPA's screening process used to identify potential candidates; EPA's interpretation of authority under EPCRA section 313; application of the statutory criteria; compliance with existing laws and policies; EPA's interpretation of release; reporting exemptions; duplicative reporting; general technical comments; and industry-specific comments.

A. Statutory Authority

While many commenters support EPA's exercise of its authority to add industry groups to EPCRA section 313, a number of commenters argue that EPA's authority to add industry groups to the TRI program is severely restricted. Some of these commenters argue that language in EPCRA section 313(b)(1)(B) limits EPA to adding industry groups only to the extent it is ``necessary'' under that provision. Others state that EPA may add or delete only those industries within the traditional manufacturing sector SIC codes 20 through 39, which were made subject to the TRI program by Congress pursuant to the statute at EPCRA section 313(b)(1)(A). On similar reasoning, still other commenters argue that EPA's authority to add industrial classifications is limited to those that are in some manner ``like'' or ``akin'' to those within the traditional manufacturing sector.

EPA believes that in EPCRA section 313(b)(1)(B), Congress gave EPA the authority to add industry groups to the TRI program, whenever the Agency reasonably finds that reporting by facilities within those groups would be relevant to the purposes of the TRI program. EPCRA section 313(b)(1)(B) provides that:

> The [EPA] may add or delete [SIC] Codes. . .but only to the extent necessary to provide that each [SIC code] to which [section 313] applies is relevant to the purposes of [section 313].

EPA believes that this provision gives authority to the Agency to add industry groups and provides guidance for the identification of the new sectors--i.e., where EPA finds that reporting by facilities within those groups would be relevant to the purposes of EPCRA section 313. Although the statute does use the term ``to the extent necessary'' in describing EPA's authority, the use of the phrase ``relevant to the purposes'' of section 313 indicates that rather than having to find that it is somehow ``necessary'' to add an industrial group to those reporting under EPCRA section 313, it is ``necessary'' for EPA to find that potential reporting by that group would be relevant to the purposes of EPCRA section 313 in order to exercise its authority to add that group.

The legislative history of section 313(b)(1)(B) confirms EPA's interpretation of the statutory text. The Senate-passed bill encompassed reporting by only those facilities within SIC codes 20 through 39, whereas the House legislation contemplated that any facilities handling above-threshold amounts of reportable chemicals would be subject to the reporting requirements. The Conference Committee that developed the language eventually enacted into law stated as follows:

> The conference substitute combines elements of the Senate and House amendments. Coverage of facilities is based on SIC Codes 20-39, except that [EPA] may add or delete SIC Codes to the extent necessary to achieve the purposes of this section. . . .

Subparagraph 313(b)(1)(B) of the conference substitute provides that:

> [EPA] may add or delete SIC codes specified for coverage in the legislation. This authority is limited, however, to adding SIC codes for facilities which, like facilities withing the manufacturing sector SIC codes 20 through 39, manufacture, process or use toxic chemicals in a manner such that reporting by these facilities is relevant to the purposes of [section 313].

Conf. Rep. 99-962 at 292. Thus, the Conference Report clearly indicates that where EPA finds that the addition of an industry group to the TRI program would be relevant to the purposes of that program, section 313(b)(1)(B) authorizes EPA to add that group to those subject to EPCRA section 313 reporting.

EPA does not agree with comments that the additional industry groups must be within the traditional manufacturing sector, or must be like or akin to that sector in the way they ``manufacture,'' ``process,'' or ``otherwise use'' toxic

chemicals. The question under section 313(b)(1)(B) is whether potential reporting by an additional group would be relevant to the purposes of the TRI program. While the Conference Report did refer to adding SIC codes for facilities which are ``like facilities within the manufacturing sector,'' id., EPA believes the relevant similarity is not the operational nature of the industry group, but in the informational value of reporting on toxic chemical use, management, and disposition--i.e., the language in the statute and Conference Report communicates Congress' intent that EPA may expand the SIC code coverage to include other facilities that will contribute to the TRI data base information on the use and disposition of toxic chemicals in the United States. By including SIC Codes 20 through 39, Congress made a judgment that reporting by those industries would be relevant to the purposes of the TRI program; Congress then authorized EPA to include additional SIC codes, where EPA finds that reporting by those industries would also be relevant to the TRI program. There is no indication that Congress intended TRI to forever remain only a Manufacturers' Toxics Release Inventory. In this rule, even though EPA believes that EPCRA permits addition of industry groups composed of facilities that ``manufacture,'' ``process,'' or ``otherwise use'' toxic chemicals in a manner different from facilities within the traditional manufacturing sector, the Agency has limited the addition to industry groups that have significant ties to the manufacturing sector.

In addition to the general comments regarding EPA's authority to add industry groups to the EPCRA 313 facility list, commenters raise some more specific authority questions. These, along with EPA's responses, are summarized below. Further detail is provided in the *Response to Comments* document (Ref. 15).

Several commenters read the statutory provision regarding addition of facilities, in conjunction with a discussion in the Conference Report, to indicate that EPA may add industry groups only if those groups manufacture, process, or otherwise use listed chemicals in a manner similar to facilities in SIC codes 20 through 39. EPA disagrees with the conclusion drawn by the commenters. The discussion at issue,

> [EPA's] authority is limited, however, to adding SIC codes for facilities which, like facilities within the manufacturing sector, SIC codes 20 through 39, manufacture, process or otherwise use toxic chemicals in a manner such that reporting by these facilities is relevant to the purposes of this section. [S]imilarly, the authority to delete SIC codes from within SIC codes 20 through 39 is limited to deleting SIC codes for facilities which, while within the manufacturing sector SIC codes, manufacture, process or use toxic chemicals in a manner more similar to facilities outside the manufacturing sector[,]

must be read in context. By prefacing the sentence on deletion with ``similarly,'' Congress is connecting it to the prior sentence on addition, and directing EPA to use the same basic criterion--relevance to the purposes of EPCRA section 313--for both addition and deletion of industry groups. The use of the manufacturing/non-manufacturing dichotomy in the deletion sentence reflects the content of the EPCRA section 313 facility list at the time, rather than a congressional intent to limit for all time the authority to add non-manufacturing industry groups to the TRI program. At the time this statement was made, the only facilities eligible for deletion were those in SIC codes 20 through 39. Therefore, the only frame of reference for the discussion was the manufacturing sector. Under those circumstances, it is reasonable for Congress to have used the distinction between manufacturing and non-manufacturing to describe EPA's authority to delete facilities from the EPCRA section 313 list. As discussed above, EPA does not believe that this distinction is controlling for purposes of adding facilities to the section 313 list because EPA does not believe that operational similarity to the manufacturing sector is a necessary correlate of ``relevant to the purposes'' of EPCRA section 313.

Other commenters argue that Congress' adoption of the PPA evinces a congressional intent to require reporting only from industries that are capable of source reduction. EPA agrees that the reporting required under PPA section 6607 is an extension of reporting required under EPCRA section 313. Thus, facilities required to report under EPCRA section 313 are also required to report for purposes of PPA section 6607. However, EPA disagrees with commenters' conclusion that adoption of the PPA in 1990 characterizes Congress' intent in its previous adoption of EPCRA section 313. In fact, in enacting the PPA, Congress specifically provided that ``[n]othing in [the PPA] shall be construed to modify or interfere with implementation'' of EPCRA. PPA section 6609(a), 42 U.S.C. section 13108(a).

Many commenters interpret EPA's authority to add industry groups to be limited to those groups composed of facilities likely to report releases of EPCRA section 313 toxic chemicals resulting in immediate human exposures or significant risks to public health. These commenters apparently believe that reporting is only relevant to the purposes of EPCRA section 313 if it communicates information about local risks to the local public. Commenters argue that absent such a finding relative to a candidate industry group, reporting by the group will mislead the public about the nature of the risks relative to the information on TRI.

EPA does not agree that the Agency must evaluate the potential for local, human exposures, and risks to determine whether a candidate industry group may be added under EPCRA section 313(b)(1)(B). As discussed above, EPCRA section 313(b)(1)(B) authorizes the addition of industry groups where reporting by such industry groups is relevant to the purposes of EPCRA section 313, which are described in EPCRA section 313(h) to include informing ``the public, including citizens of communities surrounding covered facilities. . . about releases of toxic chemicals to the environment; to assist governmental agencies, researchers, and other persons in the conduct of research and data gathering; [and] to aid in the development of appropriate regulations, guidelines, and standards.'' 42 U.S.C. section 11023(h). Thus, as EPA explained in its proposal, the Agency concludes from the language of the statute and the legislative history that there are three functional purposes for the EPCRA section 313 reporting program: (1) To provide a complete profile of the disposition of toxic chemicals through reporting of toxic chemical releases and waste management activities; (2) to compile such information into a broad-based national data base for use in determining the success of environmental programs; and (3) to ensure that the public has easy access, in an understandable format, to the data base and raw information (see 61 FR 33593). Neither EPCRA section 313(h) nor its legislative history indicates that the purpose of EPCRA section 313 is for the federal government to collect only that information from only that sector of industry that releases EPCRA section 313 toxic chemicals such that, from the federal government's perspective, there is significant local human exposure and human risk from those releases. Therefore, EPA does not believe that EPCRA section 313(b)(1)(B) requires a determination of the potential for significant exposures or risk to the local

human population from the release of toxic chemicals from facilities within candidate industries.

Federal and local perspectives on what may be an acceptable risk are likely to be very different. The roles of local government and the federal government differ significantly in terms of ensuring environmental quality. In passing EPCRA, Congress determined that it is for the public to take the information reported on the use and releases and other waste management of toxic chemicals, and to determine whether there is a need for any response given other factors, such as economic and environmental conditions, or particularly vulnerable human or ecological populations. Congress did not intend the federal government to consider these local factors prior to determining whether certain information should be made available to the public, or prior to determining whether an industry group should be added.

Moreover, while human exposure and risk may be viewed by some as the focus of EPCRA section 313, they were not Congress' sole concern in enacting that section. EPA believes that environmental considerations are also important. That Congress looked beyond human exposures and risks when enacting EPCRA section 313 is amply demonstrated by the fact that chemicals can be included on the EPCRA section 313 list based on environmental effects alone.

Some commenters argue that reporting by a candidate industry is not relevant to EPCRA section 313 if reporting will lead the local public to conclude that a particularly successful environmental program, such as a pollution prevention effort, is in fact not successful. EPA disagrees with the conclusion that the local public necessarily will be misled by having access to the information reported on TRI. Misuse or misinterpretation of information does not mean that the basis for collecting the information is invalid. EPA believes that the appropriate solution to this issue for TRI is education and outreach, rather than a decision not to include an otherwise eligible industry group on TRI. As discussed in Unit V.I.2. of this preamble, EPA has taken steps and continues to take aggressive measures to assure that the information reported is unbiased and is communicated in a responsible manner. Moreover, while EPA agrees that compilation of the information required to be reported on TRI is, in part, a valuable tool for use by the federal government for measuring the success of its environmental programs, EPA believes that the public should have the opportunity to disagree with the federal government's assessments of its own environmental programs, or with the federal or state government's standards established under those programs. Information provided on TRI allows for broader public involvement on such issues.

Some commenters conclude that where there is limited existing knowledge of the constituents of the materials handled by facilities within a candidate industry group, and estimation is infeasible or inconsistently applied, reporting by the candidate industry is not relevant to EPCRA section 313 because it is not likely to provide meaningful data. EPA recognizes that EPCRA section 313 does not require reporting to be based on actual monitoring where such monitoring is not already required under other provisions of law. See EPCRA section 313(g). Further, EPCRA permits reports to be based on readily available monitoring information or, where monitoring data are not readily available, on reasonable estimates. EPA agrees that the legislative history shows that reporting based on estimation was permitted to alleviate burdens that might be imposed by monitoring requirements. However, EPA believes that Congress recognized that while reporting based on estimation is not as exact as reporting based on monitoring, estimation can result in information that is useful to the public. Otherwise, one would have to conclude that Congress knowingly required industries to report information that was not possible to develop or that was not useful for the purposes outlined in EPCRA section 313(h). Specific comments on this issue particular to each industry added are addressed in the industry-specific responses to comments.

Other commenters argue that where reporting from the candidate industry is not likely to assist in the preparation of emergency plans or to result in reporting of emergency releases, addition of the candidate industry is not relevant to the purposes of EPCRA section 313. Others argue that the information reported by the added industries is likely to overwhelm the local emergency officials. EPA disagrees with these comments. EPCRA section 313 is concerned with the public's right to know about the use, management, and disposition of toxic chemicals. Separate provisions, EPCRA sections 311 and 312, 42 U.S.C. 11021 and 11022, are intended to address a community's preparedness for emergencies resulting from accidental releases of hazardous chemicals. While section 313 data can be used to complement sections 311 and 312 data to provide a more comprehensive understanding, TRI was designed to stand alone. The information reported on TRI is available to the public, and thus, is available to the local emergency officials. However, it is not directly reported to such officials and therefore is not likely to overwhelm them with information not relevant to accidental releases.

Finally, several commenters argue that unless a specific activity involving a toxic chemical by the candidate industry group is specifically identified within the statutory definitions of ``manufacturing'' or ``processing,'' Congress did not intend to require reporting from that industry group. Specifically, the mining community commented that Congress did not consider ore extraction or beneficiation to be within the statutory definitions of ``manufacture'' or ``process.'' Commenters believe that Congress was aware of differences between the terms extraction and beneficiation, and ``manufacturing'' and ``processing,'' and would have added extraction and beneficiation activities to the definitions of either ``manufacturing'' or ``processing'' if it meant them to be included. Commenters conclude that the non-inclusion of these terms is evidence of Congress' plain intent not to subject SIC code 10 to reporting.

EPA disagrees with commenters' reading of congressional intent because first, for an industry group to be added to the EPCRA section 313 list, activities at facilities in that group may fall within the statutory definitions of either ``manufacture'' or ``process'' or within ``otherwise use,'' which EPA believes is a broad category of additional industries. EPA also disagrees with commenters' specific conclusion that because the definitions of ``manufacture'' and ``process'' as they appear in the statute do not expressly contain the words beneficiation or extraction that Congress specifically intended to exclude the mining industry from any EPCRA section 313 reporting requirement. Again, legislative history does not support this interpretation of the statute. Nor do the commenters point to any general rules of statutory construction that would support their interpretation. In other sections of EPCRA, where Congress intended to exempt a particular activity, it did so expressly, for example, in providing an exemption for the transportation and distribution of natural gas in section 327 of EPCRA. 42 U.S.C. 11047. Had Congress intended to exclude mining activities, EPA believes it is reasonable

to conclude that Congress would have expressly provided such an exemption. In the absence of such exemptions, EPA believes that Congress intended the phrase ``manufacture, process, or otherwise use'' of toxic chemicals to encompass a broad scope of activities involving toxic chemicals, the reporting of which would be relevant to the public-information purposes of section 313.

B. Screening Process for Candidate Industries

The screening analysis used by EPA to identify candidate industries for this rulemaking consisted of several procedures used to prioritize and focus on those industries whose potential addition to EPCRA section 313 would most likely result in significant environmental and public information benefits. This analysis was not used to select industries for addition, but was used to help organize and evaluate potentially significant chemical uses, and to identify and prioritize industry groups that warranted further consideration. Further details of the screening process are included in Unit II.C. of this preamble and in the proposed rule.

Commenters raised a number of issues regarding EPA's screening process. Although EPA has responded to these comments, it is important to note that the screening process itself was not a part of this rulemaking, but was a process used to identify candidate industry groups for further consideration in this rulemaking.

Several commenters raised a variety of issues and concerns related to EPA's use of data collected under existing regulatory programs. These comments ranged from an assertion that the data collected in these systems and the manner in which the data were summarized are entirely inappropriate for EPA's TRI industry screening and selection processes, to the view that these data systems already provide information equivalent to TRI, so that extension of EPCRA section 313 reporting requirements to these industries is redundant and unnecessary.

One commenter disagreed with EPA's determination that ``the methodologies used to develop the volume data were applied consistently across industries reporting within each system...[which] allows a relative comparison among industries'' (Ref. 10), based on EPA's statement in the screening document that each of the data systems used contain biases and limitations. The commenter stated that there is no reason to believe that the biases and limitations that EPA describes will have consistent impacts across the industries being evaluated. The commenter further contends that EPA ``is simply dismissing these very serious problems with the data systems by saying that the systems are only being used to extrapolate data for relative comparisons [and that this approach] overlooks this fundamental problem with using these data systems to estimate releases of TRI chemicals.''

Based on many of the comments, it is evident that the commenters had confused EPA's use in the screening process of the data from other regulatory programs with the bases for EPA's determination that candidate industries met the statutory standard for addition. EPA did not use the data extracted from other regulatory programs in the screening process to project the amounts of EPCRA section 313 chemicals ``released,'' or to determine whether candidate industry groups met the statutory standard for addition. As EPA stated in the screening document, ``[it] does not necessarily believe that the data contained in these systems equate to the information on amounts of toxic chemicals managed by facilities as that reported under section 313'' (Ref. 10). Rather, ``data contained in these systems can be used as indicators of which industries are routinely involved with EPCRA section 313 chemicals,'' *Id.*, and to evaluate the degree to which reporting would be expected to occur. EPA used those data only for those purposes. The ``relative comparison'' cited by the commenter was limited to an evaluation of which industries may or may not routinely handle section 313 chemicals, based on indications of chemical associations developed from the data systems. EPA believes that its use of the data systems from other regulatory programs was valid for this purpose. EPA has provided responses, in the *Response to Comments* document (Ref. 15), to the major issues raised by commenters regarding specifics involved with the use of data extracted from other regulatory programs.

Some of the comments received focused on the ranking model that was developed to screen candidate industry groups. Specifically one commenter questioned EPA's use of the model in identifying candidate industries and based on results generated by the ranking model, questioned EPA's decision to include particular industries in the proposal. In particular, the commenter questioned why some industries, such as some of the 4-digit SIC codes in the metal mining industry, are being added when they appeared lower in rank compared to other industries that are not being added.

In the proposed rule, EPA did not base its determination that individual industries met the statutory standard for addition on the ranking model results. Many of the industries that appeared to be ranked higher than some other industries were screened out for a variety of reasons, such as a lack of information to adequately determine whether the industry conducts activities that would be reportable on the TRI. The ranking model was one method used as part of the screening process to identify the candidate industries that would be further considered for addition to the TRI program. Industries which were not proposed for one of the above mentioned reasons may be included in future EPCRA expansion activities.

A number of commenters stated that they believe that TRI-like information already exists and EPA should focus its efforts on making those data available. EPA expended a significant amount of resources in extracting and evaluating the data from existing data bases for purposes of their use in the screening analysis. EPA's experience with these data, along with many of the other comments received, reinforce EPA's belief that data equivalent to TRI data do not currently exist for the new industry sectors and that the extension of TRI to these industries is necessary to provide the public greater access to information on the use, management, and disposition of chemicals within their communities.

A few commenters stated that EPA failed to evaluate information collected by states in the analyses supporting this rulemaking. Another commenter asserted that EPA failed to take advantage of experience gained by those states that have expanded their TRI-like programs. EPA disagrees with these comments. Generally, the commenters failed to distinguish between analyses EPA conducted as part of the screening used to identify potential candidate industries and the ``selection factors'' and information on which EPA relied to determine whether candidate industries met the statutory standard for addition. The extent to which EPA relied on state data to support the addition of individual industries is addressed in the industry specific-sections of this notice and the *Response to Comments* document (Ref. 15). What follows below, is an explanation of the extent to which EPA relied on state experience in its screening analyses and in applying its selection factors.

The Agency has followed closely the activities of Massachusetts, Minnesota,

and Arizona in their expansion of their state right-to-know programs. Some of the experience gained by these states was determined to be relevant to the federal right-to-know program, and in those instances the information was either considered during the screening, or was taken into account when EPA applied its selection factors. However, for both purposes, EPA often found the type of information generated or evaluated by state activities to be limited in scope, or more relevant to considering specific facilities for addition pursuant to EPCRA section 313(b)(2).

For example, Minnesota's Emergency Response Commission (MERC) used the following criteria to make industry additions to their program: (1) Number of facilities in industry; (2) percent of facilities in SIC code that would likely report; (3) number of toxic chemicals in reportable quantities; (4) amount of releases and transfers; and (5) technical difficulty in reporting (Ref. 3). EPA evaluated each of the criteria used by MERC and considered several of them during the screening. EPA also considered these state criteria when identifying factors that it would consider in this rulemaking to determine whether candidate industries met the EPCRA section 313(b)(1)(B) standard for addition. (See Unit V.C. of this preamble for a discussion of EPA's consideration of the selection factors used in this rulemaking). EPA did not use element one, the number of facilities in the industry. EPA does not believe that such a consideration is appropriate for a program designed to address local information needs; the number of total facilities nationwide within a particular industry group may not be relevant to a community in which a particular facility or cluster of facilities is located. The second element used by MERC, percent of facilities in SIC code likely to report, was included during EPA's screening analysis, and its association with EPA's selection factors is discussed in Unit V.C. of this preamble. The number of toxic chemicals in reportable quantities, the third element MERC evaluated, was considered in the ranking model as part of the screening process. For example, as described in *Development of SIC Candidates*: Screening Document (Ref. 10), a significant element in the ranking model was composed of instances where facilities were matched with toxic chemicals which are carcinogens as defined in 29 CFR 1910.1200(d)(4). The fourth element, amount of releases and transfers, is information that EPA believes is not readily available nationally in a form comparable to TRI data; however, to the extent appropriate, EPA used existing information on permitted emissions to evaluate the potential association of industries with EPCRA section 313 toxic chemicals for purposes of screening for candidate industries. Further discussion is provided in the *Response to Comments* document (Ref. 15). The fifth and last element considered by MERC was the technical difficulty posed by unique circumstances in reporting TRI type information. EPA did not use this element as part of the screening process but did consider it in subsequent assessment activities prior to selecting industries for inclusion in the proposed rule.

EPA received several comments on its application of ``additional considerations'' to industries listed as candidate industries as a result of the screening process. A number of these comments took issue with EPA's use of these additional considerations to limit the candidate industries considered for inclusion in the proposal. EPA did not apply the additional considerations as selection factors. Rather, these considerations represent several issues EPA continued to address for particular industry groups, while it proceeded with the rulemaking for the remaining candidate industries. Some of these considerations are addressed further in Unit V.H. of this preamble, relating to specific industries and in the *Response to Comments* document (Ref. 15).

C. Application of Statutory Standard

As discussed in Unit III.B. of the preamble to the proposed rule (see 61 FR 33593-95), EPA's interpretation of its authority to add industrial groups to the TRI program under EPCRA section 313(b)(1)(B) led the Agency to develop three primary factors that it believes to be suitable for use in this rulemaking to determine whether to add particular candidate industries. Those factors consist of: (1) Whether one or more listed toxic chemicals are reasonably anticipated to be present at facilities in that industry (chemical factor); (2) whether facilities within the candidate industry group ``manufacture,'' ``process,'' or ``otherwise use'' EPCRA section 313 listed toxic chemicals (activity factor); and (3) whether addition of facilities within the candidate industry group reasonably can be anticipated to increase the information made available pursuant to EPCRA section 313 or to otherwise further the purposes of EPCRA section 313 (information factor). EPA interprets section 313(b)(1)(B) as authorizing the Agency to add industries where including them in the TRI program would advance the public-information purposes of that program (See Unit II.D. and V.A. of this preamble for further discussion), and EPA believes that the selection factors developed for this rulemaking help ensure that the industries selected for inclusion in the program will in fact further the purposes of section 313. Identifying facilities that are known to handle listed section 313 toxic chemicals on a routine basis (chemical factor), makes it likely that a candidate industry might have reportable information. Determining that facilities routinely conduct activities that meet the definitions of ``manufacture,'' ``process,'' or ``otherwise use'' under section 313 (activity factor) serves to increase the likelihood that facilities within an industry group are involved with listed toxic chemicals is likely to result in their reporting to TRI. Finally, the information factor takes into account more specific details regarding the nature of each industry's activities involving listed chemicals, to evaluate their likelihood of reporting information that will serve the purposes of the statute.

A number of comments were received that took issue with EPA's development and application of the factors used to select the industries for addition to EPCRA section 313. Some commenters criticized EPA's selection factors, stating that they are not relevant to section 313 and its purposes. Two commenters stated, ``[the] three criteria [selected by EPA] embody the position that there are no limits to its authority to add to the list of industries.'' Similarly, a third commenter asserted that the criteria appear to be too broad with little detail in explaining why they were chosen. A number of other commenters stated that EPA's methodology and selection criteria are flawed, artificial, meaningless, and/or inconsistent with legislative history and depart from the purposes of the statute, as well as being inappropriately and arbitrarily applied. At the same time, EPA received a number of comments that challenged the use of any factors, asserting that instead of adding individual industrial groups EPA should require any facility exceeding the thresholds to comply with the EPCRA section 313 reporting requirements.

EPA disagrees that its selection factors ``embody the position that there are no limits to its authority to add to the list of industries,'' or otherwise conflict with its statutory authority. As discussed in Unit V.A., EPA believes that its authority to add industries is broad but not unlimited. Consequently,

EPA's factors are intended to guide EPA's exercise of discretion to ensure that its decision is reasonable, and limited to adding industries whose addition serves to further the purposes of EPCRA section 313, but not to limit or otherwise restrict EPA's ability to add industry sectors beyond the statutory language. The selection factors used by EPA were used to limit additions to only those industry groups or specific facilities that are likely to provide information relevant to purposes served by EPCRA section 313. In addition, as discussed in both the preamble to the proposed rule at 61 FR 33592-33595, and in this document in Unit V.A., EPA disagrees that EPA's selection factors are in any way inconsistent with the legislative history. EPA also disagrees that it inappropriately or arbitrarily applied its selection factors. Where commenters raised issues with regard to the application of the selection factors to particular industries, EPA has responded in the specific industry section of the *Response to Comments* document (Ref. 15).

One commenter stated that the approach used for determining the presence of EPCRA section 313 toxic chemicals at candidate facilities is flawed because of questions about the reliability of data bases used for EPCRA section 313 toxic chemical release estimates. As noted above in Unit II.C. and V.B. of this preamble, the three primary data bases (AIRS, BRS, and PCS) were used in the screening process to identify which industries may routinely manage EPCRA section 313 toxic chemicals. They were not used to project an industry group's amount of toxic chemical releases or in any other way to determine, during the industry selection process, whether candidate industries met the EPCRA standard for addition. The information supporting EPA's evaluation of the chemical factor was taken from the industry process information contained in the industry profiles and economic analysis, each of which contains numerous additional references. EPA's use of AIRS data in its economic analysis is discussed in the *Economic Analysis* (Ref. 12) and *Response to Comments* document (Ref. 15).

Several other commenters stated that EPA's activity factor should be modified to include the manner in which industries manage EPCRA section 313 toxic chemicals in relation to how such chemicals are managed within the manufacturing sector. These commenters asserted that the ``manufacturing,'' ``processing,'' or ``otherwise use'' activities conducted by industries to be added must be similar to those conducted by facilities within the manufacturing sector. EPA does not believe that Congress intended to confine the TRI program to industries which handle toxic chemicals in the same ways as the manufacturing sector because, among other reasons, Congress itself applied the program to the manufacturing sector and then authorized EPA to apply the program to additional sectors. This issue is discussed further in Unit V.A. of this preamble. Therefore, as discussed in Unit III.B.2. of the preamble to the proposed rule, EPA applied the activity factor to determine whether facilities in each candidate industry ``manufacture,'' ``process,'' or ``otherwise use'' listed toxic chemicals, as those terms are defined in the statute and EPA regulations and guidance.

Another commenter suggested that EPA expand the third factor (information) to include additional considerations: (1) That the information is otherwise unavailable or less accessible to the public or government, and (2) that the information provided has practical utility such as allowing agencies to properly plan for and respond to emergencies and understand risks associated with activities conducted at a particular facility.

EPA is required by regulations issued to implement the Paperwork Reduction Act (PRA) to certify that the information to be reported pursuant to this rule will have practical utility and that it will not be duplicative. Consequently, EPA believes that including such considerations as selection factors would not provide any additional information. EPA has addressed the extent to which the information that will be reported under this rule is otherwise unavailable or less accessible to the public or government and has practical utility in Unit V.I.1. of this preamble.

Several other commenters suggested that prior to adding an industry group, EPA make a determination as to the amounts of chemicals that are anticipated to be reported as released or otherwise generated or handled by that industry. EPA generally does not have available to it this type of information for industry groups not currently reporting to TRI. Moreover, EPA does not believe that this is a factor that is appropriate for selecting industry groups. During the analyses conducted for this rulemaking, EPA went to considerable lengths in attempting to determine amounts of toxic chemicals that might be released or otherwise managed by facilities not currently reporting under EPCRA section 313. As discussed elsewhere in this preamble, EPA believes that this type of information is generally not readily available for the industries being added, and that efforts to estimate it may result in potentially significant errors and are typically met with criticism. As a result, EPA selected industry groups by using available information to identify industries that are likely to manage listed chemicals in a reportable manner, such that addition of those groups would most likely further the purposes of making TRI data available. As discussed in Unit VII. of this preamble, EPA will initiate an intensive stakeholder process to comprehensively evaluate the current reporting forms and reporting practices.

Several commenters suggest that EPA consider risk or the level of exposure in adding industries to EPCRA section 313. Among such comments were those stating that TRI must inform the public whether toxic chemical releases pose a threat to the public and not simply present the public with unqualified and misleading information. EPA believes that a risk-based approach to EPCRA section 313 reporting is at odds with the basic premise of EPCRA section 313, which is to get information about the use, disposition, and management of toxic chemicals into the public domain, enabling the users of this information to evaluate the information and draw their own conclusions about risk. This is discussed further in Unit V.A. of this preamble. EPA is sensitive to industry's concern about the TRI data being misunderstood or misused, and will be continuing its separate efforts to promote better understanding and appropriate use of this information.

One commenter believes that the burden of reporting should be a criterion in selecting industry categories. This commenter also stated that EPA should consider not only costs to facilities to report, but the number of small businesses in the industry and the capability of facilities to report. This commenter further claimed that Executive Order 12866 requires EPA to incorporate costs and related factors in the selection criteria.

EPA is separately required to consider anticipated regulatory impacts and costs under Executive Order 12866, the Unfunded Mandates Reform Act (UMRA) (Pub. L. 104-4), and the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*). EPA takes very seriously its obligations to consider costs and impacts on small entities. EPA's evaluation of informational considerations took into account, among other things, the capability of facilities in each candidate industry to report meaningful information under TRI. EPA

believes that it has met its obligations under these and other separate provisions in this action. The Agency also considers it important to note that the size of a business does not necessarily correspond to its impacts on public health or the environment, or the relevance in reporting by that entity. However, in this action, EPA has done its best to balance the need for public information with the circumstances of small businesses and their ability to meet EPCRA section 313 reporting requirements. These matters are discussed further in Unit V.I.4. of this preamble and in the *Economic Analysis* (Ref. 12).

In contrast to comments received from industry, some members of the environmental community commented that EPA is being too confining in expanding the TRI program on an industry group by industry group basis, which limits the expansion of public information to slow and incremental steps. These commenters assert that EPA should abandon the process of adding individual industry groups, and should instead require any facility exceeding the EPCRA section 313 reporting thresholds to comply with current reporting requirements, while steadily lowering the reporting thresholds over time. EPA believes there are a number of practical problems with the commenters' suggestion. Section 313 requires that in order for a facility to be required to report, the facility must be in an SIC code that is subject to the reporting requirements. Section 313(b) lays out separate standards for adding additional SIC codes and particular facilities; in addition, EPA can only proceed by rulemaking.

Aside from the fact that EPA lacks the resources to make the findings for all facilities or SIC codes in a single rule, EPA believes that it is important to expand the section 313 program in an orderly manner to ensure that the statutory requirements are met. It may not be appropriate or relevant to add all industry groups or facilities. Further, EPA believes it important to expand the section 313 program in an orderly manner to optimize the information previously collected by TRI. EPA believes that incremental additions may provide greater continuity to the wealth of information maintained and made available in TRI. Therefore, in this action EPA sought to add industries that are likely to provide relevant section 313 information on a range of activities and from a variety of industry groups related to manufacturing.

D. First Year's Reporting and Effective Date

A number of commenters have suggested that EPA delay or defer reporting for at least 1 full calendar year, while others have suggested that 2 years would be more appropriate. These commenters are concerned about adequate time to familiarize themselves with the EPCRA section 313 reporting requirements; a perceived lack of outreach on EPA's part; and pending industry studies which may provide more information on toxic releases.

EPA has reviewed and evaluated each of these comments and believes that delaying the first year's reporting has merit. Thus, EPA believes that it is appropriate to make the requirements of this rule effective on January 1, 1998, for reports due on or before July 1, 1999. EPA believes that the regulated community, EPA, and the states require time to understand and prepare for implementing this change. The regulated community will need an opportunity to become fully aware of these new requirements and understand how it can apply to their data development and their own data management systems for EPCRA section 313 compliance purposes. In addition, EPA believes that it is reasonable to provide additional time for the newly affected industry groups to become familiar with the additional requirements under EPCRA section 313, and that this additional time will promote more accurate and consistent reporting among these groups.

A number of commenters believe that EPA should delay reporting for the new industry groups until EPA develops exposure and risk evaluations for each. While EPA takes seriously its responsibility to provide the public with guidance on how to use the TRI data in conjunction with appropriate hazard, exposure and risk information, EPA does not believe that it should perform or use nationwide risk estimates to influence what data should be available to individual communities across the United States. TRI was designed in part to provide local communities with facility-specific information about releases and other waste management of toxic material within their community. The release patterns and resultant exposures are as unique as each community. Multiple facilities, each with small releases, can add up to a large release in a specific geographic area. An EPA decision, based on a nationwide risk estimate, may deprive that community of information that is vital to protecting public health at the local level. A one size fits all risk assessment, as suggested by the commenters, undermines the intent and the utility of the TRI.

A set of commenters have raised the concern that EPA did not conduct adequate outreach to the potentially regulated community and that EPA did not apprise the potentially regulated community of the planned publication of the proposed rule. EPA strongly disagrees with these comments and believes that the record of meetings held on this issue reflects a concerted effort by EPA to involve all potentially affected parties, early and often. EPA began publicly discussing the expansion of the industry groups subject to EPCRA section 313 reporting as early as 1991. TRI facility expansion was a major topic of discussion at a TRI Data Use Conference in January of 1992, a conference where many industry representatives interacted with Agency staff in discussion of this issue. EPA held the first of a number of public meetings on TRI facility expansion on May 29, 1992, and again in 1993, highlighted facility expansion in its Data Use Conference and in the Administrator's nationwide Pollution Prevention Policy Statement. In 1994, the Agency embarked on an extensive series of focus groups with individual industries that expressed an interest in working with EPA and in 1995, at another public meeting, laid out the Agency strategy for selecting industries as well as a ``short list'' of potential candidates. EPA has identified at least 65 events since 1991 that have served as outreach to the potentially regulated community. Some of these events have been focused on small business, others on a particular industry sector and others more generally on the potentially regulated community. EPA's proposed rule, issued on June 27, 1996, was thus simply one more step in a series of efforts to inform and educate the potentially regulated community of EPA's intentions.

Commenters have expressed concern that if EPA does not delay or defer reporting for 1 year after the effective date, newly added industries will not have had ample time to familiarize themselves with basic EPCRA section 313 reporting requirements. As noted above, EPA is not requiring reporting for the newly added industries for the 1997 reporting year. EPA will work with the newly added industry groups to maximize the amount of assistance that is available to them. EPA is committed to continuing its work with industry trade associations, individual companies and facilities and professional trainers to assure that guidance, both technical and

interpretive, is available to the new sectors.

In addition, EPA will develop sector-specific guidance documents for each of the newly affected industry groups and make these documents available no later than November 1997. These documents will provide the newly affected industry groups with a greater understanding of how the reporting requirements associated with EPCRA section 313 relate to specific activities conducted by their industry. These documents should also help resolve many of the issues raised by commenters prior to initiating reporting activities, and should assist them in reporting in a more cost-effective and less burdensome manner. EPA will also develop such helpful guidance for all affected industry groups and will publish this additional guidance in the **Federal Register** no later than November 1997.

Some commenters believe that EPA should defer reporting until certain studies being under taken by the industry are complete and available for Agency review. For example, electric utilities have encouraged EPA to delay inclusion of utilities until after a study of toxic emissions from utilities is complete. EPA appreciates that this type of study may provide additional information regarding certain types of releases for certain chemicals. This and the other studies mentioned, however, do not deal with the multi-media nature of releases that are core to EPCRA, nor are they designed to provide annual release information to the public. They are designed to address issues of potential risk and exposure, both important pieces of additional information which EPA believes should be made available to communities. EPA looks forward to receiving and reviewing these studies and will work with the industry to communicate the risk and exposure findings to local communities and others who use the TRI data.

E. Reporting Threshold Clarifications

1. *De minimis exemption*. Several commenters contend that for the purposes of this rulemaking, EPA should interpret the *de minimis* exemption to apply to the manufacture of byproducts. In addition, they contend that to do otherwise would be inconsistent with past guidance.

EPA disagrees with the commenters. The *de minimis* exemption allows facilities to disregard certain minimal concentrations of chemicals in mixtures they ``process'' or ``otherwise use'' in making threshold and release determinations for section 313 reporting. The *de minimis* exemption does not apply to the ``manufacture'' of a chemical except if that chemical is ``manufactured'' as an impurity and remains in the product distributed in commerce below the appropriate *de minimis* level. As illustrated by the preamble to the final rule implementing the reporting provisions of EPCRA section 313 (53 FR 4500, February 16, 1988), EPA has explicitly stated since the beginning of the program, that the *de minimis* exemption does not apply to the ``manufacture'' of byproducts. In the preamble to the 1988 final rule, EPA explained (see 53 FR 4501), that the ``*de minimis* limitation does not apply to the byproducts produced coincidentally as a result of manufacturing, processing, use, waste treatment, or disposal.'' EPA further explains at 53 FR 4504, its decision about the application of the *de minimis* exemption to impurities and byproducts.

> EPA has distinguished between toxic chemicals which are impurities that remain with another chemical that is processed, distributed, or used, from toxic chemicals that are byproducts either sent to disposal or processed, distributed, or used in their own right. EPA also considers that it would be reasonable to apply a *de minimis* concentration limitation to toxic chemicals that are impurities in another chemical or mixture....Because the covered toxic chemical as an impurity ends up in a product, most producers of the product will frequently know whether the chemical is present in concentrations that exceed the *de minimis* level, and, thus may be listed on the Material Safety Data Sheet (MSDS) for that product under the OSHA HCS.
>
> This final rule does not adopt a *de minimis* concentration limitation in connection with the production of a byproduct. EPA believes that the facility should be able to quantify the annual aggregate pounds of production of a byproduct which is not an impurity because the substance is separated from the production stream and used, sold, or disposed of, unlike an impurity which remains in the product. 53 FR at 4504.

That language is consistent with guidance EPA has provided on the *de minimis* exemption. For example, on pages 15 and 16 of EPA's *1995 Toxic Chemical Release Inventory Reporting Form R and Instructions* (EPA 745-K-96-001), a document that is distributed annually to the regulated community, EPA states the following:

> EPA included the *de minimis* exemption in the [1988] rule as a burden-reducing step, primarily because facilities are not likely to have information on the presence of a toxic chemical in a mixture or trade name product beyond that available in the product's MSDS. For threshold determinations, the *de minimis* exemption applies to: A listed toxic chemical in a mixture or trade name product received by the facility. . . .The *de minimis* exemption does not apply to: A toxic chemical manufactured at the facility that does not remain in a product distributed by the facility. A threshold determination must be made on the annual quantity of the toxic chemical manufactured regardless of the concentration. For example, quantities of formaldehyde created as the result of waste treatment must be applied toward the threshold ``for manufacture'' of this toxic chemical, regardless of the concentration of the toxic chemical in the waste.

EPA believes that there is nothing in EPA's discussion for purposes of today's action or the proposed rule that is inconsistent with the regulatory text at 40 CFR 372.38(a), the preamble to that regulatory text, or EPA's long-standing guidance on the *de minimis* exemption.

One commenter requested that EPA clarify whether the *de minimis* exemption applies to EPCRA section 313 toxic chemicals present as constituents of wastes received from off-site at RCRA subtitle C permitted facilities. Another commenter stated that if EPA adopts an interpretation of ``otherwise use'' to include certain waste treatment activities, then EPA must indicate that the *de minimis* exemption applies the same way to wastes received from other facilities as it does to any other mixture or trade name product. Other commenters asked whether the same *de minimis* concentrations applies to EPCRA section 313 toxic chemicals that are constituents of hazardous waste.

The *de minimis* exemption applies solely to mixtures. In promulgating this exemption, EPA provided the following rationales for adopting a *de minimis* exemption for mixtures:

> [Commenters] asserted that it would be both unreasonable and extremely burdensome for processors and users of [mixtures and trade name products] to have to account for these quantities in developing threshold determinations. In addition, commenters asserted that is would be equally as burdensome for suppliers of these products to have to determine and disclose small percentages of section 313 chemicals in their products beyond that currently required under the OSHA HCS. . . .
>
> EPA believes that it is necessary to provide a *de minimis* limitation to help reduce the burden both on the part of the user and the supplier of such products....Second, EPA does not expect that the processing and use of mixtures containing less than the *de minimis* concentration would, in most instances, contribute significantly to the threshold determinations and releases of listed toxic chemicals from any given facility. (53 FR 4509)

For purposes of the *de minimis* exemption, EPA's long-standing interpretation for facilities with SIC codes 20 through 39 has been that the term ``mixture'' does not include wastes; this means that the *de minimis*

exemption does not apply to the ``processing'' or ``otherwise use'' of a waste stream. EPA has chosen to retain this interpretation for this rulemaking for a number of reasons, even though this means that the *de minimis* exemption will not be available to RCRA Subtitle C treatment, storage, and disposal facilities (TSDs) for many of the activities at their facilities.

EPA's rationale for whether a facility could apply the *de minimis* exemption to ``processing'' or ``otherwise use'' activities was based on the likelihood that parties would have knowledge of the constituents of a mixture at levels below the levels required by the OSHA Hazard Communication Standards (HCS). For example, EPA determined that for manufactured by-products, additional factors made it likely that a facility would be able to characterize the individual constituents based on readily available information, notwithstanding that such levels of characterization were not required by the HCS. EPA noted in the 1988 preamble that:

> EPA believes that the facility should be able to quantify the annual aggregate pounds of a byproduct which is not an impurity because the substance is seperated from the production stream and used, sold, or disposed of. . .'' (53 FR 4505)

Further, it is clear from the 1988 preamble that EPA originally equated the term ``mixtures'' with trade name products, and these products have certain unique attributes that EPA believes generally are not applicable to wastes. For example, manufacturers of trade name products may have an incentive not to provide information on constituents below *de minimis* levels out of concerns about protecting trade secret information. Consequently, it was highly likely that facilities ``processing'' or ``otherwise using'' such products would have no way of determining whether such constituents were present, without potentially extensive sampling of the product. By contrast, waste generators have no similar commercial incentive to conceal the components of the wastes they ship off-site to TSDs. Moreover, as noted in Unit V.H.5. of this preamble, TSDs are required under RCRA regulations to conduct routine sampling of the wastes they manage, and EPA believes that facilities have an incentive to regularly conduct monitoring to ensure that they remain within their permit.

Moreover, if facilities genuinely have no information on the constituents of the wastes they manage, they are not required to collect such information in order to comply with the EPCRA section 313 reporting requirements.

EPA plans to review the *de minimis* exemption and the assumptions upon which it is based, in light of data that will be collected under this rule, and the additional facilities' experiences in reporting. Subject to the results of its review, EPA may elect to initiate rulemaking to modify the exemption.

2. *Interpretation of the ``otherwise use'' reporting threshold.* Several commenters contend that EPA should modify the regulatory definition of ``otherwise use'' to reflect EPA's revised interpretation. They contend that revision of the definition of ``otherwise use'' would be the best way to clarify the meaning of the term.

While EPA believes that the current regulatory definition of ``otherwise use'' is very broad and covers EPA's revised interpretation, EPA is amending the definition of ``otherwise use'' to reflect EPA's revised interpretation in order to minimize any difficulties in interpreting the meaning of the term.

One commenter contends that ``EPA needs to clarify that when a facility receives both `on-site' waste and `off-site' wastes, only the `off-site' waste is used in determining reporting thresholds.''

EPA agrees that threshold determinations for ``otherwise use'' should not include quantities of the toxic chemical stabilized, disposed, or treated for destruction unless the facility received the toxic chemical for purposes of waste management or generated the toxic chemical during waste management of a material received from off-site. As a result of comments, EPA is clarifying its interpretation of ``otherwise use'' and incorporating its interpretation into a revised definition as follows:

> ``Otherwise use'' means any use of a toxic chemical, including a toxic chemical contained in a mixture, trade name product, or waste that is not covered by the terms ``manufacture'' or ``process.'' Otherwise use of a toxic chemical does not include disposal, stabilization (without subsequent distribution in commerce), or treatment for destruction unless:
>
> (1) The toxic chemical that was disposed, stabilized, or treated for destruction was received from off-site for the purposes of futher waste management; or
>
> (2) The toxic chemical that was disposed, stabilized, or treated for destruction was manufactured as a result of waste management activities on materials received from off-site for the purposes of further waste management activities. Relabeling or redistributing of the toxic chemical where no repackaging of the toxic chemical occurs does not constitute use or processing of the toxic chemical.

One commenter contends that EPA should clarify that threshold determinations are based on the sum of treatment for destruction, stabilization and disposal at the site, not each of these activities individually.

To determine whether a facility exceeds an activity threshold for a listed toxic chemical, the facility must sum all quantities of the chemical for each reporting activity. For example, to determine whether the facility exceeds the ``otherwise use'' activity threshold for a listed EPCRA section 313 toxic chemical, the facility must sum all quantities of the chemical that undergo an ``otherwise use'' activity. The facility should compare the sum to the 10,000 pound threshold. If there are several ``otherwise use'' activities that involve the EPCRA section 313 chemical, the facility should not compare the quantity of the chemical in each activity to the otherwise use threshold. For example, a facility that receives quantity ``X'' of an EPCRA section 313 toxic chemical for purposes of further waste management treats for destruction quantity ``X-Y'' of an EPCRA section 313 toxic chemical, disposes of quantity ``Y'' of the EPCRA section 313 toxic chemical, and also ``otherwise uses'' a third separate quantity, ``Z,'' of the EPCRA section 313 toxic chemical as a catalyst. The facility should sum the quantities that are treated for destruction, disposed, and used as a catalyst and should compare this quantity (``X''+``Z'') to the ``otherwise use'' threshold.

Waste Management Incorporated (WMI) comments that EPA's interpretation of ``otherwise use'' to include disposal, explicitly contradicts the plain meaning of the statute. WMI states that ``[w]e do not believe that any reasonable construction of `use' means `disposal,' `discard,' or `abandon.'" The commenter states that ``[w]e believe the presence of the adjective `otherwise' means `use' must in some way be akin to `manufacture' or `process,' i.e., the `use' must add value.'' Finally, WMI argues that Congress's failure to include the terms, ``manage,'' ``handle,'' or ``possess,'' in EPCRA section 313 implies a specific legislative intent to exclude disposal.

EPCRA section 313 defines ``manufacture'' and ``process,'' but not ``otherwise use.'' As EPA noted in the preamble to the proposed rule, because Congress did not provide a definition of ``otherwise use,'' and did not provide an explanation or discussion of the term in the legislative history, EPA interpreted the term to most appropriately meet the intent of EPCRA section 313.

EPA first considered the plain language of the statute. The statutory context indicates that the term ``*otherwise*'' was intended to capture all ``uses'' of a chemical that are not

''manufacturing'' or ''processing.'' Contrary to the commenters' suggestion, the effect of the term ''otherwise'' is to distinguish these uses from ''manufacturing'' and ''processing.'' If Congress considered ''otherwise use'' to be akin to ''manufacture'' or ''process,'' there would have been no reason to apply a different threshold to this activity. Further, EPA considers the commenter's definition of manufacture and processing--as activities that only ''add value to another product or the chemical itself''--to be too narrow. EPA believes that this interpretation is inconsistent with the statutory definition of ''manufacture,'' which includes importation of a toxic chemical. 42 U.S.C. section 11023(b)(1)(C)(I). Importation does not add value to a toxic chemical; rather it is a service that benefits a particular facility, just as a facility that manages wastes received from other facilites provides a service that benefits particular facilities. Similarly, the commenter's interpretation would not address all of the concepts included within the definition of ''processing.'' The definition of ''processing'' encompasses the concept that a facility intends to obtain a commercial benefit from its activities with the toxic chemical: the term ''process'' is restricted to the preparation of the chemical ''*for distribution in commerce*.'' 42 U.S.C. section 11023(b)(1)(C)(ii) (emphasis added). Consistent with the commercial benefit concept embodied by the definitions of ''manufacturing'' and ''processing,'' EPA's revised interpretation includes uses beneficial in providing a product or a service. This would clearly encompass a RCRA Subtitle C facility, which employs EPCRA section 313 chemicals, when it manages or disposes of wastes received from off-site generators for the purpose of obtaining a commercial benefit. EPA's inclusion of disposal within the definition of ''otherwise use'' is consistent with the Congressional definitions of ''manufacture'' and ''process,'' as all of these activities benefit the facility engaging in them.

EPA also considered the relevant goals and purposes of reporting under EPCRA section 313. As EPA discusses in Unit V.A. of this preamble, the relevant purposes of EPCRA include informing the public of the use, release and other waste management activities of toxic chemicals in their community. Congress wanted the reporting requirements of EPCRA to be applied broadly, and to provide the greatest amount of information to the public and federal, state, and local governments. Moreover, Congress found information on chemical management activities relevant to the needs of local communities in requiring that information include, for example, information on waste streams and how they are handled. See, e.g., 42 U.S.C. section 11023(g). Given the primary goal of providing information to the public on listed toxic chemicals present, released, and managed in communities, EPA does not believe that Congress would intend any provision of EPCRA section 313 to be interpreted to significantly limit the information to the public. Because interpreting the definition of ''otherwise use'' narrowly can have the unintended impact of limiting the amount and kind of information readily available to the public, EPA believes that the term ''otherwise use'' should be interpreted more broadly than EPA has interpreted it in the past.

EPA also disagrees that the failure to include a term such as ''manage'' implies Congressional intent to exclude waste management activities. Where Congress intended to exempt specific activities, it did so explicitly, as, for example, exempting transportation activities in EPCRA section 327. Accordingly, EPA believes it is reasonable to assume that, had Congress intended to exclude waste management activities, it would have provided a similar exemption.

The American Petroleum Institution (API), in comments on the Information Collection Request (ICR) for this rulemaking, contends that the revised interpretation of ''otherwise use'' has several problems. API believes that EPA's definition of ''treatment for destruction'' is inconsistent with the interpretation of ''otherwise use.'' The commenter contends that under the interpretation of ''otherwise use,'' a ''non-listed'' chemical that is received from off-site can trigger reporting if it is ''treated for destruction.'' If a chemical is ''non-listed,'' any process using the chemical could be ''treatment for destruction'' because the chemical already is a ''substance that is no longer a toxic chemical subject to reporting under EPCRA section 313.''

EPA believes that the commenter misunderstands the proposed definition of ''treatment for destruction.'' In the proposed rule at 61 FR 33597, EPA proposed to define ''treatment for destruction'' as follows:

> Treatment for destruction means the destruction of the toxic chemical such that the substance is no longer a toxic chemical subject to reporting under EPCRA section 313.

By use of the words ''no longer a toxic chemical subject to EPCRA section 313 reporting,'' it is clear that ''treatment for destruction'' involves the destruction of a listed toxic chemical. Therefore, any process, even a destruction activity, on a ''non-listed'' chemical would not be ''treatment for destruction.''

In addition, based on the comment provided, EPA believes there may be some confusion regarding the reporting requirements of EPCRA section 313. The commenter mistakenly believes that EPCRA section 313 activity threshold determinations and reporting are not limited to toxic chemicals that are listed at 40 CFR 372.65. No reports are required for chemicals that are not on that list. An activity on a non-listed chemical does not trigger reporting for a listed or ''non-listed'' chemical. Further, for threshold determinations under EPCRA section 313, a facility need only consider activities that occur at that facility. The commenter appears to believe that a facility that receives for further waste management a chemical that is not listed at 40 CFR 372.65 must assume that some precursor to that chemical was an EPCRA section 313 chemical that was ''treated for destruction'' and consider activities involving those ''non-listed'' chemicals in threshold determinations. This does not follow, most obviously because the ''non-listed'' chemical may not have been made by the destruction of a listed toxic chemical. Moreover, even if the precursor to the chemical were a listed toxic chemical, the reporting facility would not be required to include the ''treatment for destruction'' of a chemical by and at another facility in its calculations of the ''otherwise use'' activity threshold.

Further, EPA believes there may be some confusion regarding EPA's revised interpretation of ''otherwise use'' and proposed definition of ''treatment for destruction,'' and guidance for calculating activity thresholds. In the proposed rule (see 61 FR 33598), EPA interpreted ''otherwise use'' as follows:

> *Otherwise use* or *use* means any use of a toxic chemical that is not covered by the terms ''manufacture'' or ''process'', and includes treatment for destruction, stabilization (without subsequent distribution in commerce), disposal, and other use of a toxic chemical, including a toxic chemical contained in a mixture or trade name product. *Except that*
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> (1) Facilities engaged in treatment for destruction, stabilization, or disposal are not using a toxic chemical in these activities unless the facility receives materials from other facilities for purposes of further waste management activities.
>
> (2) Relabeling or redistributing a container of a toxic chemical where no repackaging of

the toxic chemical occurs does not constitute use of the toxic chemical.

The interpretation of ``otherwise use'' includes the phrase ``the facility receives materials from other facilities for purposes of further waste management activities.'' EPA purposely used the word ``materials'' rather than ``EPCRA section 313 listed toxic chemicals'' to avoid a situation where a facility that receives materials for further waste management would not report on an EPCRA section 313 toxic chemical that it treated for destruction, stabilized or disposed. This situation could exist if EPA were to limit its interpretation of otherwise use by replacing ``materials'' with ``EPCRA section 313 listed toxic chemicals.'' This situation is illustrated in the following example.

Facility ``X'' receives chemical A from off-site. Chemical A is not an EPCRA section 313 listed toxic chemical. The facility treats for destruction chemical A. Since chemical A is not an EPCRA section 313 listed toxic chemical, this activity is not reportable. In treating for destruction chemical A, 11,000 pounds of chemical B, which is an EPCRA section 313 listed toxic chemical, is ``manufactured,'' and subsequently disposed on-site. (Note that the quantity of chemical B ``manufactured'' is less than the 25,000 pound ``manufacturing'' threshold).

Absent EPA's clarification in the proposed interpretation, the quantity of chemical B disposed is not otherwise used, because chemical A, which was the material received from off-site for further waste management, is not an EPCRA section 313 listed toxic chemical. In contrast, as EPA has proposed ``otherwise use,'' the disposal of chemical B in the example above would be a reportable activity.

The proposed rule contains several alternatives to EPA's interpretation of otherwise used. A commenter contends that the interpretation of ``otherwise use'' that EPA chose was more burdensome than the alternative in which there was no ``condition that the chemicals originate off-site.'' EPA disagrees with the commenter's statement that it chose an option that is more burdensome than the alternative discussed. The alternate interpretation discussed in the proposed rule is ``including in the definition of ``otherwise use'' all disposal, treatment for destruction, and stabilization, regardless of whether the facility receives materials from off-site for the purposes of treatment for destruction, stabilization, or disposal.'' (see 61 FR 33598). The alternative affects a larger universe than the interpretation EPA chose because the alternative requires that every covered facility compare the quantities of an EPCRA section 313 listed toxic chemical that it treats for destruction, stabilizes, or disposes with the ``otherwise use'' threshold. The interpretation that EPA chose requires only those facilities, that either receive an EPCRA section 313 toxic chemical from other facilities for purpose of further waste management or manufactures an EPCRA section 313 toxic chemical as a result of waste management activities conducted on materials received from off-site, to compare the quantities of that EPCRA section 313 listed toxic chemical that it treats for destruction, stabilizes, or disposes with the ``otherwise use'' threshold.

The American Automobile Manufacturers Association (AAMA) contends that if EPA's proposed interpretation of ``otherwise used'' is promulgated, then manufacturing facilities in SIC codes 20 through 39 would have to calculate threshold determinations in two ways– how much is destroyed in control equipment such as oven incinerators, as well as how much is ``manufactured/processed or otherwise used.'' They contend that EPA should exclude on-site treatment and Clean Air Act (CAA)/Clean Water Act (CWA) control equipment at non-treatment, stabilization, and disposal facilities (TSD) facilities for purposes of performing otherwise use threshold determinations.

EPA does not agree that all treatment for destruction that occurs at facilities will be considered as ``otherwise use'' activities. ``Treatment for destruction'' of an EPCRA section 313 toxic chemical constitutes an ``otherwise use'' only if the EPCRA section 313 toxic chemical is received from other facilities for purposes of further waste management activities or if the EPCRA section 313 toxic chemical is produced as a result of the waste management of a material received from off-site.

Also, EPA does not believe that there will be two groups of threshold determinations as AAMA describes. As ``otherwise use'' is defined, for certain cases ``treatment for destruction' is considered an ``otherwise use'' activity. There is nothing distinctive about EPA's approach for ``otherwise use'' as compared to its approach for interpreting ``manufacture'' or ``process.'' Further, EPA does not believe that it is appropriate to exclude on-site treatment and destruction of listed toxic chemicals in CAA/CWA control equipment at non-TSD facilities if: (1) The EPCRA section 313 toxic chemical that was treated for destruction was received by the facility from off-site for purposes of further waste management or (2) the EPCRA section 313 toxic chemical that was treated for destruction was ``manufactured'' as a result of waste management activities on materials received from other facilities for the purposes of further waste management activities. EPA believes that to do so would perpetuate a loophole that exists in reporting on EPCRA section 313 toxic chemicals. EPA believes that the public has a right-to-know about these releases and other waste management activities.

Amoco states that the definition of ``otherwise use'' should not be changed to capture the commercial hazardous waste treatment and solvent recovery industries as these sectors can be easily accommodated by ``manufacture'' and ``process'' definitions.

EPA is not revising its interpretation of ``otherwise use'' simply to ``capture'' a particular industry as the commenter has suggested. Rather, EPA is revising its interpretation to close an informational gap created by EPA guidance. EPA's revision will ensure reporting of information about the handling of chemicals that is valuable for the public to know, and therefore relevant to the purposes of EPCRA section 313. EPA is revising its interpretation of ``otherwise use'' because, as stated at 61 FR 33596, of the proposed rule, ``EPA is concerned that, based on current guidance, the public may not have access to information relating to releases of toxic chemicals from facilities within SIC codes 20 through 39 that are receiving materials for the purposes of treatment for destruction, stabilization, or disposal.'' EPA acknowledged the same concerns for the candidate industries, including RCRA Subtitle C treatment and disposal facilities and solvent recovery facilities. Thus, EPA announced its intent to revise the past interpretation of ``otherwise use'' for all industries subject to EPCRA section 313 to rectify the loss of information from certain facilities within SIC codes 20 through 39 and the potential loss of information from added facilities.

Amoco also suggests that the activities within the commercial hazardous waste treatment and solvent recovery industries can be ``easily accommodated by `manufacture' and `process' definitions.''

EPA agrees that pursuant to current statutory and regulatory definitions, facilities within the hazardous waste treatment and solvent recovery industries ``manufacture'' and ``process'' EPA section 313 toxic chemicals. For example, these facilities may coincidentally manufacture section 313 toxic chemicals during waste

management activities. These facilities may also ``process'' section 313 toxic chemicals during solvent recycling operations. In addition, under EPA's past interpretation of ``otherwise use,'' these facilities ``otherwise use'' EPCRA section 313 during waste management activities to neutralize chemicals wastes or to facilitate the waste management process. These activities and the information expected to be reported as a result of these activities serve as independent bases for adding these industries.

However, EPA disagrees that ``treatment for destruction,'' ``stabilization'' (without subsequent distribution in commerce) and ``disposal'' are ``manufacture'' or ``processing.'' The definitions of ``manufacture'' and ``process'' as defined in the final rule implementing the reporting requirements of EPCRA section 313 (40 CFR 372.3) are as follows:

> Manufacture means to produce, prepare, import, or compound a toxic chemical. Manufacture also applies to a toxic chemical that is produced coincidentally during the manufacture, processing, use, or disposal of another chemical or mixture of chemicals, including a toxic chemical that is separated from that other chemical or mixture of chemicals as a byproduct, and a toxic chemical that remains in that other chemical or mixture of chemicals as an impurity.
>
> Process means the preparation of a toxic chemical, after its manufacture, for distribution in commerce:
>
> (1) In the same form or physical state as, or in a different form or physical state from, that in which it was received by the person so preparing such substance, or
>
> (2) As part of an article containing the toxic chemical. Process also applies to the processing of a toxic chemical contained in a mixture or trade name product.

EPA does not believe that the definitions of ``manufacture'' or ``process'' as currently written, should incorporate the activities of treatment for destruction, stabilization, or disposal. The definition of ``manufacture'' includes produce, a synonym of which is create. EPA believes that neither stabilization nor disposal of a listed toxic chemical is the creation of that chemical. Nor does EPA believe that treatment for destruction of a listed toxic chemical is creation of that listed toxic chemical. EPA also does not believe that these activities can be considered to be the preparation, importation, or compounding of a toxic chemical. ``Process'' requires that the toxic chemical either in the same form or physical state as, or in a different form or physical state be prepared for distribution in commerce. EPA believes that disposal on-site, stabilization without subsequent distribution in commerce, and treatment for destruction do not involve the preparation of a toxic chemical for distribution in commerce. Thus, these would not be considered ``processing'' activities.

The Department of Energy requested guidance on how one would report under EPCRA section 313 on the constituents of waste if the origin or the chemical constituents of the waste received from offsite are unknown. For example, the Department of Energy has a backlog of wastes remaining from the research, development and production of nuclear weapons that is currently in storage awaiting treatment or disposal. A substantial volume of these ``legacy wastes'' is radioactive mixed waste (i.e., waste that contains both a hazardous (as defined under RCRA) and a radioactive component), and the Department is concerned that for some of these wastes it does not have information that will allow it to identify the individual toxic chemical constituents of these wastes. The Department is concerned that, if records cannot be found to identify the origin and individual toxic chemical constituents of this waste, in order to complete the TRI reporting, additional characterization would be needed that could increase the potential for worker exposure to radioactive material.

In the case where there is no readily available information on either the presence or concentration of toxic chemicals in wastes, a potential reporter is not required to undertake activities to characterize these wastes in order to make threshold determinations and report releases of toxic chemicals in these wastes, provided that these characterization activities are not otherwise required either by other regulations or as part of the facility's treatment or disposal activities. Under EPCRA section 313, a facility is only required to use the best available information when making threshold determinations and release and other waste management calculations.

3. *Coincidental manufacture definitions and related reporting issues.* Many commenters state that during combustion of coal or oil, metals and metal compounds in these fuels simply undergo a change in the valence state. They contend that this change should not be considered to be ``coincidental manufacture'' of a chemical. They claim this is a new interpretation of ``manufacture'' as defined in EPCRA section 313 that is inconsistent with previous guidance and that was ``proposed'' in order to capture releases from combustion processes at electric utilities.

EPA disagrees with the commenters. In the proposed rule, EPA discusses ``manufacture'' as it applies to coal and oil combustion, EPA stated that:

> In the combustion of coal and oil, metal compounds may be produced from either the parent metal or a metal compound contained in the coal or oil. *This may or may not involve a change of valence state. A change in valence state results in the manufacture of a metal compound.* Metal compounds which are produced in the combustion process are considered ``manufactured'' for purposes of EPCRA section 313 (emphasis added). (61 FR 33601).

EPA disagrees that this is a new interpretation of manufacture. If a metal undergoes a valence state change, a metal compound will be ``manufactured'' since the metal ion that results from the change in valence state of the metal will combine with another element. For example, if copper(0) (i.e., copper in valence state 0) changes valence state to copper(+2) (i.e., copper in valence state +2) then the copper(+2) will combine with some other element such as oxygen. The resulting product, in this case copper oxide, is a metal compound and thus, a metal compound has been ``manufactured.'' In order to produce the copper compound from copper, there must be a change in the valence state of the metal. As cited above, EPA also stated that the ``manufacture'' of metal compounds ``may or may not involve a change of valence state.'' For example, if copper sulfate, in which copper's valence state is +2, is converted to copper oxide during combustion, no change in the valence state of copper occurs (i.e., the copper in copper oxide still has a +2 valence state), but a new metal compound (copper oxide) has been manufactured. There may also be cases in which the metal compound is not changed at all during combustion. For example, if beryllium oxide is in the coal and remains as beryllium oxide after combustion of the coal, then no manufacture of a metal compound has occurred. In any event, the test of whether a metal compound has been ``manufactured'' is not whether there has been a change in the valence state of the metal but whether a metal compound has in fact been ``manufactured'' as a result of the combustion of the coal or oil. If a metal is converted to a metal compound or if one metal compound is converted to another metal compound, then a metal compound has been ``manufactured.''

In the proposed rule, EPA did not propose either a new definition or interpretation of ``manufacture'' in order to capture releases from electric utilities. The information provided in

the proposed rule concerning valence state changes and the ``manufacture'' of metal compounds was included to ensure that parties affected by the proposed addition of certain new industries would understand that during the combustion of coal and oil it is possible to ``coincidentally manufacture'' EPCRA section 313 toxic chemicals, including metal compounds. The discussion of ``manufacture'' in the proposed rule and as outlined above is consistent with the definition of ``manufacture'' used under EPCRA section 313. For example, on page 8 of *EPA's 1995 Toxic Chemical Release Inventory Reporting Form R and Instructions* (EPA 745-K-96-001) it is stated that ``The term manufacture also includes coincidental production of a toxic chemical (e.g., as a byproduct or impurity) as a result of the manufacture, processing, otherwise use, or treatment of other chemical substances.'' This statement is consistent with the definition of ``manufacture'' codified at 40 CFR part 372, which is consistent with the statutory definition found in EPCRA section 313(b)(1)(C)(I). As discussed in more detail in the *Response to Comments* document (Ref. 15), EPA has provided guidance to facilities within the manufacturing sector that a chemical that is created during combustion is considered to be ``coincidentally manufactured'' as a byproduct. This includes guidance that is specific to coal combustion.

There is nothing unique or special about the ``coincidental manufacture'' of toxic chemicals, including metal compounds, during combustion processes, such as the combustion of coal. Clearly combustion processes can result in the ``coincidental manufacture'' of toxic chemicals. In fact, standard manufacturing processes for making metal compounds can be similar to combustion processes, such as the combustion of coal. For example, zinc oxide is ``manufactured'' by burning (oxidizing) zinc vapor (Ref. 2). In addition, metal compounds are often ``manufactured'' from other metal compounds with or without a valence state change. For example, there is no change of the valence state of the metal in the ``manufacture'' of barium carbonate from barium sulfide (i.e., barium has a +2 valence state in both the carbonate and the sulfide) (Ref. 2, Vol. 3, page 466), yet this is clearly the ``manufacture'' of a metal compound. Therefore, if a metal is converted to a metal compound or if a metal compound is converted to another metal compound as the result of the combustion of coal, a metal compound has been ``manufactured'' as defined under EPCRA section 313.

Several commenters state that the statutory definition of ``manufacture'' found in EPCRA section 313(b)(1)(C)(I) does not include ``coincidental manufacture'' and that the definition at 40 CFR 372.3 should be consistent with the statutory definition. EPA disagrees with the commenters. The definition of ``manufacture'' found under EPCRA section 313(b)(1)(C)(I) reads as follows:

> The term manufacture means to produce, prepare, import, or compound a toxic chemical.

This definition does not preclude the ``coincidental manufacture'' of a chemical. A chemical that is ``coincidentally manufactured'' can certainly be considered as having been produced. When EPA finalized the rule implementing the reporting requirements of EPCRA section 313, the definition of ``manufacture'' was clearly interpreted to include the ``coincidental manufacture'' of a chemical (53 FR 4500, February 16, 1988). EPA does not believe that there is any inconsistency between the statutory definition and the definition as explained in the 1988 final rule. EPA addressed this issue in that final rule See 53 FR 4504.

4. *Interpretation of waste management activities.* A number of commenters contend that ``a regulatory definition or interpretation of `management activity'. . .is needed.'' One commenter, WMI states that it is concerned with the ``lack of clarity'' because there are waste management activities that are conducted at hazardous waste facilities that do not involve treatment and disposal. WMX also suggests that the Agency ``clarify that if the only `management activity' which occurs is storage, container transfer or tank transfer, then these activities do not fall under the `otherwise use' definition as proposed, and thus would not require reporting.''

EPA interprets waste management to include the following activities: recycling, combustion for energy recovery, treatment for destruction, waste stabilization, and release, including disposal. Waste management does not include the storage, container transfer, or tank transfer if no recycling, combustion for energy, treatment for destruction, waste stabilization or release of the chemical occurs at the facility.

EPA's interpretation of the terms ``recycling,'' ``combustion for energy recovery,'' ``treatment for destruction,'' and ``waste stabilization'' are discussed in Ref. 13. ``Combustion for energy recovery,'' ``treatment for destruction,'' and ``waste stabilization'' are also discussed in Units IV.E.6., IV.E.7., and IV.E.8., respectively, of this preamble. EPCRA section 329(8) defines ``release.''

Some commenters believe that EPA should define ``waste,'' particularly because EPA is adding a segment of the waste management industry. AAMA believes that EPA should ``provide clear guidance for all covered facilities with respect to the definition of waste, especially in the context of recycling.'' The Chemical Manufacturers Association (CMA) contends that EPA ``should define a waste stream under the PPA reporting requirements so there is not ambiguity about which wastes really are wastes.''

EPA is providing guidance on waste management activities in the document entitled *Interpretations of Waste Management Activities: Recycling, Combustion for Energy Recovery, Treatment for Destruction, Waste Stabilization, and Release* (Ref. 13). EPA will provide regulatory definitions on waste when it reproposes the PPA reporting requirements in the near future.

5. *Recycling as a process activity.* WMI and Safety Kleen support EPA's interpretation of recycling as a process activity. The Department of Energy contends that the ``interpretation of the term ``processing'' to include toxic chemicals contained in materials being recovered/recycled and subsequently distributed in commerce is new and that this interpretation raises issues needing clarification.'' They question whether this interpretation applies only to wastes received from off-site or from all recovery/recycling operations. They also question how they should report if the recovery operation takes place in one reporting year and the reuse operation takes place in a future reporting year.

EPA's interpretation of ``processing'' stated in the proposal is not new. In the proposed rule, EPA stated that the recovery of an EPCRA section 313 listed toxic chemical for further distribution or commercial use is ``processing'' of that chemical. This interpretation applies to recycling activities where the EPCRA section 313 listed toxic chemical that is recovered is distributed in commerce. If a facility recycles an EPCRA section 313 listed toxic chemical and uses that material at the facility, e.g., as a solvent, and the EPCRA section 313 listed toxic chemical is not distributed in commerce, the chemical is ``otherwise used.'' This guidance is not new to this rulemaking. EPA has provided this guidance on recycling activities that have occurred at covered facilities since the inception of the program. EPA has not changed its interpretation of

``processing'' to include recycling of an EPCRA section 313 toxic chemical only if the recycled material was received from off-site. Nor did EPA state in the proposed rule that it intended to change its interpretation.

In response to the question about the recovery and reuse taking place in different reporting years, a recovered toxic chemical does not need to be reused during the same reporting year to be reported as ``recycled.'' This is illustrated in the following examples.

Facility ``X'' removes chromium from sludge created during wastewater treatment. The chromium that is recovered from the sludge and is reused at the facility. Assuming all of these steps occur at the facility within the same reporting year, the quantity of chromium recovered from the sludge and reused is considered to be recycled within that reporting year. As a second example, facility ``X'' treats the wastewaters, recovers the chromium from the sludge and then stores the reusable chromium during the 1997 reporting year. During the 1998 reporting year, the chromium is reused. EPA considers the chromium to be recycled in the 1997 reporting year because that is when it was recovered into a usable product.

A broader discussion of recycling is available in the document entitled *Interpretations of Waste Management Activities: Recycling, Combustion for Energy Recovery, Treatment for Destruction, Waste Stabilization, and Release* (Ref. 13).

6. *Combustion for energy recovery vs. treatment for destruction.* Safety Kleen states that it believes that ``treatment for destruction, disposal, or stabilization is appropriately considered to be `otherwise use' when it applies to operations that are associated with disposal operations.'' However, Safety Kleen is concerned that waste-derived fuel blending operations could inappropriately be considered to be ``treatment for destruction.'' Safety Kleen states ``[w]aste-derived fuels are organic chemical waste streams which contain significant amounts of heat value (generally greater than 5,000 British Thermal Units (Btu) per pound) but with contamination levels that make it either impractical or not cost effective to recover the primary constituents from them. These fuel streams are burned as an alternative fuel in cement kilns, for example, reducing the kilns' energy dependence on coal or other fossil fuels.'' Safety Kleen considers the blending of the waste-fuel streams to be analogous to the preparation and distribution in commerce of a chemical mixture. Therefore, Safety Kleen considers this activity to be ``processing.'' Safety Kleen also requests that the ``otherwise use'' definition be modified to make it clear the ``otherwise use'' applies only to ``treatment for destruction'' if there is no subsequent distribution in commerce.

EPA believes that the commenter interprets ``treatment for destruction'' as including the preparation of an EPCRA section 313 toxic chemical in waste for destruction because: (1) Combustion of waste-derived fuels is an activity that results in the destruction of a chemical(s), and (2) the commenter requests that the definition of ``otherwise use'' be modified so that it is clear the otherwise use only applies to ``treatment for destruction'' if there is no subsequent distribution in commerce. EPA believes that the commenter contends that the preparation of a waste fuel which will subsequently be distributed in commerce and destroyed could be construed as ``treatment for destruction,'' even though no destruction of the subject EPCRA section 313 toxic chemical will occur during blending operations. EPA believes that in discussing waste-derived fuels that have heat values of greater than 5,000 Btus and that are combusted in cement kilns, the commenter is implicitly referring to ``combustion for energy recovery.'' As discussed below, for purposes of reporting on the management of wastes under the PPA, EPA differentiates ``treatment for destruction'' from ``combustion for energy recovery.'' EPA believes that in addition to bringing up a number of issues associated with how threshold determinations are made for ``processing,'' ``treatment for destruction,'' and ``otherwise use,'' the commenter also introduces the issue of how ``treatment for destruction'' and ``combustion for energy recovery'' are reported on the Form R.

EPA agrees with the commenter that the act of fuel blending is not in itself now considered ``otherwise use'' nor would it be considered ``otherwise use'' under EPA's revised interpretation of that term. If a facility blends and subsequently distributes in commerce a waste-derived fuel, the facility is ``processing'' the EPCRA section 313 toxic chemicals that are constituents of that waste-derived fuel. However, if subsequent to blending the waste-derived fuel, that same facility combusted on-site the waste-derived fuel in an energy recovery unit, e.g., a cement kiln, the facility would be ``otherwise using'' the EPCRA section 313 constituents of the waste-derived fuel. Note that this facility is ``otherwise using'' the EPCRA section 313 toxic chemicals that are constituents of the waste-derived fuel regardless of whether the facility generated the waste-derived fuel or received it from another facility for purposes of waste management. Since the inception of the program, EPA has considered that an EPCRA section 313 listed toxic chemical that is a constituent of a fuel that is combusted on-site is being ``otherwise used'' (see EPA's 1995 *Toxic Chemical Release Inventory Reporting Form R and Instructions* (EPA 745-K-96-001), page 23). If the facility that blended the waste-derived fuel distributes this fuel in commerce, the facility that receives and combusts the waste-derived fuel would compare the quantities of the EPCRA section 313 listed toxic chemicals in this fuel with the ``otherwise use'' threshold, provided that the receiving facility is a covered facility.

Thus, for purposes of identifying whether an ``otherwise use'' activity is being conducted, EPA distinguishes between the ``otherwise use'' of an EPCRA section 313 toxic chemical through the ``treatment for destruction'' and the ``otherwise use'' of an EPCRA section 313 toxic chemical that is a constituent of waste-derived fuels combusted in an energy recovery unit. Under EPA's existing guidance on ``otherwise use,'' an EPCRA section 313 toxic chemical that is a constituent of waste-derived fuel combusted in an energy recovery device is ``otherwise used'' by the facility, regardless of the origin of the waste-derived fuel. The EPCRA section 313 chemical that is a constituent of the waste-derived fuel is considered ``otherwise used'' for energy recovery because it is combusted in an energy recovery unit. This is simply one application of EPA's guidance on the ``otherwise use'' of EPCRA section 313 toxic chemicals in any fuel. EPA's revised definition of ``otherwise use'' also considers the ``treatment for destruction'' of an EPCRA section 313 toxic chemical to be ``otherwise use,'' but only if the facility destroying the toxic chemical received the chemical from another facility for waste management purposes or if the toxic chemical was produced as a result of managing waste materials received from another facility.

However, EPA notes that once the ``otherwise use'' threshold has been met, for reporting the activity under section 6607 of the PPA the combustion of the EPCRA section 313 toxic chemical in waste-derived fuel is reported as ``combustion for energy recovery'' only if certain conditions are met. Under EPA's interpretation of ``combustion for energy recovery,'' EPCRA section 313 toxic chemicals that have significant heat value and that are combusted in an energy recovery unit are ``combusted for

energy recovery.'' EPA believes that while ``combustion for energy recovery'' can be considered ``treatment for destruction'' of the toxic chemical because it results in the destruction of the EPCRA section 313 toxic chemical, it can also be considered to have aspects of ``recycling'' because it may also result in the beneficial reuse of the chemical. Therefore, EPA believes that quantities of an EPCRA section 313 toxic chemical in waste that are combusted in an energy recovery unit should not be considered to be solely the ``treatment for destruction'' of the toxic chemical. EPA believes that for the purposes of the PPA, reporting quantities ``combusted for energy recovery'' should be restricted to devices where energy is produced from the combustion of the toxic chemical and harnessed. Such a restriction distinguishes, in keeping with PPA section 6607, between combustion of an EPCRA section 313 toxic chemical for the purpose of producing energy and destruction of the toxic chemical with no recovery of energy. EPA also believes that a threshold for the heating value of the toxic chemical should be set to determine whether the chemical should be reported as ``combusted for energy recovery'' or ``treated for destruction.'' EPA believes that the threshold applied should be the same threshold used in EPA's RCRA enforcement guidance to distinguish between energy recovery and incineration (48 FR 11158, March 16, 1983), of 5,000 Btus per pound.

Specifically, EPA interprets ``combustion for energy recovery'' as the combustion of a toxic chemical that (1) is (i) a RCRA hazardous waste or waste fuel, (ii) a constituent of a RCRA hazardous waste or waste fuel, or (iii) a spent or contaminated ``otherwise used'' material; and that (2) has a heating value greater than or equal to 5,000 Btus per pound in an ``energy or materials recovery device.'' EPA believes that the Btu value of the toxic chemical is the value listed either in (i) ``Design Institute of Physical Property Data Pure Component Data Compilation'', 1988; (ii) Domalski, Eugene S. and Hearing, Elizabeth D. ``Estimation of the Thermodynamic Properties of C-H-N-O-S Halogen Compounds at 298.15 K. Journal of Physical and Chemical Reference Data, V22 #4, 1993; (iii) Domalski, Eugene S. ``Selected Values of Heats of Combustion and Heats of Formation of Organic Compounds Containing the Elements C, H, N, O, P, and S.'' Journal of Physical and Chemical Reference Data, V22 #4, 1972; (iv) ``CRC Handbook of Chemistry and Physics'', 1988; or in the absence of such listing, generated by EPA using either the American Society for Testing Materials (ASTM) Computer Program for Chemical Thermodynamic and Energy Release Evaluation Version 7.0, 1994, or the National Institute of Standards and Technology Estimation of the Chemical Thermodynamic Properties for Organic Compounds at 298.15K, 1994.

EPA considers an ``energy or materials recovery device'' to be an industrial furnace or boiler as defined in 40 CFR 372.3.

EPA considers any toxic chemical that is burned and meets the criteria described in part (1) of the interpretation, but which has a heating value less than 5,000 Btus per pound, as provided in part (2) of the definition interpretation, to be ``treated for destruction'' rather than ``combusted for energy recovery.'' This is regardless of the type of device in which it is combusted. A discussion of this interpretation is provided in Ref. 13.

EPA believes revision of its proposed definition of ``treatment for destruction'' is necessary in response to the comments received and to reflect the difference between ``treatment for destruction'' and ``combustion for energy recovery.'' EPA's revised definition for ``treatment for destruction'' follows.

Treatment for destruction means the destruction of the toxic chemical in waste such that the substance is no longer the toxic chemical subject to reporting under EPCRA section 313. This does not include the destruction of a toxic chemical in waste where the toxic chemical has a heat value greater than 5,000 British thermal units and is combusted in any device that is an industrial furnace or boiler as defined at 40 CFR 260.10.

EPA reiterates that an EPCRA section 313 toxic chemical that has a heat value of 5,000 Btus or less and that is a constituent of a waste-derived fuel is ``otherwise used,'' regardless of the origin of the waste material, if that waste-derived fuel is combusted in an energy recovery unit.

7. *Treatment for destruction*. One commenter believes that there is substantial confusion over the definition of ``treatment for destruction.'' The commenter contends that it is clear that this definition includes processes such as incineration and the commenter believes that acid or alkaline neutralization and cyanide destruction may qualify. However, the commenter is uncertain whether treatment activities such as fuel blending, clarification, precipitation, biological treatment and carbon absorption will be covered. These processes are considered ``treatment'' under current RCRA regulations.

EPA has defined ``treatment for destruction'' as ``the destruction of the toxic chemical in waste such that the substance is no longer the toxic chemical subject to reporting under EPCRA section 313. . . .'' EPCRA section 313 and PPA section 6607 reporting data elements are generally chemical-specific not waste stream-specific. Thus, reporting on ``treatment for destruction'' activities and consideration of ``treatment for destruction'' activities for purposes of the ``otherwise use'' threshold under EPCRA section 313 focus on treatment of the chemical not treatment of the wastestream. As such, ``treatment for destruction'' only includes activities that chemically change the listed EPCRA section 313 toxic chemical. EPA believes that this includes acid or alkaline neutralization if the EPCRA section 313 listed toxic chemical is the entity which reacts with the acid or base. EPA does not consider the EPCRA section 313 toxic chemical to be ``treated for destruction'' if the waste stream is neutralized, but a component of the waste stream other than the EPCRA section 313 listed toxic chemical is the entity which reacts with the acid or base. As discussed in Unit V.E.6. of this preamble, fuel blending is often a ``processing'' activity. EPA believes that biological treatment can result in the destruction of an EPCRA section 313 listed toxic chemical. More generally for EPCRA section 313 purposes, EPA believes that ``treatment for destruction'' should not include preparation of the EPCRA section 313 toxic chemical for disposal or removal of the toxic chemical from waste streams. Further, EPA believes that ``treatment for destruction'' should not include physical removal or other activities intended to render the stream more suitable for further ``otherwise use'' or ``processing,'' such as a distillation or sedimentation unit. Additional guidance on this issue is provided in Ref. 13.

8. *Waste stabilization*. In the preamble to the proposed rule, EPA stated that it interpreted waste stabilization consistent with the definition at 40 CFR 265.1081, except that for purposes of EPCRA section 313 the definition should be interpreted to apply to any EPCRA section 313 listed toxic chemical or waste containing any EPCRA section 313 listed toxic chemical. 61 FR 33596-97. EPA noted that as provided in ß265.1081, a synonym for waste stabilization is waste solidification. *Id.* at 33597. One commenter states that in a **Federal Register** notice of February 9, 1996 (61 FR 4903), EPA removed waste

solidification from the definition of waste stabilization at ß265.1081. EPA does not agree that the new language excludes solidification from the definition of waste stabilization; rather, it simply excludes one specific activity, the addition of absorbent material without mixing or agitation, from the general stabilization definition.

EPA further does not agree that the specific activity excluded from the general definition of waste stabilization in ß265.1081 should be excluded from that definition for EPCRA section 313 purposes. That activity was excluded because the addition of absorbent material without mixing or agitation would not be expected to result in emissions of volatile organic compounds. However, for purposes of ``otherwise use'' under section 313, that activity constitutes such use in the same manner as any other waste stabilization activity. Therefore, for purposes of EPCRA section 313, EPA defines ``waste stabilization'' consistently with the general definition found at 40 CFR section 265.1081, which provides that waste stabilization is a physical or chemical process used to either reduce the mobility of hazardous constituents in a hazardous waste or eliminate free liquids in the waste, and that this process includes mixing the hazardous waste with binders or other materials, and curing the resulting hazardous waste and binder mixture.

The commenter also suggests that a more appropriate definition of waste stabilization is located at 40 CFR 268.42 Table 1. That table does not define waste stabilization, but identifies waste stabilization as one type of technology-based treatment standard applicable to RCRA hazardous wastes prior to land disposal. For purposes of defining waste stabilization as a type of ``otherwise use'' of a toxic chemical, EPA believes that the general approach used in the definition at 40 CFR 265.1081, as discussed above, is appropriate.

F. Definitional Interpretations and Reporting Considerations

1. *Reporting of releases.* EPA has received approximately 50 comments on the issue of the Agency's interpretation of ``release.'' The following is a brief summary of some of the major issues raised in those comments. Detailed responses to comments specific to mining, RCRA Subtitle C facilities, utilities, and underground injection wells are available in the *Response to Comments* document (Ref. 15).

A number of the commenters argue that EPA is unlawfully expanding the definition of ``release.'' They contend that EPA has incorrectly interpreted release to include, for example, the disposal of EPCRA section 313 listed toxic chemicals in mining materials, ash, and sludge on-site to land; the disposal of EPCRA section 313 listed toxic chemicals into a RCRA Subtitle C facility; and the injection of EPCRA section 313 listed toxic chemicals into underground injection wells, particularly, Class I and II injection wells. They further contend that in *The Fertilizer Institute v. EPA*, 935 F.2d 1303 (DC Cir. 1991) (``TFI''), the court rejected EPA's expansive definition of ``release.'' Since the definition of ``release'' in EPCRA is identical to the definition of ``release'' in CERCLA, these commenters argue that *TFI* prohibits EPA from defining ``release'' under EPCRA to apply to any of the above scenarios.

EPA believes that EPCRA section 313 does authorize the Agency to require that the land-based disposal of toxic chemicals, including the examples cited above, be reported on Form R as releases. The statute directs EPA to publish a ``uniform toxic chemical release form'' and specifies that the form is to provide for the submission of, *inter alia*, ``[t]he annual quantity of the toxic chemical entering each environmental medium.'' EPCRA section 313(g)(1). The statute broadly defines both ``release'' to mean ``any spilling, leaking, pumping, pouring, emitting, emptying, discharging, *injecting*, escaping, leaching, dumping or *disposing* into the environment,'' EPCRA section 329(8) (emphasis added); and ``environment'' to ``include water, air and land and the interrelationship which exists among and between water, air, and land and all living things.'' *Id.* section 329(2). Under EPCRA, EPA interprets annual reportable quantity to include ``releases.'' EPA interprets ``release'' to include the land-based disposal of toxic chemicals given the definition of ``release'' includes a wide variety of activities and the encompassing definition of ``environment'' includes the land, both surface and subsurface. Even if ``release'' were to be construed more narrowly, EPCRA does not limit the Form R requirements to ``releases'' but calls for facilities to report all amounts of listed toxic chemicals ``entering each environmental medium'' annually. EPCRA section 313(g)(1)(C)(iv). EPA does not believe that it is appropriate in this context to exclude such disposals simply because the disposal area is intended to contain the toxic chemicals in or on the land.

EPA has interpreted section 313(g)(1)(C)(iv) in this way from the inception of the TRI program. Ever since reporting was first required, for reporting year 1987, Form R has included data elements specific to releases to land on-site: Section 5.5, entitled ``Release to Land On-site,'' is divided into four subsections: landfill; land treatment/application farming; surface impoundment; and other disposal. Further, in EPA's guidance document entitled *1995 Toxic Chemical Release Inventory Reporting Form R and Instructions* (EPA 745-K-96-001), which is provided to the regulated community every year, EPA has consistently described releases to land to include disposal in landfills, surface impoundments, land treatment/application farming, and other disposal. Form R also includes a data element specific to underground injection, Section 5.4 entitled ``Underground injections on-site,'' and the guidance document specifically states that this data element includes the ``total annual amount of the toxic chemical that [is] injected to all wells, including Class I wells, at the facility.''

EPA's interpretation of its statutory authority to collect disposals or injections to land as releases is supported by the Conference Report, in which the House and Senate conferees emphasized that ``[r]eporting on releases to each environmental medium under subsection (g)(1)(C)(iv). . . shall include, *at a minimum*, releases to the air, water (surface water and groundwater), land (surface and subsurface), and waste treatment and storage facilities. Conf. Rep. at 298 (emphasis added). Representative Edgar, the principal House author of EPCRA, further clarified this issue in stating that ``all toxic chemicals dumped into land disposal facilities must be reported whether or not such facilities are regulated under [RCRA].'' 132 Cong. Rec. at H9595 col. 1 (October 8, 1996). EPA believes that this legislative history confirms that Congress intended the release forms to include the land-based disposal of toxic chemicals. This is true whether or not the area receiving waste is intended to contain it, and therefore EPA disagrees with some commenters' assertion that there must be a direct physical contact between a listed toxic chemical and the land (or any other environmental medium) before a ``release'' reportable under EPCRA section 313 can occur.

EPA also does not agree with commenters' position that *The Fertilizer Institute* deprives the Agency of authority to require disposal of toxic chemicals to be reported as releases under EPCRA section 313. That case involved a challenge to EPA's interpretation of ``release'' under CERCLA section 101(22) to include

disposal to unenclosed containment structures, such that CERCLA's section 103(a) reporting requirement would be triggered by such disposal. In response to that challenge, EPA argued that the threat of an actual release from such a structure was great enough to justify reporting a disposal into it as an actual release. Based on specific provisions of CERCLA, however, the court rejected that position, emphasizing that CERCLA ``expressly distinguish[es] between threats of releases and actual releases,'' TFI, 935 F.2d at 1310, and concluding that ``[u]nder CERCLA's provisions, nothing less than the actual release of a hazardous material into the environment triggers its reporting requirements,'' *Id*.

EPA believes that *The Fertilizer Institute* does not affect EPA's authority to promulgate today's rule under EPCRA. Although one relevant term, ``release,'' is defined in a similar way in both EPCRA and CERCLA, other relevant provisions of EPCRA are defined differently and more broadly. First, while CERCLA section 101(8) defines ``environment'' to mean (in addition to certain specified waters) surface and ground water, land surface and subsurface strata and air, EPCRA defines environment more broadly to ``*include*'' all such media and the ``interrelationship which exists among and between water, air, and land and all living things.'' EPCRA section 329(2) (emphasis added). Second, while CERCLA section 103(a) requires notification only of an actual release, EPCRA requires each annual facility report to include, at a minimum, not only the quantity of toxic chemicals ``entering each environmental medium,'' and a number of other things, such as amounts of toxic chemicals present and the waste treatment and disposal methods used. EPCRA section 313(g)(1)(C). Moreover, the purposes of the reporting requirements in each statute are significantly different: as *The Fertilizer Institute* court noted, CERCLA was enacted ``[t]o address the growing dangers caused by the unregulated dumping and storage of hazardous wastes.'' TFI, 935 F.2d at 1306. To ``establish a program for appropriate environmental response action,'' CERCLA ``vested the EPA with the authority to investigate and respond to the release, or threatened release, of hazardous wastes into the environment.'' Id. In turn, the court stated that the purpose of the CERCLA reporting requirement is ``[t]o effectuate the EPA's response authority.'' *Id*. By contrast, in discussing the information required to be reported under EPCRA, the House and Senate conferees stated that ``[t]he purpose of this reporting requirement is to obtain available information about releases of listed toxic chemicals to the environment.'' Conf. Rep. at 298. This statement is reinforced by the broad variety of intended uses of the release forms that are discussed in the statutory text, at EPCRA section 313(h). For all of these reasons, EPA believes that the holding of *The Fertilizer Institute* is limited to the context and terms of CERCLA, and should not be extended to the reporting requirements of EPCRA.

EPA also received comments stating that because EPA uses the word ``release,'' TRI data will lead to the misperception that a reported EPCRA section 313 ``release'' necessarily results in an actual exposure of people or the environment to a toxic chemical. These comments have been received from the mining interests, RCRA Subtitle C hazardous waste facilities, utilities and other industries. Although EPA provides clear descriptions of TRI data for public use, the Agency recognizes that the potential exists for the data in TRI to be mischaracterized and/or misunderstood. However, EPA does not believe that the potential for mischaracterization and/or misunderstanding justifies not adding new industry groups to the TRI. EPA will continue to attempt to provide the public with the means for correctly interpreting the TRI data.

In addition, the Agency modified Form R for the 1996 reporting year in order to address some of the commenters' concerns about public misperception and to better help the public understand the nature of the various methods of disposal. First, EPA does recognize the difference in the management and regulatory oversight provided by the Underground Injection Control program of Class I wells from other forms of injection into the land. As a consequence, EPA has redesigned Form R to distinguish Class I injection well data from data for other classes of injection wells in a way that makes that distinction clear for the public. The Agency has redesigned Form R to distinguish disposals to RCRA Subtitle C landfills from disposals to other landfills. In addition, the title of Section 5 of the Form R, previously named ``Releases of the Toxic Chemical to the Environment On-Site'' has been changed to reflect the statutory language to ``Quantities of the Toxic Chemical Entering Each Environmental Medium.''

Beyond the changes which EPA has made on the form for 1996, the Agency will be working with industry, states, academia and other non-governmental organizations as part of the stakeholder process as described in Unit VII. of this preamble to identify other modifications to the form which will make it a more effective tool for communicating information about releases and transfers of chemicals to the public. Issues that will be addressed include changes to section 8, currently named ``Source Reduction and Recycling Activities,'' to better reflect pounds of waste generated as distinguished from pounds of waste managed, changes to the nomenclature for underground injection and land disposal as well as modifications that may result from finalization of the PPA reporting requirements for Form R.

2. *Double counting issues*. Several commenters contend that modification of the interpretation of ``otherwise use'' will result in double counting of wastes reported in section 8 of Form R. Others contend that this double counting in section 8 already exists and that the modification of ``otherwise use'' will only increase the magnitude of the problem. All of the comments are specific to the total waste reported by the facility in section 8 of Form R. None of the commenters contend that double counting will result for on-site releases.

Eastman contends that the Form R should be modified so that only the facility responsible for generating a waste would report on the EPCRA section 313 listed toxic chemical in that waste. If wastes are transferred to another facility for purposes of further waste management, the commenter believes that the receiving facility should not report unless a ``new waste'' is generated. CMA contends that EPA's proposed reporting requirements will result in significant double counting if all wastes managed are summed ``across the facilities.'' They believe that if EPA aggregates Form R section 8 data nationally, only the on-site activities should be included.

CMA further suggests that three new data elements should be included in section 8 of the Form R: ``Total waste management activities,'' ``Quantity generated onsite,'' and ``Quantity received from offsite.'' Based on examples that they provide, the data element ``Total waste management activities'' represents the sum of the current sections 8.1-8.7; ``Quantity generated onsite'' represents the quantity of the EPCRA section 313 listed toxic chemical that was actually produced as waste at the site. Quantity received from off-site is the quantity of the EPCRA section 313 listed toxic chemical as waste managed on-site that was received from another facility.

The information in section 8 of Form R is the quantity of the EPCRA section

313 listed toxic chemical that is managed as waste material by the reporting facility; it is not limited to the quantity of the EPCRA section 313 chemical that is generated as waste by the reporting facility. The information collected under section 8 of Form R is collected under the authority of section 6607 of the PPA, which specifically relates to the management of EPCRA section 313 toxic chemicals in waste. EPA does not believe that the PPA is intended to limit the reporting of EPCRA section 313 toxic chemicals managed in waste to the quantities that are generated at the facility. The information on the EPCRA section 313 toxic chemicals in waste managed by the facility would be incomplete if the facility were to report only that fraction of managed waste that was generated by the facility. Thus, EPA believes that if the wastes currently reported in section 8 are totaled across the nation, double counting of the wastes that are managed will not occur. Even assuming someone were to represent national totals of section 8 waste data as waste generated, this rulemaking does not introduce this misuse of the section 8 information.

One type of information that section 8 data capture is how different facilities manage a quantity of an EPCRA section 313 toxic chemical in waste. Currently, facilities in SIC code 20 through 39 may send wastes to other facilities in SIC code 20 through 39 for the purposes of recycling, combustion for energy recovery, treatment, and disposal. The first facility would report in section 8 of Form R on quantities of the EPCRA section 313 listed toxic chemical sent off-site for waste management. If the second facility exceeded the reporting threshold for that chemical elsewhere at the facility then that facility would report on the quantities managed. However, the management activity and quantity of the EPCRA section 313 toxic chemical associated with that activity reported in section 8 by the first facility would not necessarily be reported the same way by the second facility. For example, facility A reports that 1,000,000 pounds of an EPCRA section 313 toxic chemical is sent off-site for recycling to facility B. Facility B recycles 800,000 pounds of the 1,000,000 pounds received from facility A; treats for destruction 150,000 pounds and emits 50,000 pounds. While the reported total quantity of the EPCRA section 313 toxic chemical managed as waste will be the same for both facilities, how each facility managed the waste is clearly different. This information on waste management thus provides the public with useful information on toxic chemicals.

In addition, any apparent issue with double counting of total waste generated may be overstated by the commenters. For example, the facility generating the waste may not file a Form R because it may not have exceeded an activity threshold or may not have conducted a reportable activity.

While EPA disagrees with the commenters, EPA believes that CMA's proposed addition of data elements to section 8 may be an efficient way to address the commenters' concerns about double counting. It would continue to allow the data user to assess wastes managed by the facility but would minimize the perception that the wastes reported in section 8 were generated by the reporting facility. As discussed above, EPA plans to revise the Form R in the near future in conjunction with rulemaking in connection with the PPA reporting requirements. EPA will seriously consider the data elements included in CMA's comments. Once EPA includes data elements that are similar (or the same) as those suggested by the commenter, EPA will report separately national totals of waste generated from national totals of waste managed.

G. Industries Not Included in this Final Rule

A significant number of commenters urged EPA to add other industries which are not included in this rulemaking. These comments primarily support EPA's proposal, but state the belief that EPA should fully exercise its authority to add other industries, and that reporting by a number of other industries is justified. A number of commenters support the addition of other industries such as dry cleaners, gas stations, and airports.

As discussed in Unit II.C. of this preamble, EPA considered a number of industries during the screening process conducted prior to this rulemaking. Also, as discussed in Unit V.A. of this preamble, EPA has broad authority to add other industries, and may consider doing so in the future. EPA selected the industry groups included in this final rule as a matter of prioritizing in order to focus the Agency's efforts and resources, but recognizes that other industries may also ``manufacture,'' ``process,'' or ``otherwise use'' listed toxic chemicals in ways relevant to the reporting purposes of EPCRA section 313. Therefore, reporting by facilities in these other non-included industries may be determined to be relevant to the purposes of EPCRA section 313.

Since EPA did not include the industries suggested by commenters in its proposal, it will not directly address the particular issues associated with each industry which commenters have recommended including under EPCRA section 313. In general, EPA has questions regarding how the Agency should respond to the different situations these industries might face in reporting under EPCRA section 313. EPA recognizes the concerns many commenters expressed regarding the lack of information on toxic chemical releases from facilities in other industries. However, EPA believes that any expansion should be approached in a measured and orderly fashion.

A number of commenters from environmental and community groups urged EPA to remove some of the constraints to reporting in its program, such as lowering the current exemption for *de minimis* concentrations, particularly for classes of chemicals. Such a step may potentially make it more likely that some industry groups not included in this rule would provide more information under EPCRA section 313 reporting requirements. In the future, EPA will consider changes to the *de minimis* exemption, but is not addressing the issue in this rule, because the Agency believes that this issue requires further analysis and rulemakings. EPA may consider such a step in the future.

A number of commenters support EPA's decision not to include oil and gas exploration and production in its proposal, and urge EPA not to propose adding this industry in the future. EPA considered the inclusion of this industry group prior to its proposal, and indicated in the proposal that one consideration for not including it was concern over how a ``facility'' would be defined for purposes of reporting in EPCRA section 313 (61 FR 33592). This issue, in addition to other questions, led EPA to not include this industry group. EPA will continue its dialogue with the oil and gas exploration and production industry and other interested parties, and may consider action on this industry group in the future.

Some commenters from environmental and community groups urged EPA to abandon the SIC code system entirely in order to capture all facilities which use toxic chemicals. These commenters cite the ability of facilities to avoid reporting under EPCRA section 313 by identifying their facilities in non-covered SIC codes. EPA discusses the so-called ``SIC code loophole'' in Unit V.I.3. of this preamble, and more fully in the Response to Comment document (Ref.

15). EPA does not believe that abandoning the SIC code system entirely, and then covering all facilities which manufacture, process, or otherwise use EPCRA section 313 chemicals, is a workable alternative at this point in time. Resource constraints, legal questions, burden for facilities, and compliance and enforcement issues all combine to bring into question the Agency's ability to expand EPCRA section 313 reporting in such a fashion.

H. Industry-Specific Comments for Industry Groups that Are Being Finalized in Today's Action

1. *Comments regarding the proposed addition of mining.* EPA is finalizing the addition of Metal Mining (SIC codes 1021, 1031, 1041, 1044, 1061, 1099) and Coal Mining (SIC codes 1221, 1222, 1231) to the EPCRA section 313 list of covered industries. EPA believes that reporting by facilities in these industry groups is relevant to the purposes of EPCRA section 313. EPA received considerable comment regarding the addition of these industry groups, both for and against this action. A majority of the substantive comments received from mining trade associations, state agencies, and mining companies primarily address whether subjecting mining facilities to EPCRA section 313 reporting requirements is consistent with the authority or purposes of EPCRA section 313, and whether such reporting would provide data of little or no value at considerable burden to the industry. A significant number of industry commenters incorporated the comments of the National Mining Association (NMA) by reference. The comments in favor of the proposal address the lack of data available regarding the environmental consequences of mining and the need for that data, and the lack of inclusion of this industry under other Agency reporting requirements.

In summary, concerns that commenters raise regarding EPA's authority to specifically add mining facilities can be classified as: (a) Mining activities are not similar to activities in the manufacturing sector; (b) mining does not involve the ``manufacture,'' ``process,'' or ``otherwise use'' of EPCRA section 313 toxic chemicals; and (c) the data provided by mining facilities would be of little value or benefit. These concerns are raised in conjunction with the addition of both metal and coal mining, and are addressed in the following section. Following this general section, two sections discuss more industry-specific comments, the first dealing with metal mining, and the second with coal mining. Several major concerns raised by mining industry commenters, such as duplicative reporting requirements, were raised by a number of other commenters, and are addressed generally in other units of this rule. Additional detail is available in the *Response to Comments* document (Ref. 15).

a. *Lack of similarity to manufacturing.* Several commenters believe that EPA has the authority to add only those industries engaging in activities which are similar to activities conducted at currently covered manufacturing facilities, or which are manufacturing-like. These arguments are based on the commenters' reading of the statute and the relevant legislative history of EPCRA section 313. These commenters believe clear distinctions exist between mining and activities that occur in the manufacturing sector. Mining removes EPCRA section 313 metals from their place in nature, while manufacturing industries more typically make products that are toxic chemicals or that are made out of or with the assistance of toxic chemicals. Commenters believe that EPA based its proposal on the false premise that mining activities are ``virtually indistinguishable'' from manufacturing activities in SIC codes 20 through 39.

As discussed in Unit V.A. of this preamble, EPCRA section 313 does not limit the addition of industry groups to EPCRA section 313 to those groups that are like or similar to manufacturing facilities. Rather, Congress applied section 313 to every designated facility classified in Division D: Manufacturing, of the SIC code system, while giving EPA the authority to add other facilities, which by definition, would not be manufacturing facilities. Thus, clearly, Congress authorized EPA to add industries which are outside of the traditional manufacturing sector. The statute permits EPA to add industry groups if reporting by the industry groups is relevant to the purposes of section 313. EPA believes that reporting of information on the ``manufacture,'' ``process,'' ``otherwise use,'' and release and other waste management of toxic chemicals at coal and metal mining facilities is relevant to the purposes of EPCRA section 313. Therefore section 313 authorizes the addition of these industries.

EPA recognizes that there are distinctions between mining and manufacturing; however, there are significant similarities as well. Both manufacturing and mining facilities are engaged in the ``manufacture,'' ``process,'' or ``otherwise use'' of EPCRA section 313 toxic chemicals, and both industry groups can provide information on the release and waste management of EPCRA section 313 toxic chemicals from the ``manufacture,'' ``process,'' or ``otherwise use'' activities. This information is relevant to the purposes of EPCRA section 313. The application of the terms ``manufacture,'' ``process,'' and ``otherwise use'' to the mining sector is consistent with the application of those terms to the manufacturing sector. As discussed in more detail below, EPA believes that the extraction of listed chemicals constitutes ``processing'' for distribution in commerce. Further preparation of those listed chemicals for distribution in commerce during beneficiation also constitutes ``processing'' as defined in section 313.

b. *Mining does not include the manufacture, process, or otherwise use of chemicals.* Several commenters believe that while EPA may have the authority to expand the list of industry groups subject to EPCRA section 313, it does not have the authority to add industries which do not ``manufacture,'' ``process,'' or ``otherwise use'' EPCRA section 313 chemicals, and which do not engage in activities which are similar to activities conducted by facilities within the manufacturing sectors. These commenters argue that the threshold activity definitions in EPCRA section 313 for ``manufacture,'' ``process,'' and ``otherwise use'' do not apply to mining, for a number of reasons, including that mining is the removal of naturally-occurring materials from the earth and does not create or compound EPCRA section 313 chemicals. Because ore or coal is not created (i.e., ``manufactured''), it cannot be ``processed'' during beneficiation or preparation because ``processing'' must occur ``after manufacture'' as defined in EPCRA section 313. Further, some argue that the term ``otherwise use'' has no application because it must occur in the context of the ``manufacturing'' and ``processing'' conducted by the manufacturing sector.

EPA believes that these commenters are incorrect in their interpretation of the terms ``manufacture,'' ``process,'' or ``otherwise use.'' As defined in EPCRA section 313(b)(1)(C), ``manufacture'' means to produce, prepare, compound, or import a listed toxic chemical, and ``process'' means the preparation of a listed toxic chemical, after its manufacture, for distribution in commerce. The term ``otherwise use'' is not defined in the statute, but EPA has interpreted the term by regulation to encompass any activity involving a listed toxic chemical at a facility that does not fall under the definitions of ``manufacture'' or ``process.''

``Manufacture'' of a specific listed toxic chemical includes its production. EPA interprets ``production'' to include creation. Production of that listed chemical may occur naturally, or by industrial process. Metals contained in ores are produced by natural processes. Consequently, EPCRA section 313 chemicals which exist in nature have been ``manufactured'' at some point, as defined under EPCRA section 313. The preparation of toxic chemicals contained in the ore for distribution in commerce occurs after it has been ``manufactured'' (i.e., produced). The preparation of that EPCRA section 313 toxic chemical involves its separation from its natural state. Therefore, the extraction for distribution in commerce of the toxic chemical is ``processing'' under EPCRA section 313. Other activities, such as beneficiation, are also processing under EPCRA section 313 because the listed toxic chemical is being further prepared for distribution in commerce. EPA's belief that toxic chemicals which exist in metal ores are ``manufactured,'' and that subsequent extraction and beneficiation for distribution in commerce is the ``processing'' of those toxic chemicals, is consistent with EPCRA section 313 and EPA's current guidance on the activity definitions, as well as with current compliance practices by manufacturing facilities in SIC codes 20 through 39. Further, other EPCRA section 313 toxic chemicals may also be ``manufactured'' during beneficiation if chemical reactions take place--intentionally or unintentionally--which produce other listed toxic chemicals. In addition, EPCRA section 313 toxic chemicals are ``otherwise used'' during the extraction or beneficiation activities at many of the covered mining facilities.

In applying the EPCRA section 313 processing definition to the mining industry, metal ore can be thought of as similar to crude oil as a material entering commerce. Petroleum refineries, which are currently covered under EPCRA section 313, process crude oil which has been extracted from the earth and which typically contains, in its natural state, EPCRA section 313 listed chemicals. These naturally occurring EPCRA section 313 listed toxic chemicals may continue with the crude oil as it is further processed. The constituents may be incorporated into products such as gasoline and fuel oil. For EPCRA section 313 purposes, the toxic chemicals such as benzene and toluene that may be found as constituents of crude oil are being prepared by the refineries, after being ``manufactured,'' for distribution in commerce. Because Congress listed several naturally occuring materials in the original EPCRA section 313 toxic chemical list, EPA believes that Congress intended for facilities to report on activities involving these materials.

c. *Value and benefit of reporting from mining facilities*. Several commenters assert that little or no benefit will result from reporting under the EPCRA section 313 reporting requirements by the mining industry. Various commenters make a number of arguments as to why little or no benefit will result from reporting. They observe that mining facilities are overwhelmingly located in rural areas and in many cases are distant from population centers; therefore no ``community'' typically exists which will benefit from the data. These commenters generally argue that if there is no ``community'' nearby, then reporting by mining facilities would not be relevant to the purposes of EPCRA section 313, since the purpose of section 313 is to provide information to communities on toxic chemical releases. Many of these commenters contend that EPA did not take the location of mining facilities into account in reaching its determination to propose coal and metal mining.

EPA does not dispute that many mining facilities are located in rural areas, and accepts that some, but not all, mining operations are located significant distances from the nearest dwelling. EPA also acknowledges that a major goal of EPCRA section 313 reporting requirements is to provide data and information to local communities. However, a number of commenters also assert that the general public has a right to know about information regarding toxic chemical releases and waste management information from mining operations because of the benefits that this currently unavailable information will provide to the public. EPA agrees, and this is one of the primary reasons EPA has undertaken this action. Given the purposes described in EPCRA section 313(h), the information collected under EPCRA section 313 is for the benefit of the public, including communities around covered facilities. Coverage under EPCRA section 313 is not based solely on proximity to sizable or urban populations. EPA believes that even small or rural populations may derive benefit from EPCRA section 313 data, and the ``community'' which may benefit from data is broader than the individual citizens living or working in close proximity to mining operations. Further, an additional intent of TRI is also to provide information on chemicals that cause ecological toxicity. EPA believes that information on the releases of chemicals ``manufactured,'' ``processed,'' or ``otherwise used'' by the mining industry in rural areas is consistent with that intent. Thus, EPA acknowledges that a significant consideration in advancing its proposal was to provide information to communities, but in keeping with EPCRA section 313, EPA considers ``community'' to identify more than the most local human populations.

One commenter, the Mineral Policy Center notes that, ``the need for more information is especially compelling in the case of mining, because TRI will fill a void in valuable information about mining's toxic releases. One of the chief reasons for this lack of information is that mining wastes have been exempted from treatment as hazardous wastes under the Resource Conservation and Recovery Act . . . At present, there is no available alternative source of information--such as state programs--on the industry's toxic releases.''

This commenter further observes that the benefits of TRI data include: enabling people to make more educated choices about where to live and work; enabling people to take the necessary measures to prevent exposures to EPCRA section 313 toxic chemicals; using the data to apply pressure through the media and to public officials to address mining's pollution problems; using the data to conduct better research on the environmental and health impacts of mining wastes; and using the data in the mining industry as a gauge to measure progress in reducing releases and in applying technologies to reduce or recover toxic chemicals from mining wastes that pose serious health and environmental risks.

EPA believes that the public will benefit from the information that will result from this rule. The public, including small communities and communities distant from mining operations but which may be impacted in some manner by those operations, do not have access to facility-specific and chemical-specific information such as provided under EPCRA section 313, either at the federal or state level. With this information, the public will have improved knowledge of chemicals involved in mining, and can use that information to better assess environmental and human health risks.

Several commenters argue that reporting of so-called ``releases'' will mislead the public into believing that these ``releases'' pose risks or have significant impacts on the environment.

EPCRA section 313 is not a risk-based reporting system, and EPA makes no determination, through this action, of

the risks to human health or the environment from mining activities. ``Risk'' is not an EPCRA section 313 standard for addition of facilities. However, TRI data, in combination with other information, can and was intended by Congress to be used to help determine potential risks. As the National Mining Association has noted in an attachment to its comments, ``some mining operations may present legitimate risks to health and the environment.''

EPA recognizes that TRI data regarding releases may sometimes be mischaracterized or misperceived, as discussed in Unit V.F.1. of this preamble. Congress intended EPCRA section 313 reporting to provide the public with information about the use, management, and disposition of toxic chemicals. Reporting by mining facilities will increase the universe of information available, and the public can use TRI data in concert with other information to better understand the risks associated with releases of toxic chemicals from mining facilities. EPA believes that, in light of the possibility that public misperceptions might arise through TRI data, EPA must continue to improve its outreach and education efforts regarding the data collected under EPCRA section 313. As noted above, EPA will initiate a stakeholder process to consider these issues.

2. *Metal mining.* As stated above, EPA received considerable substantive comment which urged EPA to withdraw metal mining from this rulemaking. EPA also received comments urging EPA to include metal mining.

a. *De minimis concentrations of section 313 chemicals in metal mining.* Nearly every industry commenter contends that, for most metal mining operations, and especially for precious metal mines, concentrations of metals and metal compounds in waste rock and ore are significantly below the *de minimis* concentration and including these facilities will require facilities to consider *de minimis* amounts for reporting purposes. Several commenters state that other EPCRA section 313 listed chemicals ``manufactured,'' ``processed,'' or ``otherwise used'' at metal mining sites typically would not exceed *de minimis* thresholds. Many industry commenters believe that EPA's statements regarding *de minimis* concentration levels in ore and waste rock are in some cases inaccurate and in others are based on limited and atypical data. Some commenters also assert that there are contradictions in EPA's supporting documentation regarding whether chemicals are present above or below *de minimis* levels. These commenters believe that EPA has therefore based its decision to add metal mining on faulty assumptions and limited or flawed data.

EPA agrees that in some cases metal and metal compound concentrations in ores may be below *de minimis* concentrations, while in other cases, metal and metal compound concentrations may be above *de minimis* concentrations. EPA bases its conclusion on a variety of sources. For example, in the *Economic Analysis* (Ref. 12), EPA identified EPCRA section 313 chemicals such as compounds of lead, zinc, nickel and manganese in ores at concentrations above *de minimis* levels, while gold ores are not anticipated to contain EPCRA section 313 chemicals above *de minimis* concentrations. However, the concentration of EPCRA section 313 toxic chemicals found in ores may also increase during processing or beneficiation activities and under current guidance, facilities are required to consider amounts processed above *de minimis* concentrations toward threshold and release calculations. When a facility ``processes'' or ``otherwise uses'' EPCRA section 313 chemicals that remain below the appropriate *de minimis* levels for the chemicals, the facility does not have to consider these amounts for threshold or release calculations. If the chemical concentrations exceed *de minimis* during processing, at that point the facility must consider amounts of the toxic chemical toward threshold and release calculations.

Nevertheless, the fact that concentrations of the toxic chemical are above or below *de minimis* levels in waste rock is dispositive only for purposes of determining whether the toxic chemicals in the waste rock trigger an activity threshold. In making that determination the toxic chemicals in the waste rock must first be subject to a threshold activity (i.e., the *de minimis* exemption applies only if the EPCRA section 313 toxic chemical is ``manufactured,'' ``processed,'' or ``otherwise used''). Simply being present in concentrations below the appropriate *de minimis* level does not result in an exemption from reporting of the releases of these chemicals. For example, other activity on-site could trigger reporting for an EPCRA section 313 toxic chemical. While extraction of waste rock without subsequent distribution in commerce is not a threshold activity, disposal of the waste rock, and therefore the EPCRA section 313 toxic chemical in the waste rock, must be reported, if the appropriate threshold for that chemical is exceeded at the facility.

In order to provide additional assistance to the commenters in understanding the *de minimis* exemption and its application to mining activities, EPA has provided, in the *Response to Comments* document (Ref. 15) a description of the exemption and some examples of its application.

One commenter, the Nevada Mining Association (NvMA), provided data about the total percent concentrations of metal compounds in ore and waste rock from a number of mines in the western U.S. While these data indicate that section 313 chemicals were not generally present above *de minimis* concentrations in ore and waste rock in selected samples, it was not clear in NvMA's comments what type of mines these samples were taken from, i.e., were these samples taken from gold mines, copper mines, or other metal mines. EPA cannot determine the accuracy or validity of these data, but accepts that these data suggest that, at least in some cases, concentrations of the EPCRA section 313 chemicals in target ore and waste rock may be below *de minimis* levels. However, EPA is not certain how generally applicable these data are to the metal mining industry as a whole without a clearer understanding of what types of metal mines the samples were taken from, the collection methods, and the laboratory testing methods used to collect and process these samples. Most industry commenters limited themselves to general statements regarding their belief that section 313 chemicals are generally below *de minimis* concentrations in ore, waste rock, or overburden, without providing data. In certain situations, an EPCRA section 313 listed toxic chemical that is present below these *de minimis* concentrations that is ``processed'' or ``otherwise used'' does not have to be factored into threshold determinations. Therefore, if a gold mine in Nevada has no EPCRA section 313 chemicals present above *de minimis* concentrations in its processed ore, which industry commenters claim is typically the case, then the amounts of those chemicals ``processed'' are not attributable to thresholds or release determinations. Further, provided that an activity threshold for the chemical is not exceeded at the facility, the disposal of those chemicals contained in waste rock would not be reportable as well.

b. *Extraction exemption for metal mining.* In its proposal, EPA requested comment on whether an exemption for extraction activities should be provided for metal mining, in a manner similar to the exemption proposed for coal mining. Industry commenters support an exemption for metal mining

extraction from EPCRA section 313 reporting requirements, while some commenters specifically urged EPA to not grant an exemption. While industry commenters generally believe the entire industry should be exempt from the EPCRA section 313 reporting requirements, they also offer a number of arguments for exempting extraction.

Several commenters conclude that extraction should be exempted because EPCRA section 313 listed toxic chemicals will not typically exceed *de minimis* concentrations; extraction is not ``manufacturing'' or ``processing;'' and without an exemption, metal mining facilities would be faced with a substantial compliance burden because of the volume of materials moved in extraction and the need to continually assess EPCRA section 313 toxic chemical levels to determine whether reporting thresholds may be exceeded. Industry commenters believe that releases from extraction pose little risk, and reporting associated with extraction will be misleading and mask other more significant releases. In contrast, one commenter argues that an exemption will result in a truncated TRI that would fail to capture one of the largest sources of toxic releases from mining, resulting from the disposal of waste rock.

EPA is not granting an exemption for metal mining extraction. As stated above, EPA believes that the extraction of ore containing EPCRA section 313 chemicals for their subsequent distribution in commerce constitutes the ``processing'' of those listed chemicals. In addition, EPA believes that EPCRA section 313 chemicals may be present above *de minimis* concentrations in ore. EPA recognizes that this may not be the case for some metal mines, and that concentration levels may vary significantly. However, EPA believes, based on the Agency's current understanding, that overburden contains EPCRA section 313 chemicals in negligible amounts and that reporting is unlikely to provide the public with any valuable information. Consequently, EPA is exempting the EPCRA section 313 chemicals in overburden from EPCRA section 313 reporting requirements. EPA will not require compliance determinations or reporting of releases or waste management information for listed chemicals which may be present in overburden removed prior to removal of waste rock or extraction of the target ore. EPA defines ``overburden'' as unconsolidated material that overlies a deposit of useful materials or ores. EPA believes that this action will reduce the compliance burden on metal mining facilities while not depriving the public of any valuable information regarding toxic chemicals.

EPA considers waste rock as distinct from overburden for purposes of reporting under EPCRA section 313. Waste rock is generally considered that portion of the ore body that is barren or submarginal rock or ore which has been mined but is not of sufficient value to warrant treatment and is therefore removed ahead of the milling processes. Waste rock is part of the ore body and may, depending on economic conditions, become a valuable source of a metal. It may also be further distributed in commerce for other uses such as road construction. Waste rock may contain similar constituents as the target ore. In other words, waste rock can become target ore depending on changes in the value of the metals being mined. Waste rock may typically contain lower concentrations of metals and other constituents than the target ore. Releases associated with extraction or further preparation of the waste rock are reportable provided that a threshold is exceeded at the facility for the listed toxic chemicals that are constituents of the waste rock. This would occur under two general scenarios. In the first scenario, the waste rock is distributed in commerce, e.g., to be used in highway construction. In that particular case, the extraction and further preparation of the waste rock is for distribution in commerce, and thus is ``processing.'' In this case, if the concentration of the listed toxic chemical in the waste rock is below *de minimis*, than any quantities of that listed toxic chemical in the waste rock extracted or further prepared would be exempted from threshold and release and other waste management calculations. If above *de minimis*, than the quantities would count toward these calculations. In the second general scenario, the waste rock is disposed of to the land on-site and elsewhere at the facility a threshold is exceeded for the listed toxic chemicals in the waste rock. In this case, the releases of the EPCRA section 313 toxic chemical associated with the extraction of the waste rock would be reportable.

c. *Iron ore mining.* Two commenters requested that EPA specifically exclude SIC code 1011 Iron Ores from this rulemaking. These commenters cite the exemption of facilities in this SIC code from reporting requirements in the state of Minnesota as support. Minnesota previously extended EPCRA section 313 reporting requirements to a number of industry groups outside of SIC codes 20 through 39, including SIC code 1011. Subsequently, Minnesota issued an exemption for iron ore for mining facilities in SIC code 1011. These commenters indicate that the Minnesota Emergency Response Commission specifically found: (1) Toxic chemical releases and transfers from SIC 1011 facililities in Minnesota were not of sufficient quantities to warrant reporting; (2) based on a review of the information, no facilities were expected to meet the threshold reporting levels; and (3) facilities do not make intensive use of toxic chemicals for processing their product. These commenters believe that EPA should grant an exemption, or exclude iron ore mining facilities from this rule, for the same reasons the state of Minnesota granted an exemption. The commenters believe that, based on the findings in Minnesota, reporting by iron ore mining facilities is not relevant to the purposes of EPCRA section 313, and that these facilities do not meet the EPCRA section 313 standard for addition.

EPA is not including this SIC code in this final rule. Based on the information available to EPA, listed toxic chemicals do not appear to be ``processed'' or ``otherwise used'' above *de minimis* concentrations, nor does it appear that listed toxic chemicals are coincidentally manufactured above the ``manufacturing'' threshold during the extraction or beneficiation of iron ores. Therefore, EPA has not included SIC code 1011 in the list of facilities covered under EPCRA section 313 in this action. However, EPA does not believe that the rationale articulated by the state of Minnesota in exempting this SIC code from coverage in its program is consistent with the EPCRA section 313 standard for addition of industry groups. For instance, EPA has concerns regarding the interpretation of the article exemption under EPCRA section 313 which Minnesota used. This interpretation may have been used to exclude activities which were likely to be reportable under the federal program. EPA may reconsider the addition of this industry segment at a future date in light of additional information.

One commenter asked EPA to exclude an ilmenite mining facility from reporting under EPCRA section 313. The commenter claims no EPCRA section 313 chemicals are ``manufactured,'' ``processed,'' or ``otherwise used'' above *de minimis* concentrations at that facility. However, the commenter did not provide any additional information to substantiate this assertion. Ilmenite mining facilities are included in SIC code 1099 Miscellaneous Metal Ores, Not Elsewhere Classified. This SIC code classification contains a variety of somewhat unrelated metal mining facilities and includes facilities which extract and beneficiate a variety of metal

ores, and when taken as a group, EPA believes facilities in this classification are likely to provide reporting relevant to EPCRA section 313. Based on EPA's understanding of the activities conducted by facilities in this SIC code, including ilmenite mining, the Agency cannot conclude that this one facility is unlike other facilities in SIC code 1099. EPA received no additional comment specifically addressing ilmenite mining, or other mining segments in this 4±digit SIC code. If the commenter is correct regarding the lack of section 313 chemicals present above *de minimis* concentrations, its facility would likely not have to file any report, even though covered. EPA recognizes that coverage may still represent a burden to the particular facility; however, at this point, the commenter has not provided enough information to rebut EPA's conclusion that the body of information on ilmenite mining and the miscellaneous metal mining facilities in SIC code 1099 supports addition of this 4 digit industry group. The commenter's particular facility would not be different from many manufacturing facilities which, although covered under EPCRA section 313, do not file annual reports, presumably because they do not exceed chemical activity thresholds or they engage in exempt activities.

3. *Coal mining.* EPA received a number of comments specifically opposing the addition of coal mining to the EPCRA section 313 reporting system, but also received a number of comments specifically urging EPA to include this industry.

a. *Use of chemicals in coal mining.* Some commenters state that EPCRA section 313 chemicals are not ``routinely'' used in coal preparation activities. Only at selected steps in some coal preparation processes are these chemicals employed. While EPA recognizes that coal itself is not an EPCRA section 313 listed chemical, EPCRA section 313 toxic chemicals are generally ``otherwise used'' during coal preparation. As discussed in the *Economic Analysis* (Ref. 12), a number of EPCRA section 313 chemicals which are ``otherwise used'' during coal preparation include tetrachloroethylene, trichloroethane, 1,1,1-phenanthrene, dichlorodifluoromethane, xylene, acrylamide, and constituents of fuel oil. EPA believes, based on available data, that many coal preparation facilities within this industry ``otherwise use'' these chemicals. EPA recognizes that coal preparation practices may vary between facilities and by type of coal being prepared. If a particular facility does not ``otherwise use'' an EPCRA section 313 chemical in excess of the threshold, it does not have to report on the releases and waste management of that chemical, provided it does not otherwise exceed the ``manufacturing'' or ``processing'' threshold for that chemical.

b. *Coal preparation facilities should be exempt.* One commenter, ARCO, argues that their coal preparation plants in the western U.S. do not typically use EPCRA section 313 toxic chemicals, and are distinct from coal beneficiation plants. According to the commenter, the purpose of coal preparation plants is to crush and size coal to customer specifications, and EPA should exempt these plants or declare that no chemicals are used at these types of coal preparation facilities.

EPA disagrees with the commenter's suggestion that coal preparation is a distinct activity from coal beneficiation. Coal ``preparation'' is a general term used in the coal mining industry to describe the preparation of ores to regulate the size of the product, to remove unwanted constituents, or to improve the quality, purity, or grade of a desired product. EPA understands that these activities also describe what some in the coal and metal mining industry may call beneficiation. However, in general, coal ``preparation'' and coal ``beneficiation'' are used predominantly to describe any activity subsequent to extraction to prepare the coal for use. Thus, while the commenter may distinguish crushing and grinding activities from the other preparatory and beneficiation activities, EPA does not believe that this distinction is generally made within the coal mining industry.

Further, EPA has not categorically concluded that every coal preparation facility ``otherwise uses'' EPCRA section 313 listed chemicals, or that every coal preparation facility will ``otherwise use'' listed chemicals in excess of the ``otherwise use'' threshold. However, EPA believes that there are standard practices within the coal mining industry that involve the ``otherwise use'' of section 313 listed chemicals during coal preparation activities. Given this information, EPA anticipates that facilities preparing coal are likely to provide information relevant to the reporting purposes of EPCRA section 313.

Thus, because the industry is not generally severable as described by the commenter, and because EPA believes that coal preparation can, and in many cases does, involve the ``otherwise use'' of section 313 listed chemicals, EPA does not believe it would be appropriate to exempt coal preparation facilities as requested by commenter. For the same reasons, EPA cannot generally conclude that coal preparation facilities do not ``otherwise use'' section 313 chemicals.

To the extent that commenter's facilities solely conduct the crushing or grinding activities described by it, EPA agrees with commenter that these particular activities generally do not involve the ``otherwise use'' of section 313 listed toxic chemicals. The facility would be required to consider these crushing and grinding activities and other non-extraction activities in its threshold and reporting calculations. However, because these activities do not generally involve the ``manufacture,'' ``process,'' or ``otherwise use'' of a section 313 listed chemical above threshold quantities, the compliance determination that the facility has to do to determine that there is no need to file a report should be simple and straightforward. Only those coal preparation facilities which ``manufacture,'' ``process,'' or ``otherwise use'' section 313 listed toxic chemicals above thresholds would be reporting releases and other waste management information. If facilities engage in extraction and coal preparation (or beneficiation), they must determine whether any threshold has been exceeded as the result of non-extraction activities, including coal preparation. EPA believes that existing activity thresholds and exemptions provide sufficient means for facilities such as the commenter's to minimize the burden of compliance.

One commenter, the Kentucky Resources Council, argues that the inclusion of coal processing operations is an appropriate and important mechanism to track the generation and disposal of coal processing wastewaters and sludges, and that the inclusion of information from coal preparation plants will permit better tracking of these wastestreams.

EPA agrees that adding coal preparation or beneficiation facilities will provide a useful means of tracking toxic chemical releases and waste management at these facilities, but notes that wastewater and sludges from these operations may or may not be reportable when released, depending on the presence and concentration of EPCRA section 313 toxic chemicals in the materials ``processed'' or ``otherwise used.''

Two commenters believe that the purpose of EPCRA section 313 cannot be served by requiring marginal users of diesel fuel, such as coal preparation facilities, to report on their inventories while ignoring far larger sources, which are ``exempt'' from EPCRA section 313 reporting requirements. The commenters believe that such

information from coal preparation facilities would be inherently misleading and unnecessarily burdensome, and that diesel oil and kerosene do not contain section 313 chemicals in concentrations above *de minimis* levels. The commenters believe it is inherently contradictory for EPA to exempt diesel fuel that is used to power mobile equipment at all EPCRA section 313 covered facilities, but require the fuel to be reported if it is used in coal preparation.

EPA's treatment of the ``otherwise use'' of EPCRA section 313 toxic chemicals in fuel oil in coal preparation is consistent with its guidance to all other industries otherwise using EPCRA section 313 toxic chemicals in fuel oil. All uses of EPCRA section 313 toxic chemicals in fuel oil must be counted towards thresholds and release reporting unless they are exempt under one of the use exemptions defined under 40 CFR 372.38, such as toxic chemicals in fuels used in the maintenance of motor vehicles. Currently, manufacturing facilities which use fuels as part of their production processes are required to make ``otherwise use'' threshold determinations for the constituents of these fuels. Consequently, EPA believes reporting on the use of fuel oil by coal mining facilities is consistent with current reporting guidance issued in the past for the manufacturing industry.

EPA estimates that No. 2 fuel oil and diesel fuel will contain at least one listed toxic chemical above *de minimis* concentrations, based on data included in the *Economic Analysis* (Ref. 12). If EPCRA section 313 chemicals that are ``processed'' or ``otherwise used'' are present in a mixture such as No. 2 fuel oil below *de minimis* concentrations, they do not have to be factored into threshold or release determinations by the facility.

Several commenters believe that coal preparation requires careful definition or there is a real risk that what they see as the proposed rule's vague approach will wipe out the intended exemption for coal extraction. These commenters believe EPA has confused beneficiation and preparation in the proposal, and that without distinguishing those activities which involve the use of chemicals as ``preparation,'' EPA is not actually exempting extraction because some activities defined as beneficiation, such as the breaking or crushing of coal, are conducted during extraction. A commenter strongly recommends that EPA employ a definition which states that, ``the term `coal preparation plant' means a facility where coal is subjected to chemical processing or cleaning in order to separate the coal from its impurities and then is loaded for transit to a consuming facility.''

In its proposal, EPA defined beneficiation in order to clarify the distinction between extraction and beneficiation. EPA used a definition consistent with the RCRA definition found at 40 CFR 261.4, which restricts beneficiation to certain activities, among which is crushing. EPA's proposal did not limit reporting coverage to only coal preparation (or beneficiation) activities. Rather, EPA proposed to exempt extraction activities and include coal preparation (and beneficiation) activities, activities that take place subsequent to extraction. To the extent that the commenter's facilities solely conduct the crushing or grinding activities described by it, EPA agrees with the commenter that these particular activities generally do not involve the ``otherwise use'' of section 313 listed toxic chemicals. Although the facility would be required to consider these crushing and grinding activities and other non-extraction activities in its threshold and reporting calculations, because these activities do not generally involve the ``manufacture,'' ``process,'' or ``otherwise use'' of a section 313 listed chemical above threshold quantities, the compliance determination that the facility has no need to file a report should be simple and straightforward. Only those coal preparation facilities which ``manufacture,'' ``process,'' or ``otherwise use'' section 313 listed toxic chemicals above thresholds would be reporting releases and other waste management information. If facilities engage in extraction and coal preparation (or beneficiation), they must determine whether any threshold has been exceeded as the result of non-extraction activities, including coal preparation. EPA believes that existing activity thresholds and exemptions provide sufficient means for facilities such as the commenter's to minimize the burden of compliance.

c. *Number of facilities and representativeness of data.* One commenter believes that the inclusion of coal preparation plants would also be contrary to EPA's ``screening criteria'' since more than 50 percent of the coal mining and processing facilities would be exempt by reason of employing fewer than 10 employees. This commenter believes EPA has exempted other industries on the premise that a substantial portion of the facilities within these industries would be exempt and that similar treatment is in order for an industry where more than half the facilities would be exempt.

EPA used its screening process to set priorities and to focus attention on those industry groups whose potential addition to EPCRA section 313 would result in significant environmental and public informational benefits. EPA did not screen industries based on whether a significant portion of facilities within an industry group might be likely to report. Rather, EPA focused on the informational value of adding candidate industries. In addition, EPA did not ``exempt'' industries not included in the proposal. These facilities were simply not included in this action. Further, EPCRA section 313 provides an exemption for facilities with fewer than 10 full-time employees in order to reduce burden on small facilities. Currently, out of the more than 300,000 manufacturing facilities in the U.S., roughly 23,000 filed section 313 Form Rs for the 1994 reporting year. In other words, less than 10 percent of manufacturing facilities actually report under EPCRA section 313. EPA estimates in its *Economic Analysis* that, based on 1992 data, approximately 342 coal preparation facilities were in operation in the U.S., and out of that number, 321, or approximately 94 percent, are expected to file reports (Ref. 12). (EPA's draft *Industry Profile for Coal Mining* stated that 610 plants were in operation in 1991, which was an incorrect figure. The correct figure is 345 which is reflected in the revised industry profile) Regardless, the possibility of less than half of the facilities in a given industry filing reports would not by itself cause EPA not to add that industry. EPA does not agree with the commenter's premise that unless a substantial number of facilities within an industry group are likely to file, reporting by those that do file would be valueless.

d. *Extraction exemption for coal mining.* In EPA's proposal to include the coal mining group, the Agency proposed to exempt coal mining extraction activities from coverage under EPCRA section 313. Industry commenters supported this exemption and agreed with EPA's understanding that coal extraction activities do not typically involve the presence or use of listed toxic chemicals in reportable concentrations, while a number of commenters urged EPA to withdraw its proposed exemption for coal mining extraction. EPA did not receive any additional information which would change its understanding of coal mining extraction from those comments objecting to the exemption. Many of the environmental consequences of coal extraction which these commenters cite,

based on EPA's understanding of the comments, are not likely to be reported under EPCRA section 313, primarily because section 313 chemicals are unlikely to be present above *de minimis* concentrations, or the sources of the releases, which concern commenters are abandoned or non-working mines and therefore would not be likely to trigger reporting.

EPA believes it is appropriate to exempt coal extraction activities from all EPCRA section 313 reporting requirements. EPA does not agree that coal extraction does not involve the presence or use of listed toxic chemicals. EPA does, however, believe that the presence and use of these chemicals during coal extraction is likely to be in concentrations below *de minimis*. As a result, facilities that extract coal for distribution in commerce would be able to take the *de minimis* exemption for the listed toxic chemicals in the coal. Consequently, little or no information would be provided by these facilities. EPA may reconsider this exemption at a later date in light of additional information. EPA interprets ``extraction'' for purposes of EPCRA section 313 to mean the physical removal or exposure of ore, coal, minerals, waste rock, or overburden prior to beneficiation, and to encompass all extraction-related activities prior to beneficiation. If an EPCRA section 313 toxic chemical that is a constituent of coal or overburden is ``processed'' or ``otherwise used'' in SIC code 12 during extraction, a facility is not required to consider the quantity ``processed'' or ``otherwise used'' when determining whether an applicable threshold has been met, or determining the amounts to be reported.

4. *Comments regarding the proposed addition of electric utilities*. EPA is finalizing the addition of coal- and oil-fired electric utilities in SIC codes 4911, 4931, and 4939 to the EPCRA section 313 list of covered industries. EPA believes that reporting by facilities in this industry is relevant to the purposes of EPCRA section 313. EPA received considerable comment in support of the addition of this industry, generally expressed in the context of support for the addition of all of the proposed industry groups. EPA also received significant comment opposing this addition from electric utility companies and trade associations. A majority of the comments received from the industry address whether subjecting electric utility facilities to EPCRA section 313 reporting requirements is consistent with the authority or purposes of EPCRA section 313, whether the EPCRA section 313 definitions can be applied reasonably to electric utilities, and whether such reporting will provide data of little or no value at considerable burden to the industry. Industry commenters also addressed concerns about the scope of facility coverage, the ``coincidental manufacture'' of metal compounds in combustion, and the disposal of combustion byproducts, among other issues. Further detail concerning the public comments received is in Ref. 15.

a. *Activity definitions*. Many industry commenters believe that the existing definitional framework of the EPCRA section 313 reporting program is tailored to manufacturers and does not suit the activities of the non-manufacturing industries such as electric utilities. Some commenters object that EPA considers the combustion process to be the ``manufacture'' of a ``product'' as those terms are commonly understood and that the intent of Congress was to apply the section 313 reporting requirements only to those industries that ``manufacture'' or ``process'' toxic chemicals. Commenters believe that, logically, substances present or incidentally formed during combustion (e.g., stack gases, fly ash, and bottom ash) are not ``manufactured'' or ``otherwise used,'' and that ``coincidental manufacture'' during combustion should not apply because the primary function of an electric generation facility is not the manufacturing of any chemical or mixture of chemicals.

EPA believes the existing regulatory and definitional framework of the EPCRA section 313 reporting program can be applied reasonably, logically, and effectively to non-manufacturing industries. In keeping with the EPCRA section 313(b)(1)(B) standard, EPA has acted to add those industry groups which, like facilities within manufacturing sector SIC codes 20 through 39, ``manufacture,'' ``process,'' or ``otherwise use'' toxic chemicals in a manner such that reporting by these facilities is relevant to the purposes of section 313. EPA believes the addition of coal and oil-fired electric generating facilities to the EPCRA section 313 reporting program is consistent with the legislative intent.

EPA believes that electric utilities engage in activities which involve or result in the ``manufacture,'' ``process,'' or ``otherwise use'' of EPCRA section 313 toxic chemicals, as do activities conducted by the manufacturing sector. In particular, EPA disagrees with the commenters that the existing definitional framework does not apply to the combustion process. Coal and oil-fired electric utilities combust fuel to generate electricity, a product which is distributed in commerce. As discussed in Unit V.E.3. of this preamble, the combustion process involves the ``otherwise use'' of EPCRA section 313 toxic chemicals in the fuel, and results in the ``coincidental manufacture'' of EPCRA section 313 toxic chemicals; both of these chemical activities are similar to activities conducted and reported by manufacturing facilities. Electric utilities also ``otherwise use'' EPCRA section 313 toxic chemicals in cleaning, maintenance, and purification activities in a manner similar to activities carried out by manufacturing facilities.

One commenter states that considering combustion byproducts to be ``manufactured'' is contrary to the logic and rationale that EPA appropriately used for excluding nuclear and gas plants from the proposed expansion. The commenter states that, according to EPA, cleaning, purification and maintenance activities using section 313 chemicals at non-coal/oil-fired electric utilities are support activities which ``are not the primary function of the facility'' (see 61 FR 33601). The commenter goes on to state that because of the secondary nature of these cleaning, purification, and maintenance activities, nuclear, gas and hydroelectric facilities were not included in the TRI expansion. The commenter states that combustion byproducts should be considered in the same light as these excluded secondary activities, because the creation of combustion byproducts is incidental to the production of electricity and their presence/formation is not the primary purpose for burning coal and oil.

As stated in the proposal, EPA proposed to add coal and oil-fired electric generating facilities because their primary function involves the combustion of fuels containing EPCRA section 313 chemicals and production of TRI chemicals during combustion. The commenter seems to conclude that, because EPA did not consider the ``otherwise use'' of EPCRA section 313 chemicals in support activities alone to be sufficient justification for adding non-coal/oil-fired electric utilities to EPCRA section 313 chemicals at this time, EPA therefore must believe that such use of EPCRA section 313 chemicals is not of sufficient importance to warrant reporting under EPCRA section 313. This is not correct. EPA's decision to not to include nuclear, hydroelectric, and natural gas facilities simply was an attempt to prioritize industry groups for this initial expansion effort by including only those

industry groups whose primary functions or activities involve the ``manufacture,'' ``process,'' and ``otherwise use'' of EPCRA section 313 chemicals. EPA's screening process and comments raised on the screening process are more fully described and addressed in Unit IV.B. of this preamble and in the *Response to Comments* document (Ref. 15).

As the proposal made clear, coal and oil-fired electric generating facilities will be required to factor into their threshold determinations and reporting calculations the quantities of EPCRA section 313 chemicals used in support activities such as cleaning, maintenance, and purification, in addition to chemicals ``otherwise used'' and ``coincidentally manufactured'' in the combustion process. This is consistent with the existing reporting requirements for manufacturing facilities, which must factor into their threshold determinations and release calculations all ``manufacture,'' ``process,'' and ``otherwise use'' of EPCRA section 313 chemicals, with the exception of quantities specifically exempted at 40 CFR 372.38. Thus, the commenter is wrong in characterizing activities such as cleaning, maintenance and purification at electric utilities as ``excluded'' from EPCRA section 313 reporting. Further, the Agency does not agree with the commenter that the use of EPCRA section 313 chemicals in activities such as cleaning, maintenance and purification at non-coal and oil-fired facilities is in any way analogous to the ``coincidental manufacture'' of EPCRA section 313 chemicals in the combustion process at coal or oil-fired facilities. The ``coincidental manufacture'' of EPCRA section 313 chemicals directly results from the combustion of coal or oil to generate electricity, which is the primary purpose of the facility. The fact that the ``coincidental manufacture'' of these byproducts is not actually the purpose of combusting the fuel is irrelevant. Therefore, the Agency disagrees that ``coincidental manufacture'' of EPCRA section 313 chemicals in the combustion of coal or oil is incidental, or should be disregarded as a basis for addition of these utilities.

b. *Facility coverage*. Most industry commenters express concern that EPA's explanation of which electric utility facilities in SIC codes 4911, 4931, and 4939 would be required to report was vague and did not adequately explain the scope of facility coverage. The commenters believe that EPA was ambiguous and inconsistent in its proposed exclusion of gas, nuclear, and hydroelectric electric utilities. The commenters point out that EPA proposed that any facility in SIC codes 4911, 4931, and 4939 which combusts coal or oil in whatever percentage of its fuel use, and whether for primary or backup generation, would become a covered facility for purposes of EPCRA section 313. The commenters contend that many non-coal/oil-fired electric utility facilities would be considered covered facilities under such a definition, despite EPA's stated intention to exclude them from coverage.

The commenters point out a number of purposes for which non-coal/oil-fired electric utility facilities would combust some quantity of coal or oil, including: support activities, such as heating the facility; start-up; emergency power generation (for maintaining operation of facility equipment in an emergency); periodic testing of emergency power equipment; periodic testing of backup power generation capability; and backup power generation when supply of the primary fuel source is curtailed. Commenters request clarification of which of these activities would subject a non-coal/oil-fired electric utility facility to EPCRA section 313 reporting requirements, and/or state their objections to facility coverage because of such activities.

In particular, many commenters recommend that EPA exempt from the reporting requirements all non-coal/oil-fired facilities which infrequently burn coal or oil for ancillary support operations or for backup power generation. A number of commenters recommend that EPA adopt for facility coverage purposes the definition of ``gas-fired'' which appears in the Clean Air Act Acid Rain implementation rules (40 CFR 72.2), exempting from EPCRA section 313 coverage facilities which burn natural gas or other gaseous fuel for at least 90 percent of the unit's average annual heat input during the previous 3 calendar years and for at least 85 percent of annual heat input in each of those 3 years. Several commenters recommend that EPA include in EPCRA section 313 reporting only those electric utility facilities which combust coal or oil for 50 percent or more of the fuel combusted or the electricity produced.

EPA's intention in the proposal was to include only those facilities in SIC codes 4911, 4931, and 4939 which combust coal or oil in any quantity to generate the electricity that the facility supplies to its customers, whether such combustion is for primary or backup power generation. EPA understands that the language in the proposal has been interpreted by some commenters to cover facilities EPA did not intend to add to EPCRA section 313 at this time (i.e., electric utilities that are essentially non-coal/oil-fired, but that use coal or oil only to provide electricity for support activities at the facility). EPA continues to believe that this rule should focus on electric utilities that use coal or oil for performing the primary function of the facility (i.e., generating the electricity the facility supplies to its customers). As a means of describing the universe of facilities it intends, EPA is using the phrase ``limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce'' for this industry in order to clearly limit coverage to facilities that combust coal or oil to generate electricity the facility supplies to its customers. Accordingly, in today's final rule, EPA has amended the facility coverage language for SIC codes 4911, 4931, and 4939 to read ``(limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).''

Combusting coal or oil for on-site support purposes (such as heating the facility), for testing or operation of emergency backup power systems (meaning systems designed to supply power to the facility itself in the event of an emergency), or for start-up purposes (i.e., to heat the boiler to an operational temperature prior to switching to the primary fuel) will not subject facilities to the EPCRA section 313 reporting requirements, provided such combustion of coal or oil does not itself generate power for distribution in commerce.

EPA does not agree with the commenters who recommend that EPA exempt non-coal/oil-fired facilities that combust limited quantities of coal or oil for the purposes of generating power for distribution in commerce, such as backup or peak power generation. EPA believes it is appropriate to include as covered facilities all facilities which burn any quantity of coal or oil to generate power for distribution in commerce. EPA does not agree with commenters who state that facility coverage should be based on the percentage use of coal and/or oil. Particularly in the case of large facilities, exempting facilities which burn 10 percent to 15 percent coal or oil, or 50 percent as some commenters recommend, could mean exempting facilities which burn very large quantities of coal or oil, even if such quantities are not large in percentage terms. Under such an exemption, a large facility which burns a comparatively low percentage quantity of coal or oil could be exempt from the reporting

requirements even if it burned more coal or oil than a small facility which was 100 percent coal or oil-fired and therefore was subject to section 313 requirements. Such a result would not be sensible from a public right-to-know standpoint.

EPA believes that the proper mechanism for relieving reporting burden for facilities which combust only limited quantities of coal or oil is the existing activity threshold system under EPCRA section 313(f)(1). (The employee threshold found at EPCRA section 313(b)(1)(A) will also provide burden relief for small electric utility facilities with fewer than 10 full-time employee equivalents.) Any facility which combusts only limited quantities of coal or oil for the purpose of generating power for distribution in commerce may be unlikely to exceed any reporting threshold, unless the facility also ``manufactured,'' ``processed,'' or ``otherwise used'' significant quantities of listed chemicals in other activities at the facility. Therefore, such a facility would not likely incur the burden of EPCRA section 313 reporting. The Edison Electric Institute and other commenters point out that such facilities would have to expend resources to determine or demonstrate that thresholds were not exceeded, even though exceeding the thresholds would be unlikely. Commenters also state that non-coal/oil-fired facilities with coal/oil-fired backup generation capability would have to develop information throughout the year as if section 313 applied to them, since they could not be sure that they would not have to operate their backup generating systems during a given year. EPA acknowledges that facilities which combust small quantities of coal and oil would have to expend a certain amount of resources to determine that thresholds were not exceeded. However, EPA believes that facilities would already track the quantity of each fuel type used, and that this would be a major component of both the compliance determination and the calculation of release and other waste management quantities. Moreover, establishing the facility definitions recommended by some commenters only adds another layer of compliance determinations. In addition, EPA points out that, pursuant to EPCRA section 313(g)(2), facilities when reporting ``may use readily available data (including monitoring data) collected pursuant to other provisions of law, or, where such data are not readily available, reasonable estimates of the amounts involved.'' The statute does not require the facility to obtain data beyond that which is readily available. A facility which combusts oil or coal late in the reporting year and thus becomes a covered facility because of that combustion of coal or oil would need only to use readily available data or make reasonable estimates in reporting under EPCRA section 313. In this case, these facilities would use the information it has collected throughout the year to support the end of the year threshold determinations and release and other waste management reporting estimates. Facilities which may or may not be subject to EPCRA section 313, depending on whether they combust coal or oil in a given year, would not have any greater burden of tracking information during the course of the year than a facility which knows that it will not be a covered facility. Facilities which may or may not be subject to EPCRA section 313, depending on whether they combust coal or oil in a given year, would only incur a compliance and reporting burden if they did in fact combust coal or oil that year, at which point they would have to perform threshold determinations and, possibly, release and other waste management calculations using the information available to them. EPA also points out that it intends to develop reporting guidance for the industry which will reduce burden on industry by assisting industry in making compliance determinations and reporting calculations based on information such as fuel quantity and type. EPA believes its approach for defining the utilities covered best balances the reporting interests of the public with the concerns expressed by the commenters given the existing burden reduction mechanisms in the statute and regulations.

A number of industry and trade association commenters state that EPA should define facility coverage for electric utilities in much the same way as multi-establishment complexes have been defined for manufacturing facilities under EPCRA section 313. According to the commenters, the preamble to the proposed rule suggested that EPA would not apply its existing ``multi-establishment rule'' to electric utility facilities that have both covered and non-covered plants within SIC codes 4911, 4931, and 4939 located at a single facility, and that EPA failed to provide a reasoned explanation for this inconsistent treatment. Some commenters believe that electric utilities should be allowed to divide such a facility into establishments and make a separate compliance determination for each establishment. One commenter, the Class of '85 Regulatory Response Group, recommended that EPA specifically exempt non-coal/oil-fired generating stations that are located on contiguous property and under common ownership with coal/oil-fired generating stations.

EPA disagrees with the commenters and believes the Agency is consistent in its application of the multi-establishment provision. Prior to this rulemaking, multi-establishment facilities with establishments in two or more different SIC codes would have been subject to reporting requirements, if: (1) All establishments are in a covered SIC code; (2) if the sum of products shipped and/or produced from those establishment(s) in a covered SIC code is greater than 50 percent of the total value of all products shipped and/or produced at the facility; or (3) one establishment in a covered SIC code contributes more in terms of value of products shipped and/or produced than any other establishment at the facility (see 53 FR 4526).

Establishments are defined as part of the SIC code system. The Standard Industrial Classification Manual (Ref. 4) indicates that the SIC codes 4911, 4931, and 4939 do not have an ``establishment'' distinction based on fuel type. Consequently, a facility using different fuel types, or operating two generators on different fuel types, is still considered a single establishment (i.e., within a single SIC code). For electric utilities, the multi-establishment provision applies only if a generating station is part of a facility with another establishment in a different SIC code, and the economic conditions described above are met by the establishment in the different SIC code. EPA believes that the multi-establishment provision can be applied consistently and similarly to electric utilities, and that there is no justification for interpreting the multi-establishment provision differently for facilities in this industry. EPA also believes it would be inappropriate to develop a specific exemption for non-coal or oil-fired generating units located on contiguous or adjacent property and under the same ownership as one or more coal/oil-fired units. The effect of such an exemption would be to divide a single establishment at a facility into covered and non-covered sections, which is inconsistent with the existing reporting requirements for manufacturing industries.

The American Public Power Association states that EPA should exclude electric utilities owned by local communities and regional governmental entities from the EPCRA section 313

reporting requirements. According to the commenter, EPA recognized the special circumstances of local government control of facilities when it decided to exclude from the proposal several industry groups primarily operated by local municipal and regional governmental entities. According to the commenter, there is little distinction between those excluded industry groups and publicly-owned electric utility systems. The commenter also stated that reporting of EPCRA section 313 toxic chemicals by publicly-owned utilities would be better left to the discretion of the local government entities that own and control them, because these governing bodies would be better able to define and implement reporting programs that are responsive to the needs of local citizens.

EPA did not include in the proposal several industry groups based on several ``additional considerations'' (see 61 FR 33592). None of the considerations were used to determine whether candidate industry groups met the statutory standard for addition. EPA may consider these industry groups in a future rulemaking. The publicly-owned facilities the commenter cites were not included for a number of reasons, including the potential impacts on other governmental entities. While EPA acknowledges this concern about impacts on other governmental entities is also relevant to publicly-owned electric utilities, EPA points out that this consideration was just one of many factors taken into account in screening industries. In evaluating this industry for addition, EPA judged that publicly-owned electric utilities conduct operations which are virtually indistinguishable from their investor-owned counterparts and that there are not other general issues meriting deferral of the utility industry. EPA does not believe that any significant difference exists between publicly-owned and privately-owned electric utilities for purposes of reporting under EPCRA section 313. Therefore, EPA believes it is appropriate to include both publicly- and privately-owned electric utilities in this facility expansion rule.

One commenter requests clarification regarding whether a facility which combusts oil and exceeds thresholds would have to include releases from natural gas combustion conducted at the same facility. If the facility combusts oil to generate power for distribution in commerce, the facility is a covered facility for purposes of EPCRA section 313. A covered facility must apply toward activity thresholds the quantities of listed toxic chemicals ``manufactured,'' ``processed,'' or ``otherwise used'' in all non-exempt activities at the facility, including natural gas combustion, which is not itself an exempt activity. The EPCRA section 313 reporting exemptions are codified at 40 CFR 372.38. If the facility exceeds a threshold for any listed chemical, it must include in its Form R for that chemical the release and other waste management quantities resulting from all non-exempt activities.

A number of industry commenters point out that facilities which combust only small quantities of coal or oil may exceed the ``otherwise use'' threshold only for chemicals used in support operations such as maintenance and cleaning. These commenters question whether this contradicts EPA's purpose in excluding non-coal or oil-fired facilities, which might also report on these same uses. Some of these commenters believe it is inconsistent of EPA to rely on ``otherwise use'' activities to justify adding coal and oil-fired facilities but not to add non-coal or oil-fired facilities which also conduct these activities. One commenter requests that EPA specifically exempt the ``otherwise use'' of chemicals in these support operations.

EPA is adding coal and oil-fired facilities because their primary function involves the combustion of fuels containing EPCRA section 313 chemicals and generation of toxic chemicals during that combustion. As covered facilities, these facilities must report on releases and other waste management activities of all EPCRA section 313 chemicals for which they exceed thresholds, excluding only certain specifically exempt activities codified at 40 CFR 372.38. This is consistent with the existing reporting requirements and guidance for manufacturing facilities. EPA does not agree that it is inconsistent to require coal and oil-fired facilities to report for support operations, when non-coal/oil-fired facilities will not have to report for similar support operations because they will not be considered covered facilities. EPA recognized in the proposal that reporting associated with the ``otherwise use'' of chemicals in support activities at non-coal or oil-fired facilities has some value. However, as a matter of prioritizing, EPA did not include nuclear, hydroelectric and natural gas facilities in this action because their primary function does not involve the combustion of fuels containing listed chemicals in reportable concentrations.

Two commenters observe that EPA discussed conventional oil-fired steam generation but did not discuss oil turbines in its proposal. One commenter requested that EPA clarify whether oil turbines are covered, and another believes EPA should exempt oil turbines from coverage since many of the EPCRA section 313 constituents in oil are consumed during combustion and turbines do not use listed chemicals in the large quantities associated with boiler operation and maintenance.

EPA described only conventional steam generation in the proposed rule because this is a common method of producing electric power. However, in describing this method of power generation, EPA did not mean to imply that only this method was subject to the EPCRA section 313 reporting requirements. EPA clearly stated that ``any facility which combusts coal or oil in whatever percentage of its fuel use, and whether for primary or back-up generation, would become a covered facility. . . .'' Facilities which combust oil in oil turbines to generate electricity for distribution in commerce would fall within SIC codes 4911, 4931, and 4939, and therefore would be considered covered facilities. Because facilities generating electricity using oil turbines fall within SIC codes 4911, 4931, and 4939, and because the combustion of oil in oil turbines results in the ``coincidental manufacture'' of EPCRA section 313 chemicals, EPA sees no reason to exclude such facilities from EPCRA section 313 coverage.

One commenter points out that some facilities may combust alternative fuels, including solid and liquid waste, used oil, and fuels derived from the processing of coal or oil. The commenter requests clarification about the applicability of the EPCRA section 313 reporting requirements to facilities which burn such fuels. An electric utility facility which combusts used oil, or solid or liquid waste containing coal or oil, would be considered a covered facility under EPCRA section 313. Because the commenter did not provide specific information about the alternative fuels ``derived from the processing of coal or oil,'' EPA cannot provide the requested clarification for such fuels. EPA will examine issues surrounding the combustion of alternative fuels, including waste oil and fuels derived from the processing of coal or oil, in its development of reporting guidance for this industry.

c. *Public misperception of risk*. Most industry commenters believe that requiring electric utilities to report emissions under EPCRA section 313 is inappropriate because such emissions are not hazardous and pose little risk to the public. The commenters state that emissions and combustion byproducts from utilities have been studied by EPA

and others and been proven not to pose a significant risk to human health or the environment. The commenters argue that because TRI data are provided as annual volume estimates without regard to factors such as chemical concentration, toxicity, or exposure potential, the data for electric utility combustion activities would be so oversimplified and unqualified that it would lead to public misperception of risk. A number of industry commenters state that TRI reporting does not take into consideration the fact that releases are regulated and permitted to ensure that health risks are controlled. Other industry commenters express concern that the large volume of reported releases from electric utilities could dwarf and obscure other, possibly more hazardous releases from other industries, such as the manufacturing industries which were the original subject of EPCRA section 313.

EPCRA section 313 is not a risk-based reporting system, and EPA makes no determination, through this action, of the risks to human health or the environment from fuel combustion or other activities at electric utilities. Further, any determination by EPA or others that a particular type of release from a facility does not pose an unacceptable risk does not constitute a reason to exclude from EPCRA section 313 such releases or the facility responsible for it. ``Risk'' is not an EPCRA section 313 criterion for addition of facilities. Congress intended EPCRA section 313 reporting to provide the public with information about toxic chemical release volumes. Reporting by electric utilities will increase the universe of information available to the public about toxic chemical releases. The public will be able to use this information, in combination with other information, to better understand any potential risks from electric utility operations. EPA recognizes that TRI release data may sometimes be mischaracterized or misperceived. EPA believes that, to the extent public misperceptions arise through TRI data, EPA must continue to improve its outreach and education efforts regarding the data collected under EPCRA section 313. EPA does not agree that large release volumes reported by one industry would ``obscure'' or improperly direct attention away from release volumes reported by other industries; however, to the extent that this may occur, EPA believes the appropriate solution is outreach and education to better explain the significance of other factors than volume of release, not denying the public access to the information at all. As noted previously, EPA will initiate a stakeholder process to consider these and other issues.

d. *Combustion byproducts.* Many commenters state that most trace metals and other impurities in coal and oil would be present below *de minimis* concentrations and therefore would not be subject to reporting under the ``otherwise use'' activity. The commenters maintain that combustion processes do not ``manufacture'' toxic chemicals and that including combustion under the definition of manufacture is in effect an attempt to remove the *de minimis* exemption for metals that exist as impurities in fuels.

EPA believes that all of the constituents of coal and oil are subject to the ``otherwise use'' activity thresholds when combusted for energy production and may be subject to the *de minimis* exemption for this activity. Therefore, toxic chemicals present in coal and oil ``otherwise used'' below *de minimis* levels would not be subject to reporting under the otherwise use activity. However, as discussed in Unit V.E.3. of this preamble, the combustion of metals and metal compounds in coal and oil does ``coincidentally manufacture'' new metal compounds as byproducts and thus these combustion processes are not eligible for the *de minimis* exemption. The combustion of coal and oil by electric utilities produces both a product (the energy produced) and byproducts (e.g., ash and combustion gases). Under EPCRA section 313, ``manufactured'' impurities that remain with a product are subject to the *de minimis* exemption, but ``manufactured'' byproducts that do not remain with the product are not subject to the *de minimis* exemption (see Unit V.E.1. of this preamble). In the case of the combustion of coal and oil there are no chemicals that remain in the product (energy) as impurities; therefore, all of the chemicals that are produced during combustion are byproducts that are separate from the product and therefore not eligible for the *de minimis* exemption.

e. *Determination of threshold and release quantities.* Many commenters state that it is not possible to determine changes in the valence state of metals that occur as a result of combustion, and that little information exists on what metal compounds are in coal and oil prior to combustion and what metal compounds are in the ash byproducts. The commenters state that the constituents of coal and oil and combustion byproducts vary, and since no monitoring or testing is required under EPCRA section 313, and is probably not possible, facilities will be forced to make threshold and release determinations based on various theories of what happens during combustion. The commenters state that for these reasons the determination of threshold and release quantities is difficult, if not impossible, and therefore, the data will be inconsistent and of little value to the public.

EPA disagrees with the commenters' statements regarding their inability to determine threshold and release quantities of EPCRA section 313 metal compounds ``manufactured'' as a result of the combustion of coal and oil. It is not necessary to measure the changes in the valence state of the metals that take place at the time of combustion or as a result of combustion in order to determine if EPCRA section 313 reportable metals or metal compounds have been ``manufactured.'' As has been discussed in Unit V.E.3. of this preamble, the test is not whether a metal's valence state has changed, but rather whether a new metal compound has been created. The determination of threshold quantities can be done by either estimating or measuring the metal compounds that exist after combustion occurs. As the commenters correctly state, EPCRA section 313 does not require any additional monitoring or testing; calculations are to be based on readily available data which may include monitoring data collected pursuant to other provisions of law, or if such data are not readily available, reasonable estimates can be used.

The issues raised by the commenters mainly relate to the determination of reporting thresholds rather than reporting of releases and transfers. EPA does not believe that it is difficult to accurately determine threshold quantities. Even if there were some difficulty in determining threshold quantities, EPA does not believe that is sufficient reason to exempt facilities from the reporting requirements of EPCRA section 313. In the absence of better facility-specific information, estimates can be used to determine whether thresholds have been exceeded. Data on what happens to the metal constituents in coal and oil indicate that most, if not all metals, are present as some form of metal compound that does not usually survive the combustion process (see Unit V.E.3. of this preamble and Refs. 1 and 16). Therefore, for estimating the amount of metal compounds manufactured from the combustion of coal and oil, EPA believes that, in the absence of better facility-specific information, a facility may assume that all of the metals present in the coal or oil are converted

to the lowest weight metal oxide (per unit of the metal) possible for each metal. For example, for purposes of threshold determinations only, if the average concentration of chromium in coal were 0.001 lb per ton, then its combustion would produce 0.0015 lbs of chromium (III) oxide (Cr_2O_3) per ton of coal combusted which would be counted towards the manufacturing threshold for chromium compounds. In order to determine threshold quantities, the same kind of calculation can be performed for all metals in coal and oil. EPA believes that it is unlikely that use of this estimation method would require reporting by any facilities that are not exceeding thresholds because at least some, if not many, of the metal compounds ``manufactured'' as a result of combustion will be heavier than the lowest weight metal oxide (Ref. 15).

One exception to the use of metal oxides for threshold determinations may be mercury. Data indicate that substantial amounts (approximately 90 percent) of the mercury in coal and oil is volatilized as the metal itself rather than converted to a metal compound (Refs. 1 and 16). However, this makes little difference in threshold calculations since in mercury oxide (HgO), the oxygen only accounts for 7.4 percent of the compound's weight. Therefore, using the metal itself or the metal oxide as the basis for threshold calculations for mercury will make little difference in the threshold determinations. Since the data indicate that most mercury remains volatilized as elemental mercury after combustion, the weight of the metal, rather than that of the metal oxide, can be used in threshold determinations, and this amount then applied towards the ``manufacture'' activity reporting threshold for mercury.

With regard to the reporting of release and transfer quantities, for the metal compound categories, the weight of the EPCRA section 313 metal itself, not the weight of the entire metal compound, is used to report quantities released and transferred. Therefore, it is not necessary to know what metal compounds have been ``manufactured'' in order to report on releases and other waste management activities of the EPCRA setion 313 metal. The only information needed is the amount of the EPCRA section 313 metals in the stack emissions and ash byproducts. Information on typical concentrations of metals in stack emissions and ash byproducts from the combustion of coal and oil is available (Refs. 1 and 16) and can be used as a basis for estimating quantities released per ton of coal or oil combusted. Again, if better facility-specific information is not available, then estimates can be used based on the average content of stack emissions and ash byproducts from coal or oil combustion. This information can come from data on the coal or oil the facility actually uses or if this is not available, then data on the average metal content of coal and oil can be used. Even estimates that vary from facility to facility will ultimately provide the public with better information than if nothing is reported concerning releases and other waste management that result from fuel combustion by electric utilities.

f. *Disposal of combustion byproducts.* Many industry commenters believe that toxic chemical constituents in electric utility combustion byproducts should not be subject to EPCRA section 313 reporting. The commenters state that EPA studies have concluded that such combustion byproduct ash is not a hazardous waste under RCRA and can be disposed of as any other non-hazardous waste. The commenters believe that reporting releases of EPCRA section 313 toxic chemicals in ash and sludge will mislead the public about risk from these substances. Several commenters stated that ash landfills and disposal units are highly regulated and are designed to protect the public and environment; one commenter suggested EPA require reporting only for quantities of listed toxic chemicals which migrate out of such units.

In its ``Final Regulatory Determination on Four Large-Volume Wastes from the Combustion of Coal by Electric Utility Power Plants'' (58 FR 42466, August 9, 1993), EPA specifically concluded that regulation under subtitle C of RCRA is inappropriate for fly ash, bottom ash, boiler slag, and flue gas emission control waste because of the limited risks posed by these substances and the existence of generally adequate state and federal regulatory programs. However, in this determination, the Agency did not conclude that ash and sludge from coal and oil combustion pose no risk. Rather, EPA stated that it ``believes that the potential for damage from these wastes is most often determined by site- or region-specific factors and that the current State approach to regulation is thus appropriate.'' In making the disposal of toxic chemicals contained in combustion byproduct ash a Form R reportable activity under the EPCRA section 313 reporting requirements, EPA is not drawing any conclusion about the risk of those wastes to communities. Rather, the Agency is providing the data on these wastes, as well as on metal wastes resulting from the removal of sulfur dioxide from flue gas emissions, to the public to allow the public to use the data, as well as information on the hazards of chemicals, site-specific information that will affect exposure, and other data on non-TRI sources of the chemical to determine if there is a risk. EPA acknowledges that reporting the disposal in a secure landfill or impoundment of constituents in combustion byproduct ash without explanation potentially could result in public misperception of the risks of such disposal. However, the Agency continues to believe that expanding the TRI reporting system to include additional industry sectors will provide the public with a more complete picture of toxic chemical releases, and that this increased information is intended to lessen, not increase, the possibility for misperception of toxic chemical risks.

EPA recognizes that TRI data may sometimes be mischaracterized or misperceived, but EPA believes that any such misperceptions are best addressed through continued and improved outreach and education efforts. The Agency has also made some changes to the EPCRA section 313 reporting form for the 1996 reporting year in order to address some of the concerns about public misperception and to better help the public understand the nature of the various releases to land. These changes are discussed in more detail in Ref. 15. As mentioned above, EPA will initiate a stakeholder process to discuss the reporting forms and other issues, including whether it should add an element relating to the intra-land movement of waste from landfills and possibly surface impoundments, and whether such reporting would enable the public to better characterize relative risks from the various forms of land disposal.

Many commenters object to the requirement that electric utilities report for combustion byproduct ash, when the Agency chose to exclude from EPCRA section 313 reporting non-hazardous waste facilities in SIC code 4953 which dispose of the same ash. Numerous commenters argue that it is inconsistent to require utilities which dispose of their ash onsite to report the quantities of listed chemicals in it, while utilities which sell or otherwise distribute their ash in commerce for reuse would not have to report these quantities.

The commenters are correct that certain facilities within SIC code 4953 which typically dispose of utility combustion byproduct ash were not included in this expansion initiative and therefore would not have to report disposal of this ash. However, EPA did not ``exclude'' these facilities from

coverage under EPCRA section 313; EPA simply chose not to add these facilities at this time. As EPA stated in the proposed rule, ``these facilities are primarily operated by local municipalities and regional government entities. Although each industry group may manage significant quantities of EPCRA section 313 listed toxic chemicals, the manner in which they manage these chemicals raises several cross-governmental issues EPA is continuing to address. As a result, EPA is not considering these industry groups at this time.'' EPA goes on to say that it ``may reconsider at a later date some or all of the industry groups which were excluded as a result of the considerations mentioned above.'' EPA also points out that any EPCRA section 313 covered facility which disposes of combustion byproduct ash would have to report for the EPCRA section 313 chemicals contained in that ash if the facility exceeded an activity threshold for the chemical. This requirement is not unique to electric utility facilities.

The commenters are correct that under the existing EPCRA section 313 reporting regulations, toxic chemicals contained in a substance which is disposed of on-site must be reported, while toxic chemicals contained in the same substance would not be reported if the substance is sold as a product. EPA recognizes that the public may have an interest in and benefit from knowing about the presence of toxic chemicals in products produced by facilities. EPA issued an Advance Notice of Proposed Rulemaking (61 FR 51322, October 1, 1996) (FRL±5387±6) concerning the possible collection of this and other types of information. Following a series of public meetings and evaluation of public comment, EPA will determine whether and how to proceed on that initiative.

g. *Addition of SIC code 4961.* In the proposal, EPA requested comment on whether to add SIC code 4961, Steam and Air Conditioning Supply, to EPCRA section 313. (This SIC code was misnumbered as 4960 although correctly described in the proposal.) Four commenters opposed the addition of SIC code 4961. No comments were received in support of adding this industry, and no comments were received which provided any additional information about this industry group. Therefore, EPA has not included this industry in this rule. EPA may reconsider this industry group in a future rulemaking in light of additional information.

5. *Commercial hazardous waste treatment and disposal.* EPA is adding to the list of industry groups covered under EPCRA section 313, facilities in SIC code 4953 which are regulated under the RCRA Subtitle C. EPA received a variety of comments regarding the inclusion of these facilities. Many of the concerns raised by industry representatives, such as the classification of waste disposal as a release under section 313, deferring the effective date of reporting, and considering treatment, stabilization, and disposal as an ``otherwise use'' under section 313, relate to more than one industry and therefore have been addressed in separate sections of this preamble. Other comments that raise major issues with this industry sector are addressed below. All of the issues are addressed in greater detail in the *Response to Comments* document (Ref. 15).

Some commenters stated that EPA's application of the EPCRA section 313 reporting requirements to commercial RCRA Subtitle C hazardous waste management facilities does not further the statutory purpose underlying EPCRA section 313 because no additional information concerning release of toxic chemicals will be provided. One commenter asserted that the only releases occurring at RCRA facilities are permitted releases to air and these are monitored and reported pursuant to the CAA; permitted releases to water and these are monitored and reported pursuant to the CWA; and unintended releases to the environment which are monitored, reported, and subject to corrective action under RCRA. The commenter stated that requirements under RCRA incorporate public participation during the permitting process, which ensure releases do not occur and that communities are well informed of any and all toxic releases that do occur.

EPA disagrees with these commenters. The information about toxic chemical releases to the environment that are permitted, monitored, reported on, or otherwise regulated under other environmental statutes is not available to the public in the same manner as information reported to TRI. This includes information about releases regulated under the CAA, the CWA, RCRA, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). TRI consolidates data addressing toxic chemical releases to all environmental media into an inventory that is a single, multi-media data resource, consistently defined and formatted, annually aggregated, and readily available to the public.

Furthermore, permitting processes under other environmental statutes, while providing opportunities for public participation, do not afford the public the kind of information made available through TRI. In fact, information reported to TRI is often used both by members of the public to enhance their participation in these permit processes, and by federal, state, and local government decision makers in administering these permit processes. In addition, legislative history indicates that Congress contemplated reporting under EPCRA section 313 to include activities and amounts permitted under other statutes such as the CWA and RCRA, and that the reporting would result in a cross-media inventory describing the disposition of EPCRA section 313 toxic chemicals to land, air, and water. (See, for example, A Legislative History of the Superfund Amendments and Reauthorization Act of 1986 (Pub. Law 99-499), Vol. II at 1083, and Vol. V at 4194, 4196-97, and 4200.)

Some commenters asserted that commercial RCRA Subtitle C hazardous waste management facilities do not ``manufacture,'' ``process,'' or ``otherwise use'' listed EPCRA section 313 toxic chemicals, and therefore, should not be included in TRI. Another commenter stated that commercial TSDs do not meet EPA's activity factor because TSDs do not ``otherwise use'' chemicals and added that:

> EPA concluded that the statute as originally written and implemented did not apply to Subtitle C facilities that would not ordinarily be subject to the rule. [Nothing] has changed other than EPA's desire to include these facilities and waste management activities in the section 313 reporting requirements. The Agency identifies no new information needs that were not available when it originally interpreted otherwise use to expressly exclude waste management activities from reporting under section 313.

EPA disagrees with these commenters. As identified in the *Economic Analysis* and Industry Profile, commercial RCRA Subtitle C hazardous waste management facilities may ``manufacture,'' ``process,'' or ``otherwise use'' listed toxic chemicals. EPCRA section 313 toxic chemicals are, for example, coincidentally manufactured during hazardous waste incineration and ``otherwise used'' for injection of hazardous waste or for hazardous waste treatment (Ref. 12). Further, there may be facilities within this SIC code that also recycle spent solvents for distribution in commerce and may therefore be ``processing'' EPCRA section 313 toxic chemicals. Finally, as noted in the *Economic Analysis*, under EPA's revised

interpretation of ``otherwise use,'' numerous chemicals contained in wastes received or generated from the management of wastes received are treated for destruction, stabilized, or disposed are ``otherwise used'' (Ref. 12).

In addition, contrary to the commenters' assertion, the proposal clearly explains the basis and purpose for EPA's revised interpretation of ``otherwise use.'' As EPA notes in the proposal, EPA is revising its interpretation of ``otherwise use'' to address the unintended consequence of its previous interpretation. EPA states that it ``is concerned that, based on current guidance, the public may not have access to information relating to releases of toxic chemicals from facilities within SIC codes 20 through 39 that are receiving materials for the purposes of treatment for destruction, stabilization, or disposal.'' (61 FR 33596) As EPA clearly expresses, it was concerned that its previous interpretation left a significant gap in the information reported by facilities within SIC codes 20 through 39, and did not want to perpetuate this informational gap when adding other industry groups. Thus, although recognizing that RCRA Subtitle C facilities could report information as a result of the ``manufacture,'' ``processing,'' or ``otherwise use'' activities described above and in support documents, EPA announced its intent to revise the interpretation of ``otherwise use'' for all industries subject to EPCRA section 313 to rectify this loss of information from facilities within 20 through 39 and the potential loss of information from any added facilities. EPA believes that the addition of facilities within this industry group and the revised interpretation will significantly add to the public's right-to-know about the use and disposition of toxic chemicals in their communities. EPA has provided further discussion of its revised interpretation in Unit V.F.2. of this preamble.

Comments submitted by two industry representatives stated that TRI reporting by commercial RCRA Subtitle C hazardous waste management facilities will be highly inaccurate because information on concentrations of constituents is not usually available for wastes received from manufacturing facilities, or from contaminated media received from CERCLA or RCRA corrective action and clean-up activities. The commenters asserted that the RCRA reporting and manifest system does not provide data on chemical concentrations in hazardous wastes, and that the information that is provided may not pertain to the total concentration of the compound or may be in range values that can be extremely wide. These commenters also repeated statements made by several others that, unlike manufacturing plants, it is impossible for a RCRA hazardous waste treatment or disposal facility to review the paperwork it receives and determine from it the quantities of chemicals entering the facility. Similar comments stated that information required from generators for wastes identifies if the waste may contain, or may leach, certain chemical constituents above a minimum level, or is generated by industry-specific processes. Accurate chemical constituents are not necessary for processing wastes.

EPA believes, based in part on industry comments, that commercial RCRA Subtitle C hazardous waste management TSDs receive and prepare information on chemicals contained in wastes that is sufficient for reporting under section 313, and that this information will be beneficial as reported. Generators that send hazardous waste to facilities for treatment, recovery, or disposal provide RCRA manifests which contain a variety of detail on the wastes they transfer. While this information is provided as a means to satisfy associated RCRA requirements, EPA believes that in many instances this information can contain significant detail and can be useful in developing constituent specific estimates required under section 313. In addition, one set of industry comments indicate that waste generators provide waste handlers with information on the concentration ranges of constituents in waste.

> Laidlaw utilizes a profile system in order to obtain information from the waste generator that is needed to properly treat, store or dispose of the hazardous waste. Variants of this type of system is generally used by all members of the hazardous waste management industry....Profiles typically provide information on RCRA hazardous constituents present in the waste, including concentration ranges.

Laidlaw attached examples of these profiles. For example, the profile for ``Line Rinse Mop Water'' lists the following constituents: Water - 50-80%, Methanol - 0-5%, Ethanol - 10-20%, Acetone - 0-2%, Isopropanol - 3-15%, Tetrachloroethylene - 0-1%, n-Butyl alcohol - 0-1%, Mineral spirits - 3-15%, Pyrethroids - 0-1%, Dirt - 1-5%. This range information is analogous to the information on Material Safety Data Sheets (MSDS) that the manufacturing sector uses to estimate the constituents of mixtures. For example, an MSDS for ``Xylenes'' lists the following constituents: m-Xylene - 40-65%, o-Xylene - 15-20%, p-Xylene - 0-20%, Ethyl benzene - 15-25%.

Further, EPA believes that TSD facilities that receive hazardous waste in many cases conduct additional analyses and develop profiles of the wastes they receive for purposes of treatment or disposal in order to ensure that the waste they receive meets their recovery, treatment or disposal specifications, or to otherwise properly manage wastes received. For example, TSDs are required under 40 CFR 264.13 and 265.13 to obtain a detailed chemical and physical analysis of a representative sample of any hazardous, and certain non-hazardous, wastes prior to any treatment, storage, or disposal, and to develop written waste analysis plans that specify the frequency of sampling.

EPA also disagrees that it would be nearly impossible or extremely expensive for TSDs to develop formulas to calculate concentrations of toxic chemicals received in hazardous wastes. EPA expects that developing toxic chemical concentration estimating techniques would not be extremely difficult for hazardous wastes listed as toxic hazardous wastes at 40 CFR 261.33(f) (``U-listings''), or acutely hazardous waste listed at 40 CFR 261.33(e) (``P-listings''). These materials are discarded commercial chemical products, off-specification species, container residues, and spill residues and are likely to be present as highly concentrated chemicals. These waste codes also represent a significant portion of the RCRA hazardous waste manifests required to accompany all shipments of hazardous waste to commercial RCRA Subtitle C hazardous waste management facilities. Similarly, many of the RCRA wastes listed at 40 CFR 261.31 and 40 CFR 261.32 are narrowly defined, such as F007 (spent cyanide plating bath solutions from electroplating operations) and K009 (distillation bottoms from the production of acetaldehyde from ethylene), and relate directly to process-specific waste steams that lend themselves readily to generic toxic chemical concentration estimating procedures.

EPA agrees that concentrations of toxic chemicals vary widely for RCRA hazardous wastes identified at 40 CFR 261.21 through 261.24 by hazardous characteristics (corrosive, ignitable, reactive, and toxic) and for contaminated media from Superfund or RCRA corrective action clean-ups, and that these wastes may represent a large portion of the total quantities of hazardous wastes received by commercial RCRA Subtitle C hazardous waste management facilities. However,

TSDs are required to develop a significant amount of information regarding the constituent composition of certain characteristic wastes to ensure compliance with RCRA requirements such as the treatment standards for underlying hazardous constituents. For example, 40 CFR 268.48 requires facilities to conduct routine sampling to ensure compliance with the treatment standards for the listed hazardous constituents. Despite the fact that concentration data available to these facilities for these wastes may be variable in some cases, or correspond to leachable fractions instead of total concentrations, EPA nonetheless believes that these data, along with RCRA manifests, waste profile reporting data, and facilities' knowledge of the waste management processes they operate, provide a substantial basis for facilities to develop reasonable estimates of annual quantities of each RCRA hazardous constituent contained in these waste streams. Furthermore, manufacturers currently reporting to TRI that operate on-site RCRA Subtitle C hazardous waste management facilities have nearly a decade of experience in developing reasonable release estimates associated with these processes. Such experience, along with the actual TRI reports provided by these facilities since 1987, can be drawn on to support the endeavor. In addition, EPA has provided guidance to current reporters in the proposed and final rules implementing the EPCRA section 313 reporting requirements (52 FR 2115-2116, 53 FR 4510-4511) and the 1995 Toxic Chemical Release Inventory Reporting Form R and Instructions (EPA 745-K-96-001) for making threshold determinations on the components of mixtures, which can be applied to wastes, even though waste is not a mixture. EPA's guidance includes the following scenarios: (1) The concentration range is known, (2) only the upper bound concentration is known, (3) only the lower bound concentration is known, and (4) when no concentration information is known.

Finally, many of the currently reporting manufacturers have worked through trade associations and other cooperative mechanisms to develop industry-specific estimating procedures that meet the EPCRA section 313 reporting requirements to provide reasonable release estimates based on information generally in the possession of reporting facilities. EPA believes similar cooperative endeavors could be initiated to develop similar estimating procedures for commercial RCRA Subtitle C hazardous waste management facilities, since the number of such facilities is relatively small, allowing most if not all members to participate in the endeavor.

Consequently, EPA believes that the combination of information received with waste transfers and information developed by the facility will enable TSD facilities to adequately determine their compliance requirements under section 313 and that the additional waste management information anticipated from these facilities will further the purposes of TRI.

One commenter asserted that EPA's approach to TRI release reporting at RCRA facilities is contrary to the fundamental goal of EPCRA, because communities will be misled into believing that all wastes placed in RCRA disposal units are released, and ``actual'' releases from RCRA disposal units are not to be reported pursuant to 1995 Form R instructions and guidance. Specifically, the commenter noted that amounts placed in managed units, such as subtitle C landfills, will be reported when they are disposed of, while the resulting emissions such as the amounts that migrate or are emitted to air will not be reported.

EPA does not believe that the manner in which information will be reported under section 313 by hazardous waste facilities will mislead communities or will be contrary to the goals served by section 313. Under section 313, facilities must report information on amounts of listed chemicals in wastes, including details regarding the environmental media into which releases occurred and the other measures that were taken to manage the wastes annually. For example, if a hazardous waste treatment facility exceeds the activity threshold for a toxic chemical within a given year and during that year the entire amount was disposed in a landfill and remained there, then the facility would report the entire amount as being disposed in a landfill and the information would appear as such. If the facility exceeded an activity threshold for another toxic chemical that may be more volatile, the facility would report the estimated amount disposed that remained in the landfill as disposed in a landfill and the fraction that could be estimated to have volatilized as released to air during the reporting period.

In order to address industry concerns, EPA modified the Form R for the 1996 reporting year in an effort to avoid public misperception and to promote a better understanding of the differences among various waste disposal methods. For additional detail regarding this reporting modification, refer to Unit V.F.1. of this preamble. In addition, as noted above, EPA will initiate a stakeholder process to consider these and other issues.

A number of commenters stated that the distortion of disposal as release would focus public attention on the end of the manufacturing cycle (treatment and disposal), when there is virtually nothing that commercial RCRA Subtitle C hazardous waste management facilities can do to minimize or reduce the use of EPCRA section 313 toxic chemicals, and that EPA will have missed the target of encouraging reduction and minimization by shifting the focus away from the manufacturing cycle to the waste treatment component which is least able to affect these goals.

EPA fully supports source reduction and waste minimization activities. One of the benefits of making information publicly available through TRI, but which has been predominately limited to sources within the manufacturing sector, has been the ability to detect shifts in amounts of waste directly disposed as compared to amounts being recycled for example. Encouraging reductions of toxic chemicals in waste and applying pollution prevention practices, however, are not the primary purposes under which section 313 was established. Section 313 was established in order to make publicly available information regarding routine chemical releases, and the management and disposition of listed chemicals within local communities, for all media, in one location. By including hazardous waste treatment and disposal facilities in TRI, the public will have ready access to more complete information on the management and disposition of toxic chemicals in their communities.

Several commenters proposed that, if EPA included commercial RCRA Subtitle C hazardous waste management facilities under section 313, EPA should delay reporting for their industry for 1 year and commence coverage on January 1, 1998, in order for them to develop data gathering systems.

EPA acknowledges that some commercial RCRA Subtitle C hazardous waste management facilities may want to implement data management strategies to best comply with TRI reporting. However, the Agency believes that such modifications will take substantially less than a year to implement, and that information corresponding to the portion of the reporting year during which tracking modifications are being developed can either be entered by facilities subsequent to completion of the modifications or extrapolated for the missing period based on information entered into such systems for the

duration of the reporting year. As noted in Unit V.D. of this preamble, EPA is not requiring reporting by any of the added industry groups for the reporting year 1997. This rule is effective December 31, 1997.

One commenter submitted a statement that TRI does not offer any mechanism to indicate beneficial destruction of a listed section 313 chemical, and therefore, TRI does not reflect risk reduction provided by the destruction, stabilization, recovery, or other treatment of hazardous wastes.

EPA disagrees that TRI does not offer any mechanism to indicate destruction, removal, or other management of EPCRA section 313 listed chemicals. Facilities report in section 6 of Form R the quantities of toxic chemicals discharged to Publicly Owned Treatment Works (POTWs) (section 6.1) or transferred to other off-site locations for further waste management (section 6.2). In section 6.2, facilities identify the receiving waste management facility, the quantity of the toxic chemical transferred to that facility, and the specific type of management practice to be applied to destroy, treat, combust for energy recovery, recover, or stabilize the toxic chemical in wastestreams (M codes). Facilities report in section 7 of Form R more detailed information describing on-site energy recovery and recycling of the toxic chemicals, and waste treatment methods applied to the waste streams containing the toxic chemical. In section 8 of Form R, facilities report on waste management activities applied to the listed toxic chemical. Facilities also report in section 8 whether and which types of source reduction were implemented for each reported toxic chemical. EPA believes that the sum of these information items does in fact provide significant insights into the risk reduction provided by information on methods used to manage the listed toxic chemical in waste streams.

Additionally, RCRA Subtitle C facilities will be faced with a unique opportunity to demonstrate their efficiency in reclaiming a toxic chemical or destroying the toxic chemical through reporting under section 313. Section 313 reporting by RCRA subtitle C facilities will be based on their commercial treatment and disposal activities and the amounts that they report as released will be amounts that are released as a result of their treatment processes or amounts that they directly dispose. A facility with an efficient treatment process will report smaller amounts disposed or otherwise released than a facility with a less efficient process.

Some commenters stated that expanding TRI to include commercial RCRA Subtitle C hazardous waste management facilities will have the effect of transferring the responsibility and liability for characterizing hazardous wastes from generator to treatment, storage, and disposal facilities, which is counter to RCRA philosophy and inconsistent with 40 CFR Subpart C Supplier Notification Requirements. Similarly, another commenter stated that expanding TRI to include commercial RCRA Subtitle C hazardous waste management facilities will have the effect of restructuring the entire RCRA waste characterization scheme, a concept that was not contemplated or clearly proposed by this rule.

EPA disagrees with the commenters that expanding the EPCRA section 313 facilities list to include commercial RCRA Subtitle C hazardous waste management facilities will have either the effect of restructuring the entire RCRA waste characterization scheme or transferring the responsibility and liability for characterizing hazardous wastes from waste generators to TSDs. As noted in both EPA's proposal and this preamble, EPA believes that these facilities will be able to meet EPCRA section 313 reporting requirements by determining whether thresholds were likely to have been met and to prepare reasonable estimates of annual quantities of toxic chemicals released/disposed, treated, recovered, and recycled, by using information already provided to them through existing practices, along with information they develop for operational needs and for compliance with other regulations.

While EPA anticipates that these facilities will undertake the development of estimation procedures, drawing on these data to bridge the difference between RCRA data resources and EPCRA section 313 requirements, the Agency does not agree that such endeavors, undertaken by individual facilities or on a collaborative basis among several facilities, amounts to or would have the effect of restructuring the entire RCRA waste characterization scheme.

RCRA TSD facilities are required to prepare waste analysis plans in accordance with 40 CFR 264.13 or 265.13 that establish procedures for identification and characterization of incoming wastes. Data collected by TSDs, as outlined in their site-specific waste analysis plans, which typically detail the data needs for initial waste profiles, in concert with shipment-specific information in the waste manifest, are believed to be sufficient to meet the EPCRA section 313 reporting requirements. No new RCRA waste characterization requirements are being established in this rulemaking. Similarly, EPA does not believe that summarizing these data at the chemical level by a receiving facility for TRI reporting purposes will alter the liabilities imposed by RCRA, CERCLA, and other environmental statutes, which require the generators of hazardous waste to properly manage and identify their wastes.

One commenter proposed that EPA establish a higher reporting threshold of 50,000 pounds for amounts injected into underground wells, because the wastes injected are relatively dilute, compared to other waste streams. The commenter described wastes injected as typically composed of 90 to 95 percent water with the remainder composed of soluble inorganic and dissolved organic fractions.

EPA would like to clarify that amounts considered toward thresholds are based on the amount of the listed toxic chemical and not the volume of the waste stream. Therefore, in the case described by the commenter, only the toxic chemical fraction of the waste would be evaluated for each individually listed chemical, and reporting would be limited to the amounts of each chemical that exceeds threshold quantities.

Another commenter suggested that generators of hazardous wastes be required to send to RCRA Subtitle C treatment and disposal facilities, information on quantities of section 313 listed chemicals contained in wastes.

Supplier notification requirements are not being amended by this rulemaking. Supplier notification applies to chemicals contained in mixtures or trade name products. 40 CFR 372.45. EPA does not consider wastes to be ``mixtures or trade name products.'' In addition, EPA does not believe that supplier notification is necessary for newly listed industry groups to be able to reasonably comply with EPCRA section 313 reporting requirements and provide information of sufficient quality. For this rulemaking, EPA selected industry groups that the Agency believes currently possess adequate information to report under section 313. As stated throughout this preamble, EPA believes that existing information provided to these facilities through RCRA manifests, reporting requirements and facility practices, taken together with facilities' knowledge of the waste management processes they operate, provide a sufficient basis for them to develop reasonable estimates for section 313 reporting. Accordingly,

EPA sees no reason at this time to extend supplier notification requirements to the generators that transfer hazardous wastes to these facilities.

One comment submitted by an industry representative stated that they were concerned that EPA is excluding Municipal Solid Waste Landfills and POTWs from reporting to TRI, even though these facilities many manage significant quantities of EPCRA section 313 toxic chemicals. The commenter stated that, unlike deep well injection facilities, these types of facilities emit EPCRA section 313 toxic chemicals which present high risks to surface and ground waters, about which EPA has the duty to notify the public.

As stated in the proposed rule, other sections of this preamble, and in the *Response to Comments* document (Ref. 15), EPA chose for a number of reasons to defer considering whether to add several other industries in this action. In electing not to exercise its authority to extend the EPCRA section 313 reporting requirements to Municipal Solid Waste Landfills and POTWs in this action, EPA has not made a determination that these industry segments should not be included in the section 313 facilities list. EPA will consider comments received during this action regarding these and other industries not included in today's action at a future date.

One commenter suggested that EPA exclude RCRA facilities that no longer accept off-site hazardous wastes and have notified the lead RCRA agency of their intention to close. The commenter noted that the RCRA closure process provides adequate public notification opportunities and comment on activities conducted at the facility.

EPA does not believe that a specific exemption should be granted for facilities that are closing. Facilities that are no longer receiving waste for treatment or disposal are potentially no longer subject to the EPCRA section 313 reporting requirements. If no threshold activities are conducted within a reporting year, then no reporting is required.

6. *Petroleum bulk terminals and stations*. EPA is adding to the list of industry groups covered under EPCRA section 313 SIC code 5171, bulk petroleum stations and terminals. The major issues raised in comments regarding this industry are addressed below. Greater detail can be found in the *Response to Comments* document (Ref. 15). General issues raised by commenters are addressed in separate sections of this preamble.

Two commenters claim that EPA has not provided factual or scientific justification for including SIC code 5171. One commenter noted that the proposal spends less than one page discussing their industry.

EPA disagrees with the commenters. The Agency has provided factual and scientific justification for including facilities operating within SIC code 5171. The discussion provided in the preamble to the proposed rule was intentionally brief and limited to providing a summary of EPA's findings for each industry group. However, EPA cited and has made available several support documents that describe in detail information relating to bulk petroleum facilities, and facilities identified in each of the other industry groups being added. These support documents include industry profiles (Refs. 6-10 in the proposed rule and Refs. 5-7 and 18 in the final rule), which provide descriptions of activities within the industries, and the *Economic Analysis* (Refs. 11 and 12) which provides statistical and market information on the particular industry as a whole, as well as projections of estimated impacts for each industry group anticipated as a result of this rulemaking.

Many commenters state that bulk petroleum plants and terminals provide different functions which involve different practices, and are different types of facilities that should not be considered equivalent. Many argue that the SIC code 5171 industry classification covers types of facilities with unique differences and that EPA's action does not adequately address these differences. Many commenters stated that for this regulation, ``one size does not fit all.'' Most of the comments from smaller companies state that implementing this action will put them at an economic disadvantage as compared to larger facilities such as many bulk terminals. Another commenter provides sales information supporting the point that terminals have much greater throughput quantities which allow them to spread costs over much larger profits. Many of these commenters and others claim to be classified as ``small'' according to the Small Business Administration (SBA) definition and add that if this action goes into effect as proposed, many companies will be forced out of business, prices will increase, and, in some cases, a gap in the market may be created limiting options for their present customers.

EPA does not believe that the distinctions within the petroleum distribution industry the commenters raise are sufficiently relevant to the purposes of EPCRA section 313 to warrant a division among facilities within SIC code 5171 for purposes of EPCRA section 313 reporting. While EPA recognizes that a substantial range in facility size and in the quantity of product managed exist within SIC code 5171, EPA believes that bulk terminals and bulk plants manage similar mixtures containing EPCRA section 313 chemicals, often manage these chemicals in a similar manner, and that each may reasonably be anticipated to provide information that will appreciably further the purposes of EPCRA section 313. In other words, both bulk terminals and bulk plants meet the statutory standard for listing.

In addition, EPA believes that existing thresholds associated with EPCRA section 313, such as the employee threshold, will reduce the regulatory burden substantially for small companies within this industry. These thresholds have reduced the burden for the manufacturing industry. EPA also recognizes that existing exemptions will reduce the reporting burden; for example, fuels that do not contain EPCRA section 313 toxic chemicals above *de minimis* concentrations will not be counted towards activity thresholds. Thus, for facilities operating within SIC code 5171, EPA believes that existing thresholds or exemptions such as the *de minimis* exemption will serve to significantly reduce overall burden, and inherently recognize the differences in facility sizes and products managed.

A number of commenters assert that the Agency has inadvertently and unintentionally included small petroleum bulk plants in the proposed expansion. These commenters state that EPA incorrectly assumed marketers with small bulk plants would be classified as SIC code 5172, despite the fact that all marketers with any size bulk plants are classified as SIC code 5171 not SIC code 5172. Furthermore, they note that EPA's economic analysis erroneously refers to ``bulk plants'' as a synonym for SIC code 5172. They further state that unless this mistake is corrected, EPA's action will result in a disproportionately large economic impact on small marketers. Similar comments were submitted by the Petroleum Transportation and Storage Association (PTSA) which state that they believe EPA intended to capture only larger bulk plants and terminals with average product throughput amounts of 36.5 million gallons as compared to facilities with typical annual throughputs of 5 to 6 million gallons as evidenced by EPA support documents and EPA discussions. PTSA further states that they believe the Agency intended this rulemaking to be

much less expensive than it has the potential of being, and that the Agency has not adequately considered the impact of the rule as currently written, in part, because EPA's economic analysis mistakenly classified 7,000 bulk plants in 5172, which actually operate within SIC code 5171. Their comments also mention that small bulk plants are very similar to facilities that operate in SIC code 5172, which were specifically exempted. They state that bulk plants operating in SIC code 5171 and facilities operating in SIC code 5172 share many regulatory interests and their primary distinction is that facilities in SIC code 5172 have access to terminals and do not need to have on-site storage capacities.

The proposed rule (see 61 FR 33587) clearly specified the addition of SIC code 5171, and included an industry description based on the SIC code classification, which includes both petroleum bulk plants and terminals. While some portions of EPA's economic analysis mistakenly labeled certain facilities as operating in SIC code 5172, the information used to estimate costs and economic impacts on the industry was based on facilities classified as SIC code 5171. EPA's analysis did not consider the 7,000 facilities identified by the commenter in estimating the costs and economic impacts on 5171, because their storage capacities are below 10,000 gallons and thus these facilities are properly classified as 5172, or because the facilities, even though they are properly classified as 5171, fall below the 10 full-time employee threshold. Therefore, EPA's analysis included those bulk plants that are properly classified in SIC code 5171 and that are expected to report. Consequently, EPA believes that its economic analysis accurately calculated the burden of reporting for this industry group.

EPA would also like to clarify that SIC code 5172 was not ``specifically exempted'' from reporting to TRI. Rather, EPA deferred further consideration of this industry prior to the proposal for reasons identified as ``Additional Considerations,'' which were discussed in the proposed rule (see 61 FR 33588) and in the *Development of SIC Code Candidates: Screening Document* (Ref. 10).

Two commenters stated that EPA should have also included SIC code 5172 in this action. These commenters state that facilities in SIC code 5172, which they refer to as ``fixed based operators,'' provide services to many major airports, among other locations. Commenters state that these facilities are responsible for 10 to 20 percent of the releases of ethylene glycol, and that by not listing this industry group, EPA has missed an opportunity to capture a source of large releases. These commenters also state that the distinctions between the SIC codes 5171 and 5172 classifications are not that clear and by not including both, EPA creates an incentive for facilities formally classified in SIC code 5171 to reclassify themselves into SIC code 5172. These commenters note that EPA's proposed rule states that facilities in SIC code 5172 ``may be adversely affected at a substantially high rate'' but request that EPA explain how these facilities would be adversely affected.

EPA believes that the distinctions between establishments classified in SIC code 5171 and those classified in 5172 based on the Bureau of the Census' *1992 Industry and Product Classification Manual* are adequate for the purposes of designating industry groups to report under section 313 (Ref. 8). Petroleum wholesale facilities are assigned to either SIC code 5171 or 5172 based on their storage capacity, which is numerically defined. EPA believes this is a clear distinction.

EPA disagrees that its decision to defer further consideration of 5172 was based on a finding that these facilities ``may be adversely affected at a substantially high rate.'' As noted in the proposal, EPA's preliminary analysis indicated that, due to existing thresholds and exemptions, ``the projected value of reporting for these industry groups is questionable.'' (see 61 FR 33592) In addition, EPA's preliminary analysis identified facilities in SIC code 5172 as possibly having ``a disproportionately large economic impact if EPCRA section 313 reporting requirements were extended to their industry.'' (see 61 FR 33592) This finding is based on a projected estimate of the anticipated cost to comply with this rule relative to the gross sales. This finding is not an absolute determination, but was a consideration in EPA's screening process that was taken into account in EPA's decision to defer SIC code 5172 for further consideration in this rulemaking.

Several commenters state that many facilities within SIC code 5171 do not perform mixing or blending activities. They state that storage and simple redistribution should not be included in the processing activities for threshold calculations. Several of these commenters argue that this activity is analogous to ``transportation or storage incidental to transportation'' which is exempt under section 313. Some claim that no distinction should be made simply because a terminal takes possession of the product it receives, and note that simply taking possession of the product does not increase the possibility of releases. Another commenter suggests that all transport and storage incidental to transport of their product should not be subject to EPCRA section 313 reporting or threshold calculations based on the EPCRA section 327 transportation exemption. Based on their interpretation of this exemption, they contend that most of the activities occurring at bulk plants would not be covered, and therefore, these facilities do not meet EPA's ``activity factor'' used to select industries.

Section 327 of EPCRA establishes an exemption for activities involving the transportation and storage incidental to transportation of listed chemicals for purposes of section 313 requirements. For the purposes of EPCRA section 313, this exemption applies to chemicals under active shipping. EPCRA section 313 toxic chemicals that are in transit and held temporarily at facilities that do not take formal possession or ownership of these chemicals are considered under ``active shipping'' and are exempt from the EPCRA section 313 reporting requirements. When the receiving facility takes possession and ownership of materials, these materials are no longer under active shipping and, in terms of the EPCRA section 313 requirements, potentially subject to reporting. EPA has determined that the facilities operating within SIC code 5171 generally take possession and ownership of the chemicals that they manage, that these chemicals are not under active shipping, and therefore, not eligible for the exemption established under section 327 (Ref. 12). The commenters have provided no information to convince EPA to amend the information and conclusions in EPA's *Economic Analysis* (Ref. 12).

Additionally, the EPCRA section 313 statutory ``processing'' definition is explicit in terms of what it includes. EPA would like to clarify that amounts of listed EPCRA section 313 toxic chemicals retained in storage are not counted toward activity thresholds, such as ``processing.'' However, when these amounts are transferred, such as from a bulk storage unit to a truck, for further distribution in commerce, the amounts of listed EPCRA section 313 toxic chemicals must be considered toward the ``processing'' threshold because this is considered repackaging of the EPCRA section 313 toxic chemicals. This interpretation is consistent with EPA's guidance as it has pertained to the manufacturing sector. Question 149 of the most recent

Question and Answer document developed for the TRI program includes the following discussion: ``. . .the facility loads other tanker trucks with gasoline which distribute the gasoline to service stations. . .are the chemicals in the gasoline processed.'' EPA's response was: ``[s]ince the facility repackages the gasoline by transferring it between trucks and bulk storage containers for further distribution in commerce, the facility is processing the toxic chemicals in the gasoline.'' (Ref. 17). Activities being conducted by facilities operating within SIC code 5171 are directly analogous to those previously interpreted for facilities within the manufacturing sector who have reported on like activities.

Several commenters state that their industry is substantially regulated under other environmental statutes, which removes the need for the bulk petroleum distribution industry to be included under this action. Some of the existing statutory and regulatory provisions cited include CAA Title V, the National Standards for Hazardous Air Pollutants (NESHAPS) for Source Category; gasoline distribution, and the Marine Vapor Recovery Program; EPCRA sections 311 and 312; the Oil Pollution Prevention Act; and 40 CFR part 112. These commenters state that routine reporting and inspection requirements under these statutes make EPCRA section 313 reporting by their industry unnecessary and would result in duplicative reporting.

While bulk petroleum distribution facilities are regulated under several existing environmental regulations, EPA does not believe that current regulations satisfy the objectives sought by inclusion of facilities under EPCRA section 313. A comparison between existing regulations and the EPCRA section 313 reporting requirements was prepared in support of the proposed rule and is discussed in Unit V.I.1. of this preamble. EPA believes that these findings confirm that similar information is not provided by other requirements, so that the extension of section 313 reporting requirements to this industry is not duplicative. Additionally, as discussed in Unit V.A. of this preamble, Congress was well aware of the existing requirements that collect a variety of information and, in enacting EPCRA section 313, determined that there was a need to provide a single source of readily available information regarding chemicals entering all environmental media.

Commenters from the bulk petroleum distribution companies suggest a variety of alternatives to standard EPCRA section 313 reporting requirements. These alternatives range from adopting definitions used under existing regulations issued pursuant to other environmental statutes, to modifying reporting definitions under section 313. Each of these alternatives, if implemented, would exempt a portion of the facilities operating within SIC code 5171. The most commonly suggested alternative to EPA's proposed action is for EPA to establish a storage capacity exemption. Most of the commenters proposed that facilities with storage capacities of less than 150,000 gallons be excluded while others suggested the Agency consider 200,000 gallons as a cut-off. Several other commenters suggested that if a storage capacity exemption were not acceptable, then the Agency should consider a throughput exemption in order to provide regulatory relief to smaller facilities that handle ``smaller'' bulk quantities.

EPA does not believe that a storage capacity qualifier is suitable for adoption by the TRI program at this time. The amounts suggested by commenters potentially equate to very large amounts of product throughput, which EPA believes would deprive the public of useful information that is not currently available. While a large portion of the facilities operating in this industry primarily perform simple product transfers, and amounts processed greatly influence the quantity of releases or toxic chemicals in wastes which result, EPA believes that existing thresholds and exemptions will adequately serve to remove a substantial number of smaller facilities. Based on EPA's economic analysis, 10,292 facilities have been identified as being classified in SIC code 5171. With the application of existing thresholds, EPA estimates that 3,842 will meet reporting requirements. Therefore the existing thresholds are anticipated to exempt approximately 62 percent of those facilities classified within SIC code 5171, which EPA believes provides substantial burden reductions (Ref. 12).

Several commenters requested that EPA adopt the definition of bulk gasoline terminals used under certain CAA regulations and thereby exempt all bulk plants, or consider either a throughput level or combination of the two in this rule. These commenters support any of these alternatives over listing the entire 4-digit SIC code of 5171 and argue that this would effectively exempt most if not all bulk plants and could be structured to remove any small business issues.

Certain CAA regulations only apply to bulk gasoline terminals. For example, under the New Source Performance Standards (NSPS) for gasoline distribution, these are defined as establishments that receive petroleum via ship, barge, or pipeline in amounts equal to or greater than 20,000 gallons per day. This definition may effectively exclude all petroleum bulk plants, regardless of the product throughput they manage. However, contrary to the commenter's implication, the CAA definitions do not equate to a determination that emissions from bulk plants are insignificant. Nor are bulk plants exempt from all CAA provisions; for example, bulk plants may still be covered by various State Implementation Plans (SIPs). Further, EPA believes that exemption under the CAA provides additional justification for the addition of SIC code 5171. One of the purposes of EPCRA section 313 is to monitor the success of existing environmental regulations, and by gathering TRI data on emissions from bulk plants EPA could evaluate, for example, whether CAA regulation may be warranted for some bulk plants under section 112(k), which makes special provision for urban air toxics.

In addition, EPA believes that the purposes served by the CAA and implementing regulations are unique and different from those associated with EPCRA section 313. While the distinctions between petroleum bulk terminals and plants may be appropriate for regulatory requirements under the CAA, EPA believes that existing thresholds both for activities and employee size provide adequate regulatory relief appropriate for fulfilling the objectives of section 313.

Several commenters describe operations at typical bulk plants as having relatively few employees physically located at the facility on a regular basis. Some of these commenters noted that delivery personnel, who are infrequently physically at the facility, will cause many facilities to exceed the employee threshold and thereby be subject to reporting. These commenters suggested that, as a result, facilities may decide to no longer employ these personnel, but to use contracted services, which must be an unintended result of this rulemaking. Similar comments were submitted by another commenter which stated that due to the low numbers of employees at many petroleum marketing terminals, and the annual application of reporting requirements, many facilities will ``teeter'' on the brink of coverage in any given year. This will cause many facilities to engage in full-blown recordkeeping and track their activities over the course of the year, even though

they may not be required to report. With the exception of actually filling out Form Rs, which the commenter stated is a minor component, the burden on the facility will be the same whether or not it is covered. Likewise, with the annual fluctuations likely to occur, trend analysis will not be possible, which will affect industry comparisons and TRI overall.

EPA has received similar requests to make distinctions among employees in order to increase the effect of this statutory exemption for their industry. EPA believes that the employee threshold established by Congress serves the purposes of EPCRA section 313. For purposes of section 313, facilities with fewer than 10 ``full-time'' employee equivalents are not subject to any of the EPCRA section 313 reporting requirements. For purposes of section 313, a full-time employee is defined as 2,000 work hours per year and the employee threshold is based on the total number of work hours expended per year. In order to determine the number of full-time employees working at a facility, all hours worked by all employees during the calendar year, including contract employees and sales and support staff working at the facility, are totaled. The total number of hours worked during a calendar year is then divided by the ``full-time'' employee number of 2,000 and if the result is 10 or greater, then the facility has exceeded the employee threshold under section 313. The application of the employee threshold to personnel based at the facility applies a relatively consistent degree of equity in reporting. Even though this threshold may exclude some facilities who manage and release significantly larger amounts with fewer employees, EPA is not at this time aware of another mechanism that can be implemented fairly across the program. At this time, EPA believes that a modification to this threshold, such as an exclusion for delivery operators or ``non-process'' related staff, would potentially lead to greater inequalities in how reporting requirements are applied.

The comment raising issues with facilities within the petroleum distribution industry that have employee numbers that fluctuate above and below the section 313 threshold, describes a situation that also exists within the manufacturing industry and that has affected their obligations under the EPCRA section 313 reporting requirements since the TRI program has been in place. While it may be the case that the petroleum distribution industry is particularly subject to employee fluctuations, it may also be true that their product and customer requirements are more consistent than other industries and therefore, they may be better equipped to predict annual activities.

Another commenter states that if EPA decides to include petroleum bulk terminals and stations in the final rule, the Agency should modify the reporting frequency, so that after their initial report, facilities in SIC code 5171 would only be required to report whenever a predetermined threshold, such as change in storage capacity, loading activities, or types of chemicals handled is triggered. This would achieve the intent of the TRI program, while minimizing the burden imposed upon the reporting facilities and the state and federal offices that process these reports. Another commenter described the releases from petroleum bulk stations as being consistent from year-to-year and therefore, if EPA must have SIC code 5171 facilities report to TRI, it should require a one-time filing by such facilities with an obligation to amend that filing if there is a significant change at a facility.

EPCRA section 313(i) provides EPA with limited authority to modify the reporting frequency and requires EPA to follow a complex administrative procedure to do so. To modify the reporting frequency, EPA must first notify Congress and then delay initiating the rulemaking for at least 12 months. In addition, EPA must make a specific finding; EPCRA section 313(i)(2) requires EPA to:

> (A) make a finding that the modification is consistent with the provisions of subsection (h) of [section 313] based on-
>
> (i) experience from previously submitted toxic chemical release forms,
>
> (ii) determinations made under paragraph (3).

EPA believes that the determinations it currently could make pursuant to paragraph (3) would not support a modification, because the Agency does not have sufficient information to make the necessary findings in paragraph (3). Specifically, paragraph 3(B) provides that EPA must determine:

> the extent to which information is (i) readily available to potential users from other sources, such as State reporting programs, and (ii) provided to the Administrator under another Federal law or through as State program.

As EPA has noted elsewhere in this preamble, EPA does not believe that equivalent information is publicly available in the same manner as TRI data. Nor is it clear that EPA would have sufficient information to make the necessary findings pursuant to EPCRA section 313(i)(3)(A) and (C) because these facilities have not reported to TRI in the past. Thus, EPA could not adopt the commenter's suggestion for purposes of this rulemaking.

Moreover, even if EPA could adopt the commenter's suggestion in this rulemaking, EPA would not. While some commenters have described activities within the bulk petroleum distribution industry as being consistent from year-to-year, EPA has received other comments stating that many changes have occurred within this industry in terms of both the chemical composition of some products and some management practices. EPA believes that while some facilities in the bulk petroleum industry have operations that are reasonably consistent, others may not. EPA also believes that the same situation exists within the manufacturing sector, although perhaps to a lesser extent. EPA recognizes that one of the benefits of TRI information is its annual collection of information which allows interested parties to access and evaluate year-to-year fluctuations by facilities or industry groups. EPA believes that to provide this benefit, annual reporting of information is generally necessary. Further, EPA believes that while activities may be relatively standard throughout an industry, and for a particular facility, repeated routinely, it is fairly rare for amounts of chemicals or products not to change. EPA also does not believe that most facilities would desire that data from a previous year be applied to a facility's report for another year without prior review by the facility. EPA also believes that relatively consistent operations would reduce the burden on facility's annual calculations in meeting reporting requirements under section 313. Therefore, EPA believes that, at this time, the best and most accurate means of providing TRI data is to require each facility in this industry sector to submit that information themselves annually.

Other commenters made various statements regarding the benefits derived from the reporting anticipated from the bulk petroleum industry. Many of these commenters note that greater benefits could be derived by spending the resources that reporting will require on other more environmentally beneficial activities. Another commenter stated that residents around their facilities have not asked for this information and that very little is actually emitted from their facilities. This commenter states that their larger bulk petroleum storage facilities with submerged loading and vapor recovery devices have throughput of approximately 1.4 million gallons of

gasoline and that their operations emit approximately 800 pounds of volatile organic compounds (VOCs) annually. This represents 2.1917 pounds per day, which they claim is less than the VOCs emitted from 1 gallon of applied oil base paint.

While a particular facility or company may not have received any requests for information on their chemical releases and waste management practices, EPA has received numerous comments supporting the extension of section 313 reporting requirements to those industries included in EPA's proposal, including SIC code 5171. For example, EPA received comments from a state environmental agency and from a public interest group encouraging EPA to include facilities in SIC code 5171 in this rule. Specifically, the comments submitted by the public interest group stated that some toxic chemicals contained in petroleum products, namely toluene, are now detectable in ambient samples in the Phoenix, AZ area and stated that it would have been extremely useful to have had TRI reports from bulk petroleum facilities located in the area for risk assessments conducted by the state.

With regard to the commenter's estimated emissions, the amount of product throughput described is far below the levels EPA believes are representative of the average distribution facility. EPA does not believe that the estimated annual releases characterized by the commenter are representative of the petroleum distribution industry and instead, refers the commenter to other sources including comments submitted by an industry trade association. Estimates from a member survey conducted by a trade association found that a typical bulk plant had an average throughput of 9.4 million gallons per year. Additionally, EPA questions whether the facilities operated by the commenter, a regional agricultural supply and grain marketing cooperative that have bulk petroleum storage and distribution elements, are properly classified as SIC code 5171 (bulk petroleum facilities) as opposed to SIC code 5191 (farm supplies) based on primary economic activity. If they are more appropriately classified as SIC code 5191, it would be inappropriate to compare these facilities to those whose primary function involves bulk petroleum distribution. EPA also questions whether the commenter's facilities would be subject to EPCRA section 313 reporting requirements, even if some of their facilities primarily function as petroleum distribution facilities. For these reasons, EPA does not believe that the estimated annual releases characterized above are representative of the petroleum distribution industry (Ref. 15).

7. *Chemical distributors.* EPA is adding to the list of industry groups covered under EPCRA section 313, facilities operating within SIC code 5169, Wholesale Nondurable Goods–Chemicals and Allied Products, Not Elsewhere Classified. Many of the major issues raised in comments concerning the addition of SIC code 5169 related to preproposal outreach activities conducted by EPA with the chemical distribution industry. These comments and others specifically relating to chemical distributors are addressed below. Other more general issues were addressed in separate sections within this preamble. EPA has provided greater detail in comments summarized and Agency responses in the *Response to Comments* document (Ref. 15).

Many individual chemical wholesale distribution companies make three general points in their comments: (1) EPA conducted almost no outreach to chemical distributors before issuing the proposed rule, (2) the chemical distribution industry should be given more time to gather data and respond to EPA, and (3) EPA should eliminate chemical distributors from this rule if EPA plans to make 1997 the first reporting year under the rule.

EPA believes that adequate notice was provided regarding the Agency's intention to expand the EPCRA section 313 reporting requirements to several additional industries, including the bulk chemical distribution facilities operating in SIC code 51. EPA also believes that adequate opportunity existed for representatives from this industry, and any of its member companies, to have contacted EPA and requested discussions on EPA's intent to add SIC code 5169 to the EPCRA section 313 list of covered facilities. EPA addresses these comments in greater detail in the *Response to Comments* document (Ref. 15). As noted in Unit V.D. of this preamble, EPA is not making 1997 the first reporting year.

The National Association of Chemical Distributors (NACD) asserts that EPA's lack of consultation with the industry implies that EPA did not have access to accurate information on several important factors used in EPA's decisonmaking. According to NACD, such questions as whether additional data exist on uses, releases, and other waste management; what activities use significant volumes of EPCRA section 313 toxic chemicals; how many of these might meet reporting thresholds; and whether data are available to assist in reporting have not been adequately addressed. NACD does not support inclusion of SIC code 5169 and stated that ``if the Agency feels that it lacks adequate information to make such a decision at this time, NACD urges the EPA to defer consideration of SIC code 5169 facilities until a partnership can form to develop a common-sense alternative to reporting to satisfy the goal of right-to-know and considerations of NACD facilities.

EPA believes that it has adequate information to decide whether SIC code 5169 meets the statutory standard for addition. EPA considered existing data reported under state regulations, in addition to industry specific information, and concluded that facilities operating within the chemical distribution industry manage significant volumes of EPCRA section 313 listed toxic chemicals, which may result in relevant information on releases and wastes managed that would beneficially contribute to furthering a right-to-know data base. As noted in the proposal (see 61 FR 33599-33600), EPA believes that many facilities within SIC code 5169 clearly conduct EPCRA section 313 reportable activities. EPA believes that existing guidance will transfer directly to assist facilities within this industry in making accurate threshold determinations and to develop reasonable reporting estimates. However, EPA invites the industry to assist in efforts to develop more specific guidance tailored to facilities within their industry sector as additional reporting needs are identified. EPA will initiate a stakeholders process to discuss this and other issues.

Comments submitted by NACD refer to a letter they sent to EPA dated July 25, 1996, which states that they believed a member survey was needed because ``EPA appears to be relying upon incorrect data or assumptions about the industry.'' The commenter, along with the SBA, refer to EPA's use of data collected by Massachusetts' Toxic Use Reduction Act (TURA), which are similar to the data collected by TRI and which collect information from the chemical distribution industry. Both commenters focus on the accuracy of one submission reported by one chemical distribution facility in the Massachusetts data set, which EPA included in limited summary statistics that appear in the preamble to the rule.

EPA generally disagrees with these commenters. While it is true that on December 6, 1996, the chemical distribution facility in question requested a revision to a data submission to Massachusetts for the 1992, 1993, and 1994 reporting year, to

report significantly lower methyl ethyl ketone (MEK) releases, EPA disagrees that this demonstrates that EPA had insufficient information about the industry to support the addition of SIC code 5169. The particular facility discussed by the commenters reported lower releases of MEK, they did not report that they do not ``manufacture,'' ``process,'' or ``otherwise use'' any listed chemicals, or that they should have filed no reports for the past years. The specific amounts of releases reported were essentially irrelevant; EPA did not project releases, and determine on that basis whether candidate industries met the statutory standard. Rather, the TURA data were used to further support EPA's determination that SIC code 5169 facilities are reasonably anticipated to have involvement with one or more listed chemicals, to process listed chemicals, and to file Form R reports that could be expected to contain release data.

One commenter questions whether facilities in SIC code 5169 generally have the types of product transfer and release tracking systems or programs in place to accurately track fugitive emissions and indicated that it would be difficult to begin tracking this type of information by January 1, 1997.

EPA does not disagree that many of the trade association's members may not have the type of tracking system currently in place that the facilities may want to implement, but emphasizes that the EPCRA section 313 reporting requirements require only the facility use its best available information and estimation techniques. However, EPA believes that most facilities have some sort of tracking system in place to track their products. If additional tracking systems, or even any tracking systems, are not in place on the date that these requirements take effect January 1, 1998, the industry is required only to provide the best estimates that can be made based on existing business information.

A number of commenters argue that a significant portion of the industry engages solely in product distribution and conducts no ``processing'' activities.

EPA agrees with the commenter that a significant portion of the industry simply engages in product distribution without any actual processing taking place, and such facilities should not have to file a report. However, EPA has also documented that many facilities within SIC code 5169 conduct reformulation and repackaging activities which are ``processing'' activities. This is confirmed by other comments received from the industry. EPA believes that these facilities engage in reportable threshold activities and should be required to report their releases and other waste management activities when thresholds are exceeded.

An industry trade association argues that EPA's screening analysis for facilities within SIC code 5169 is flawed because it defines chemical distributor's reformulation and repackaging operations as ``processing'' under EPCRA section 313. NACD disagrees that these activities are similar to the operations of SIC codes 20 through 39, which result in reportable information on releases and waste management activities. NACD therefore claims that SIC code 5169 does not satisfy the Agency's ``activity factor.'' NACD refers to section 313(b)(1)(B) and emphasizes that any addition is limited to ``the extent necessary to provide that each SIC code is relevant to the purposes of the act.'' NACD repeats a portion of EPA's summary statement from the proposed rule (see 61 FR 33599) that discusses the similarity of activities conducted in the manufacturing section to those conducted in SIC code 5169. Many other commenters from this industry sector claim they conduct no ``processing'' activities.

EPA disagrees with the commenter. EPA's interpretation and application of the statutory standard for the purposes of this rulemaking and how industries were screened and selected for inclusion in this rulemaking is discussed in detail in Unit V.A. through V.C. of this preamble.

Contrary to comments submitted on behalf of a trade association, EPA believes that facilities in SIC code 5169 do conduct activities that are similar to those performed and subsequently reported by manufacturing facilities such as ``processing'' a toxic chemical as a formulation component or repackaging. Based on 1994 TRI data, manufacturing facilities submitted 18,465 forms indicating a toxic chemical was ``processed'' as a formulation component and 3,782 forms indicating the toxic chemical was repackaged. These are the types of activities that EPA has identified as being performed by facilities within the chemical distribution industry and EPA's determination is confirmed in comments submitted by a trade association which stated, ``SIC code 5169 facilities generally engage in . . .operations includ[ing]: (1) distributing; (2) warehousing; (3) repackaging; and (4) blending or formulating.'' This commenter notes that ``blending'' in this context refers to creating products by adding two or more precursor chemicals through a simple, non-reactive mixing process at ambient pressure,'' which they compare to ``reactive or synthetic operations conducted at elevated pressures by facilities in SIC codes 20-39.'' EPA disagrees with the commenter that the activities conducted in SIC codes 20 through 39 are limited to the reactive-type operations described by the commenter. There are many non-reactive processing activities that occur in SIC codes 20 through 39, such as paint formulation. Further, EPA disagrees that ``blending'' is synonymous with ``chemical reaction.'' EPA believes that there is little, if any, overlap between the two terms. In any event, reformulation and repackaging activities clearly fit within the processing definition and therefore meet EPA's ``activity factor.'' The fact that some chemical distributors do not conduct activities that would be reportable threshold activities under section 313 is not a reasonable basis to not add those that do conduct such activities.

Most commenters from the chemical distribution industry requested that their industry either be exempted from this rulemaking, be granted an extension of the comment period, or that EPA defer reporting for their industry for at least one year. The request for a deferment was primarily based on the lack of earlier involvement with EPA prior to publication of the proposal. A similar comment was made by a trade association which stated that neither they nor their membership had adequate time to evaluate the regulatory alternatives suggested by EPA. A lengthier discussion on the issue of deferral can be found in Unit V.D. of this preamble.

As stated previously, EPA believes sufficient notice was provided to the chemical distribution industry so that it could adequately respond to issues raised in the proposal, including the alternatives suggested by EPA. EPA believes that this industry is uniquely well informed with regard to considering the various issues raised by EPA's proposal; for example, some of the alternatives posed by EPA were taken from the chemical distribution industry's reporting experience in Minnesota. In part as a result of requests from representatives from the chemical distribution industry, EPA did extend the comment period for 30 additional days in order to allow commenters more time to prepare their comments. In addition, these requirements will not take effect until January 1, 1998.

As part of EPA's obligation under the Regulatory Flexibility Act (RFA), several alternatives were proposed for facilities operating within SIC code 5169, due to potential economic impacts estimated to result from this action. Some of the

commenters address these alternatives but raise concerns regarding the actual relief that would be provided. One of the alternatives suggested by EPA for this industry was to expand eligibility of the Alternate Threshold, found at 40 CFR 372.95. A trade association stated that the alternate threshold reporting option currently in place ``does little'' to ease the burden on facilities in SIC code 5169 for the reason that many chemical warehousing facilities often exceed the 1 million pound threshold that limits its application. SBA also proposed that this reporting option be revised.

EPA believes that each of the alternatives suggested in the proposed rule have significant drawbacks, while offering questionable reductions in burden. Individual alternatives are discussed in detail in EPA's *Response to Comments* document (Ref. 15).

EPA does not believe a revision of the existing Alternate Threshold reporting option is appropriate at this time. Currently this reporting option allows facilities which do not exceed 500 pounds of annual reportable amounts to apply a 1 million pound manufacture, process, or otherwise use threshold on a per chemical basis (referred to as an alternate threshold). This threshold is far greater than the existing 25,000 pound manufacture or process threshold, or the 10,000 pound otherwise use threshold. If a facility does not exceed the 1 million pound alternate threshold then it may submit an abbreviated form, Form A, rather than a full Form R.

EPA noted in the final rule establishing the Alternate Threshold that part of its rationale for establishing the Alternate Threshold was in response to the increased level of reporting that was expected in response to the addition of numerous chemicals and industry sectors (59 FR 61489). This reporting option has only been in effect for activities beginning on January 1, 1995. July 1, 1996, was the first opportunity for facilities to apply this reporting option. The Office of Management and Budget (OMB) has authorized the information collection period for this reporting alternative until June 1998, in order to provide the Agency additional time to sufficiently evaluate the benefits of the existing reporting option and propose any adjustments through rulemaking, if necessary. As EPA noted in the proposal, EPCRA section 313(f)(2) requires that any revision to the current reporting thresholds continue to capture a substantial majority of total releases of each listed chemical or chemical category. Because the facilities added in this rule have not reported in the past, also EPA noted in the proposal that it may not have sufficient information about releases (both types of chemicals and release levels) with which to justify expanding the alternate threshold eligibility for this industry group. EPA has not received any information since the publication of the proposal to convince the Agency that it has sufficient information to support the necessary findings. Indeed, the Massachusetts TURA data indicates that facilities in SIC code 5169 are often below the 1 million pound threshold. Until EPA gains additional experience with the existing Alternate Threshold and with the reporting from the newly added industry sectors, the Agency does not believe that it is in a position to expand the eligibility for this reporting option. EPA has committed to review the Alternate Threshold in light of the Agency's additional experience with this reporting option and with the reporting from the newly added industries.

Numerous comments were also submitted that raised concerns over the issue of confidential business information (CBI). A trade association commented that none of the small business alternatives presented in the proposal, offered acceptable options for protecting CBI. The alternatives presented by EPA included an expansion of the range values available for reporting, a modification of the data to be submitted such that EPA could extrapolate estimates of releases and other waste management for the industry and a reduction in data elements to be reported by facilities in SIC code 5169. This commenter stated than none of EPA's alternatives acknowledge or resolve the CBI problems that they anticipate if distributors are included in the TRI program. The type of throughput data, suggested in one of EPA's alternatives, is claimed by the commenter to be a core business activity and as such, disclosure on Form R or any alternative reporting system would allow customers, suppliers, and competitors to either learn directly or estimate confidential information that in turn would reveal sensitive purchasing and marketing information that would jeopardize competitiveness.

EPA does not agree that existing trade secret provisions in EPCRA do not offer adequate protection for sensitive business information, and that the existing reporting scheme is appropriate for SIC code 5169. EPA believes that the commenters' assertions are inconsistent with the record developed from state TRI reporting programs, and with the EPCRA sections 311, 312, and 313 programs. Chemical wholesalers are currently required to report actual throughput under the Massachusetts Toxic Use Reduction Act, and yet the commenters have neither asserted, nor shown that any actual harm has resulted, nor otherwise provided examples to substantiate their assertions of the serious CBI problems that would result from TRI reporting. The commenters are also currently required to report release data in Arizona and Minnesota; according to the commenters, this should allow competitors to back-calculate throughput, yet the commenters have not provided specific data or examples to substantiate their assertions that TRI reporting would release CBI. Further, the chemical wholesalers asked Minnesota to allow them to use a simple method of estimation (emission factors) which would appear to make back-calculation easier; again, they have shown no actual harm resulting from reporting to the Minnesota TRI. The commenters also currently report under section 312, which publicly releases information that could theoretically be used to calculate throughput, and they have not provided any information or examples to support their allegations. In addition, there are facilities that have a primary SIC code within 20 through 39, but that also have establishments at their facilities that fall within SIC code 5169. These facilities have not made a disproportionate number of trade secret claims.

EPA is also not convinced that the information reported on TRI would necessarily permit competitors to back-calculate. Notwithstanding the commenter's assertion, facilities in SIC code 5169 conduct activities other than repackaging; some product remains in original containers, which is not reportable. Consequently, without additional information, competitors would not know what fraction was actually reported. Elsewhere in its comments, NACD also comments that reporting is very burdensome, in large part because many variables influence releases, and they would have to account for all of these variables in compiling their reports. EPA disagrees with this characterization of reporting, but notes that if this is accurate, it should not be possible for competitors to back-calculate throughput, even with what NACD claims is a ``reasonable degree of accuracy.''

8. *Solvent recovery operations*. EPA is adding to the list of industry groups covered under EPCRA section 313, facilities that operate within SIC code 7389, limited to facilities that are primarily engaged in solvent recovery

services on a contract or fee basis. EPA received relatively few comments on the proposed inclusion of this industry. Several commenters do not support EPA's addition of solvent recyclers. Several commenters support EPA's proposal to add those facilities within SIC code 7389 that are primarily engaged in solvent recovery activities. One of these commenters notes that 36 Superfund sites and 83 damage incidents have been recorded as resulting from facilities involved in solvent recovery and hazardous waste recycling activities. In many cases, the comments submitted by this industry raise issues that apply to more than this industry and these have been addressed in other sections of this Notice. Major issues relating to this industry are addressed below. In each case, EPA has provided greater detail of comments and responses in the Response to Comment document (Ref 15).

Safety-Kleen believes that by limiting the addition of solvent recycling facilities to those that are in SIC Code 7389, EPA will exclude a significant number of similar facilities that operate in other industries. The commenter believes that EPA should require EPCRA section 313 reporting by all industries that recover solvents received from off-site, irrespective of SIC code and regardless of whether these facilities are commercial recovery facilities.

EPA disagrees with the commenter. EPA believes that identifying solvent recyclers other than by SIC code would cause confusion. Further, EPA believes that through today's action, particularly in the addition of facilities in SIC codes 5169, 4953, 7983 and through the original SIC code coverage, the majority of facilities (in all SIC codes) conducting solvent recovery operations that meet both the chemical and employee thresholds will be covered. As discussed in the *Economic Analysis* (Ref. 12) some facilities that conduct solvent recovery operations have a primary SIC code within 20 through 39, and therefore are already subject to section 313. The commenter lists facilities that conduct commercial recycling activities that have primary SIC codes in 5169 or 4953 that by this rulemaking are being made subject to the EPCRA section 313 reporting requirements.

Facilities that are subject to the EPCRA section 313 reporting requirements must consider all (non-exempted) manufacturing, processing, and use activities when determining threshold, release and other waste management quantities. Thus, a facility with a primary SIC code of 20 through 39, 5169, or 4953 would not exclude from threshold and release and other waste management determinations, quantities of the chemical associated with activities not directly associated with the ``primary'' SIC code of the facility. For example, a facility with a primary SIC code of 4953 and a secondary SIC code of 7389 would not exclude from threshold determinations those activities that occur within the SIC code 7389 establishment. Nor would a facility with one SIC code, e.g., 4953, that conducted activities similar to the activities conducted by solvent recycling facilities in SIC code 7389 be able to exclude these activities from threshold determinations.

One commenter contends that the SIC code classification system is being redesigned as the proposed North American Industrial Classification System (61 FR 35384, July 5, 1996). They state that as this redesign is scheduled for implementation in 1997, EPA should postpone its addition of industry groups to EPCRA section 313 until the reclassification has been completed and industries have had an opportunity to evaluate their activities under the new classification system.

As stated in Unit V.I.3. of this preamble, EPA will address the impact of the revision of the current SIC code structure based on the North American Industrial Classification System on both industries added under this action and those currently within the manufacturing sector, after the revision becomes final.

Several commenters contend that solvent recyclers should not be added to EPCRA section 313 because they do not have the same amount and type of information that the currently covered manufacturing facilities have to make threshold and release and other waste management determinations. They contend that manufacturing facilities have a reporting advantage over solvent recovery facilities because the manufacturing facilities control the composition of the raw materials they purchase. They assert that manufacturers know both the identity of the chemicals and their ``exact concentrations or ranges.'' In contrast, they contend, the facilities that receive toxic chemicals in waste rely on generator information and limited analysis necessary to evaluate RCRA classifications. The commenters believe this information is insufficient to make the determinations necessary for compliance with the EPCRA section 313 reporting requirements. They believe that inbound streams would have to be analyzed, and that the cost of this analysis, which has not been considered by EPA, would be prohibitive. One commenter claimed that in some cases standard methods do not exist for determining the amount of some EPCRA section 313 chemicals or compounds within a category.

Generators that send hazardous waste to facilities for treatment, recovery or disposal provide RCRA manifests which contain a variety of detail on the wastes they transfer. While this information is provided as a means to satisfy associated RCRA requirements, EPA believes that in many instances this information can contain significant detail and can be useful in developing constituent specific estimates required under the EPCRA section 313 reporting requirements. Further, EPA believes that those facilities that receive hazardous waste for the purposes of recovery, treatment or disposal in many cases conduct additional analyses to ensure that the waste they receive properly meet their recovery, treatment or disposal specifications. In addition, comments provided by Laidlaw indicate that waste generators provide waste handlers with information on the concentration ranges of constituents in waste. ``Laidlaw utilizes a profile system in order to obtain information from the waste generator that is needed to properly treat, store or dispose of the hazardous waste. Variants of this type of system is generally used by all members of the hazardous waste management industry. . .Profiles typically provide information on RCRA hazardous constituents present in the waste, including concentration ranges.'' Laidlaw attached examples of these profiles. For example the profile for ``Line Rinse Mop Water'' lists the following constituents: Water - 50-80%, Methanol - 0-5%, Ethanol - 10-20%, Acetone - 0-2%, Isopropanol - 3-15%, Tetrachloroethylene - 0-1%, n-Butyl alcohol - 0-1%, Mineral spirits - 3-15 %, Pyrethroids - 0-1%, Dirt - 1-5%. This range information is analogous to the information on Material Safety Data Sheets (MSDS) that the manufacturing sector uses to estimate the constituents of mixtures. For example, an MSDS for ``Xylenes'' lists the following constituents: m-Xylene - 40-65%, o-Xylene - 15-20%, p-Xylene - 0-20%, Ethyl benzene - 15-25%. Further, both the proposed and final rules implementing the EPCRA section 313 reporting requirements (52 FR 2115-2116, 53 FR 4510-4511) and the 1995 Toxic Chemical Release Inventory Reporting Form R and Instructions (EPA 745-K-96-001) provide guidance for the reporting of the components of mixtures, given the following scenarios: (1) The concentration range in known,

(2) only the upper bound concentration is known, (3) only the lower bound concentration is known, and (4) when no concentration information is known. While for EPCRA section 313 reporting purposes, a waste is not considered a mixture, the guidance for making threshold determinations on the components of mixtures can be applied to wastes. Although EPA agrees that facilities in SIC codes 20 through 39 often control the composition of their raw materials, EPA disagrees that the level of information that facilities in SIC codes 20 through 39 use to make threshold determinations is significantly different than the level of information that waste handlers, including solvent recyclers are expected to have to make threshold determinations.

Further, EPCRA does not require additional monitoring or sampling in order to comply with the requirements under EPCRA section 313. EPCRA section 313(g)(2) states:

> In order to provide the information required under this section, the owner or operator of a facility may use readily available data (including monitoring data) collected pursuant to other provisions of law, or, where such data are not readily available, reasonable estimates of the amounts involved. Nothing in this section requires the monitoring or measurement of the quantities, concentration, or frequency of any toxic chemical released in the environment beyond the monitoring and measurement required under other provisions of law or regulation.

EPA believes that the combination of information received with waste transfers and information developed by the recovery facility will enable solvent recovery facilities to adequately determine their compliance requirements under section 313 and that the additional waste management information anticipated from these facilities will further the purposes of TRI.

EPA has not included the cost of consitutent analysis in its estimates of the costs of reporting for SIC code 7389 because, as discussed above, such analysis is not required.

Another commenter suggests that the 40 CFR 372.45 supplier notification requirements be applied to facilities that generate and transfer to other facilities wastes containing EPCRA section 313 toxic chemicals. They contend that this would assist the facility receiving the wastes containing EPCRA section 313 toxic chemicals in making section 313 reporting determinations. The commenter further states that if the supplier notification requirements are extended in this way, there would no longer be the need for receivers of the wastes to report under EPCRA section 313, because information provided by the generators would already be available.

The supplier notification requirements are not being amended by this rulemaking. Supplier notification applies to chemicals contained in mixtures or other trade named products. EPA does not consider wastes to be ``mixtures or trade name products.'' Even if supplier notification could be applied, EPA disagrees with the commenter that supplier notification information would satisfy the purposes of section 313 reporting. The information provided by supplier notification requirements by itself may not be adequate for EPCRA section 313 reporting purposes. It includes the notification that a section 313 chemical is contained in a mixture and the concentration in which it exists provided it is above certain *de minimis* levels. Information provided, as part of the supplier notification requirements, may not accompany each shipment of a mixture, such as identical mixtures being sent to the same receiving facility multiple times within a year. The information once received is not required to be entered into any readily available format. Supplier notification information is intended to assist facilities in making compliance determinations under section 313, but it is not a substitute for the calculations resulting in information on how associated wastes from mixtures are managed. Supplier notification information alone does not answer the questions of how much of the chemical was received by the facility during the year, or how much was released to air, water, land or how much was then transferred to another facility for treatment. Thus, supplier notification information in itself is not a surrogate for TRI Form R information.

EPA also received comments that question whether the current Form R and its reporting elements will promote adequate reporting from nonmanufacturing industries. One commenter states that Form R does not readily lend itself to reporting data from solvent recyclers, and that a separate form may be necessary because solvent recovery facilities are involved in processes which are the reverse of those performed by manufacturing facilities. A solvent recycler receives waste and creates a product, and it is the product that leaves the facility with non-recyclable materials remaining as waste. This commenter states that without a modification to current reporting, the extent of data manipulation required to conform to Form R requirements may result in reporting that is essentially meaningless. Other commenters offered suggestions that might improve how solvent recovery facilities could report. One commenter stated that hazardous waste manifests could be modified to note if EPCRA section 313 chemicals have been reported by the generator. Amounts that had been reported would then not be considered for reporting by the receiving facility, and amounts that had not would be included in the receiving facility's Form R report.

EPA does not believe that because solvent recyclers use wastes as their input that information on the quantities of chemicals that they process and manage as waste cannot be represented on Form R. Nor does the commenter provide adequate rationale as to why a new form would be needed. The TRI program has not focussed exclusively on the ``manufacture,'' ``processing,'' or ``otherwise use'' of non-waste in the past. The Form R has captured information on chemicals in ``waste'' that have been manufactured, for example chemicals that have been ``coincidentally manufactured'' often as part of a waste stream (see the discussion on ``coincidental manufacture'' elsewhere in this preamble) and on waste that is combusted for energy recovery (this has been considered to be ``otherwise used'' because it is a fuel, see the *1995 Toxic Chemical Release Inventory Form R and Instructions* (EPA 745-K-96-001), p. 23 for a discussion of otherwise use activities). Nor does EPA believe that the ``manipulation'' that will be required to make threshold determinations from available information is significantly different from that done in the manufacturing sector.

EPA does not agree that waste management is the reverse of manufacturing. For both the manufacturer and the recycling facility inputs come into the facility, a product leaves the facility, and waste is often the byproduct of the activities that occur at the facility. As such, EPA does not believe that a separate form is required for solvent recyclers.

Further EPA does not believe that annotating hazardous waste manifests in lieu of reporting under the EPCRA section 313 reporting requirements is a viable option for a number of reasons. The information presented on a waste manifest is at the waste stream level. While the manifest contains some information on the constituents present in the waste, it does not identify the quantity of each individual constituent. EPA does not believe that the level of information present on a manifest can be used in lieu of TRI data. Also as

discussed elsewhere (particularly see Unit V.F.2. of this preamble), EPA believes that requiring both the generator of a toxic chemical waste and a downstream manager of that toxic chemical waste to report to TRI will not result in double counting. Each facility will manage the waste differently, which will be reflected in how and what each facility reports. When a hazardous waste facility receives waste from a generator many activities may occur. The waste may be stabilized, incinerated or in some other way treated. As a result of these activities, the amount finally deposited in a landfill may be significantly different from the amount of the toxic chemical in waste that initially entered the facility. Releases to air and water as well as transfers off-site for further waste management will undoubtedly cause a smaller quantity of the toxic chemical to be reported as landfilled, while the remainder will be captured as releases to other media transfers off-site. The amount to be reported in the Form R as disposed in a landfill is the final amount of EPCRA section 313 constituent that is landfilled, not the amount received by the facility. Only in the case of a direct transfer from the truck, barge, etc. to the landfill would this number be similar.

A comment from a trade association recommended that recyclers be granted TRI ``credits'' for wastes successfully reclaimed. The commenter does not explain what a ``TRI-credit'' is.

As stated in the proposed rule (61 FR 33607), EPA recognizes the beneficial role that many solvent and other chemical recyclers play in decreasing the demand for raw materials. Current EPCRA section 313 and PPA section 6607 reporting requirements are adequate to provide meaningful information from facilities within the manufacturing sector that conduct solvent recovery activities, and those reporting elements currently distinguish among the various waste management activities conducted on toxic chemicals. However, after experience with the newly added industry sectors and subsequent review, EPA may conclude that greater informational benefits could result by further distinguishing among waste management practices that recirculate toxic chemicals in commerce. The commenter poses an interesting concept that EPA is willing to take into consideration and EPA invites the industry to develop the concept more fully. EPA will initiate a stakeholders process to discuss this and other issues.

Safety-Kleen states that the wording of the 5 citations where the SIC code 7389 is further limited is not consistent with the Office of Management and Budget's (OMB) SIC Manual. The commenter contends that the citations in the proposed rule appear to have omitted a word. The OMB SIC Manual lists the subgroup of SIC code 7389 involved with solvent recovery as ``Solvents recovery service on a contract or fee basis.'' The commenter believes that the phrase at Proposed 40 CFR 372.22(b), (b)(1), (b)(2), (b)(3)(I), and (b)(3)(ii) (see 61 FR 33618) should be modified to include the word ``or'' that was omitted. They believe that without this change potentially affected parties would read the language to say that only contractual applications are subject to the rule.

EPA agrees with the commenter that the word ``or'' should be inserted in the phrase modifying SIC code 7389 in the language at proposed 40 CFR 372.22(b), (b)(1), (b)(2), (b)(3)(I), and (b)(3)(ii). EPA has incorporated this change.

I. Miscellaneous Comments

1. *Duplication of reporting requirements and available data.* Many commenters from industry believe the information that would be reported under EPCRA section 313 is not necessary, since other sources of data exist at the state and federal level which can provide the public and government with the information necessary to understand the environmental consequences of industry activities. Therefore, reporting would yield data which are either duplicative or unnecessary for informing the public regarding the risks resulting from releases of toxic chemicals. A large number of commenters, including environmental and community groups, as well as private citizens, believe that information is not generally available from many facilities in the proposed industry groups on toxic chemical releases, and therefore they support this action.

EPA recognizes that facilities may be subject to other reporting requirements at the federal and state levels. In enacting EPCRA, Congress recognized that information available under other environmental statutes such as the CWA or the CAA exists, but ``has been difficult to aggregate and interpret, which has made it difficult, if not impossible, for the public to gain an overall understanding of their toxic chemical exposure.'' (H.Rep. 99-975, 99th Cong., 2nd Sess., p. 5212 (October 7, 1986)). EPA believes that very little additional data exist which are comparable to EPCRA section 313 data, and has found that other available information does not typically include annual data regarding releases and other waste management of toxic chemicals from facilities in the industry groups included in this rulemaking. EPA discusses more fully other data sources in the *Economic Analysis* (Ref. 12) and in the *Response to Comments* document (Ref. 15).

Section 313 of EPCRA requires manufacturing facilities to report annually their routine and accidental transfers and releases of listed toxic chemicals and chemical categories. Data reported under EPCRA section 313 are contained within TRI and are accessible to the public via electronic media (i.e., CD-ROM and Internet) and printed media. Data are reported annually, allowing reporters and the public to monitor trends in releases, transfers, and waste management activities. TRI is unique among environmental data bases because of the multimedia data it collects, and because it was specifically designed to facilitate public access. TRI is also unique in terms of its chemical coverage, with over 600 toxic chemicals and chemical compound categories, which exhibit a variety of adverse health and environmental effects, reported to TRI.

EPA currently maintains several other data bases that are designed to support the enforcement and compliance efforts of the Agency's major program offices. Existing data sources include the Aerometric Information Retrieval System (AIRS), the Permit Compliance System (PCS), the Biennial Reporting System (BRS), and the Tier I and II reports submitted under sections 311 and 312. However, these alternate data sources do not provide an adequate substitute for the information reported to TRI, nor do they create the same incentives to implement pollution prevention measures that TRI does. Currently available non-TRI sources of information cannot provide release and transfer, inventory, or pollution prevention data with the scope, level of detail, and chemical coverage as data currently included in TRI. EPA's review of these data sources, summarized below, is presented in full in the Economic Analysis for this final rule (Ref. 12).

a. *Sources of air release data.* EPA's Office of Air and Radiation (OAR) uses the AIRS Facility Subsystem (AFS) to track emissions of pollutants that have been shown to be detrimental to public health (known as the *criteria pollutants*). States are required to report ambient air quality data on a quarterly basis, and point source data on a yearly basis, for the criteria pollutants listed. States may also use the AIRS system to store data on other pollutants in

addition to the six criteria pollutants. However, AFS data do not duplicate TRI air release data primarily because the majority of air toxics are not reported in AIRS. Currently, there is no requirement for states to report hazardous air pollutants (HAPs)[2] to AFS, although some states with toxics reporting requirements that exceed federal requirements may upload their air toxics information to AFS. In contrast, EPCRA section 313 currently requires that facilities report fugitive (non-point) air emissions and point source (stack) air emissions of over 600 chemicals and chemical categories. Since data on chemical releases in AFS are limited to the six criteria pollutants, an application known as ``SPECIATE'' is required to estimate specific toxic emissions, but it allows the estimation of only 18 percent of section 313 listed chemicals. In addition, SPECIATE suffers from technical limitations and is not recommended for the development of toxics inventories. In contrast, TRI provides the public with data on the release of more than 600 toxic chemicals and chemical categories, including HAPs, that have been determined to pose a risk to public health and the environment.

b. *Sources of water release data.* EPA's Office of Enforcement and Compliance Assurance (OECA) currently manages the Permit Compliance System (PCS) which tracks the enforcement status and permit compliance of facilities regulated under the National Pollutant Discharge Elimination System (NPDES). PCS tracks all point source discharges to surface waters, but does not include indirect releases such as discharges to POTWs. As required under the CWA, dischargers report compliance with their NPDES permit limits through Discharge Monitoring Reports (DMRs). Data collected via DMRs are entered into PCS. Only data reported by ``major dischargers'' are entered into the data base.

PCS is a permit tracking system and therefore does not substitute for TRI release data. In addition, PCS discharge data are only available for major facilities, and are reported in terms of PCS parameters, not specific chemicals. In addition, only those chemical parameters actually specified in the facility permit have monitoring requirements. In some cases, data may be reported in units of concentration rather than units of mass. If flow rates are also reported, concentration data can be used to estimate total releases, although there are several complicating factors in producing such an estimate. In contrast, EPCRA section 313 requires that facilities report total direct releases to receiving streams or water bodies. Releases to water are reported in pounds per year and include the name of the receiving stream or water body. The PCS data base does not substitute for the data reported to TRI.

c. *Sources of underground injection, on-site releases to land, discharges to POTWs, and transfers to off-site facilities data.* Under section 3002(a)(6) of the Resource Conservation and Recovery Act, facilities that generate an amount of hazardous waste that exceeds a defined threshold are required to submit biennial reports on that waste to EPA (or to state agencies that run RCRA programs). Data are reported to the states and EPA regions, which then provide it to EPA headquarters. Information is entered into the Biennial Reporting System (BRS) and is maintained by EPA's Office of Solid Waste and Emergency Response (OSWER). The data base provides an overview of the progress of the RCRA program through tracking trends in hazardous waste generation and management. Large quantity generators (LQGs) and treatment, storage, and disposal facilities (TSDs) are required to report every 2 years. BRS contains data for about 23,000 LQGs and 4,000 TSDs. BRS requires reporting of several data elements including: underground injection, on-site releases to land, and off-site transfers.

BRS contains data on hazardous wastes as defined by RCRA, which are designated as either ``listed waste'' or ``characteristic waste.'' Listed wastes have been identified as hazardous as a result of EPA investigations of particular industries or because EPA has specifically recognized a chemical waste's toxicity. Characteristic wastes are determined hazardous because they exhibit one or more of the following ``characteristics'': ignitability, corrosivity, reactivity, or toxicity. All RCRA wastes are designated by a waste code rather than a Chemical Abstract Service (CAS) number, and not all waste codes used in BRS reporting map directly to a single, unique chemical. A RCRA waste stream may be reported under multiple waste codes, but at present there is no mechanism to apportion the waste stream volume to particular waste codes where multiple codes are reported. Also, the quantities of specific chemicals cannot be determined from reported quantities of waste streams, which contain various constituents including EPCRA section 313 toxic chemicals contained in various concentrations in a non-hazardous matrix, such as water. Out of the over 600 chemicals and chemical categories on the current EPCRA section 313 toxic chemical list, 185 can be mapped to a single unique RCRA waste code.

BRS requires individual reporting of underground injections on-site, on-site releases to land, transfers to off-site locations as well as discharges to POTWs, as does TRI. However, only half of the volume reported in BRS can be assumed to identify individual chemicals. In addition, the waste classification system results in waste quantities being reported to BRS that do not identify quantities of the individual chemicals. The quantity reported to BRS represents the quantity of the entire waste stream, and not individual chemicals.

d. *Sources of chemical inventory data.* EPCRA sections 311 and 312 requires that states establish plans for local chemical emergency preparedness and that inventory information on hazardous chemicals be reported by facilities to state and local authorities. EPCRA section 312 outlines a ``two-tier'' approach for annual inventory reporting. All facilities that store hazardous or extremely hazardous substances must submit at least a Tier I and often a Tier II form (the Tier I form collects a subset of the information collected on the Tier II form). Tier I requires reporting on broad categories of physical hazards such as fire, sudden release of pressure, and reactivity, as well as acute and chronic health hazards. Upon request by a Local Emergency Planning Committee (LEPC), State Emergency Response Commission (SERC), or fire department, a facility may be required to submit the more detailed Tier II form, which requires chemical specific information by CAS number. Approximately 33 states require regulated facilities to submit Tier II forms, and most of the remaining states recommend that facilities submit Tier II forms.

While both the Tier II form and the Form R collect information on the name of the facility, the facility's address, the parent company, the parent company's address, the name of the chemical, the CAS number, and both contain a data element on the maximum amount of the chemical on-site (the Form R data element is ``maximum amount of the toxic chemical on-site at any time during the calendar year;'' the Tier II data element is ``maximum daily amount in pounds''), the remainder of the information collected is different. The Tier II form collects information on

[2]Hazardous Air Pollutants (HAPs) are defined in section 112 of the Clean Air Act (CAA). Section 112 lists 189 HAPS, of which 181 are also listed in TRI.

the physical health hazards associated with the chemical, additional information on inventory, and specific information about the conditions under which the material is stored (e.g., temperature and pressure) and the locations of the chemical at the facility. EPCRA section 313 does not require the collection of any of this information; rather, it focuses on information concerning releases and other waste management activities.

In summary, existing EPA data bases do not substitute for the multi-media data reported under EPCRA section 313. In addition to the limited chemical universes encompassed by these alternate data sources, the program data bases do not substitute for TRI data in terms of frequency of reporting, reporting thresholds, and ease of use. EPA is committed to improving the usefulness of the data it collects, and maximizing public access. TRI is a cornerstone of this effort, and serves as a model for toxic chemical release data collection and dissemination.

e. *State data sources*. EPA recognizes that facilities may face various reporting requirements at the state level. EPA examined available state data, but did not find data comparable to that collected under EPCRA section 313. As of 1994, only Arizona, Massachusetts, Minnesota, and Wisconsin required or were planning to require expanded state TRI reporting to include facilities outside of SIC codes 20 through 39. Some states require facilities to report release information beyond that required by the federal TRI program. Overall, however, the additional data collected by states are far less complete and uniform than would be available under an expanded EPCRA section list of covered facilities. A number of states and regional agencies also maintain their own air emissions inventories, including California and the Great Lakes states. Difficulties in replicating TRI data from these sources include variations in the type of data collected, and the fact that only some states maintain these types of inventories.

In summary, existing EPA data bases do not substitute for the multi-media data reported under EPCRA section 313. In addition to the limited chemical universes encompassed by these alternate data sources, the other EPA data bases do not substitute for TRI data in terms of frequency of reporting, reporting thresholds, and ease of use. State data sources are limited and vary widely in coverage as well. EPA is committed to improving the usefulness of the data it collects, and maximizing public access.

2. *Limits of TRI data*. A number of commenters identified shortcomings in the TRI reporting system which they say cause public misunderstanding of the information and limit its utility. For example, a number of commenters state that the existing TRI system is of limited utility in identifying risks and may mislead the public about risk, because it focuses on volume alone without regard to factors such as chemical toxicity, bioavailability, concentration, and exposure potential. Other commenters state that EPA should devote resources to improvements in such areas as compliance, data quality assurance, chemical list coverage, outreach and data dissemination prior to expanding the TRI program to include additional industries.

EPA acknowledges that there is room for improvement and refinement of the TRI reporting system. Since the inception of the program, EPA has worked continually to improve the reporting system and the ability of the general public and others to use the information contained in it. In addition to ongoing programs of enforcement, compliance assistance, data quality assurance, data use assistance, and general outreach, EPA has several initiatives now underway which address the commenters' concerns, including: revising the Form R to address concerns about the reporting of underground injection and land releases; screening the EPCRA section 313 chemical list to ensure that all listed chemicals meet the statutory listing criteria; conducting a major assessment of the accuracy of data submitted by facilities; and hosting a national conference to discuss and promote TRI data use. EPA does not agree that adding non-manufacturing industries will exacerbate any existing deficiencies in or misperceptions resulting from the TRI reporting program. To the contrary, EPA believes that this expansion, as well as the recently completed expansion of the EPCRA section 313 toxic chemical list, will improve the utility of the TRI data by providing the public more complete information about toxic chemicals in their communities. EPA will initiate a stakeholders process to discuss this and other issues.

3. *SIC code loophole*. Several commenters, including the Working Group on Community Right-to-Know and a number of other environmental organizations, urge EPA to abandon the SIC code-based system of coverage under EPCRA section 313 or to lower the economic determination for multi-establishment facilities. These commenters believe that a number of facilities are able to avoid reporting under EPCRA section 313 by classifying their facilities in non-covered SIC codes. These facilities may ``manufacture,'' ``process,'' or ``otherwise use'' listed toxic chemicals in a manner similar to covered facilities, but since the facilities can claim that 51 percent or more of their economic activity is derived at an establishment within a non-covered primary SIC code, reporting is not required.

EPA recognizes that some facilities with more than one establishment are able to avoid reporting under EPCRA section 313 through a determination that one or more establishments, classified in non-covered SIC codes, are responsible for a majority of the economic activity at that facility. EPA interpreted SIC coverage in this manner to remove ambiguity and confusion created by the linkage between facility and SIC code at the time of the final rulemaking originally implementing EPCRA section 313 (see 53 FR 4502). EPA believes that today's rulemaking partially addresses the commenters' concern by adding other SIC codes to the list of covered SIC codes in EPCRA section 313, even while acknowledging the weaknesses and limitations of the present SIC code system. A revision of the SIC code system, called the North American Industry Classification System (NAICS), has recently become effective (61 FR 57006), and may address the commenters' concerns by developing production-oriented classifications. EPA believes that, at present, abandoning SIC codes (or future NAICS codes) entirely would create significant problems in terms of compliance and enforcement, and would lead to an unmanageable reporting system. EPA will continue to consider future expansions, and methods of more completely capturing toxic chemical releases and waste management information.

4. *Compliance with NEPA*. Several commenters contend that EPA failed to comply with the National Environmental Policy Act (NEPA), which requires that the agency prepare an Environmental Impact Statement for any major federal action having a significant impact on the environment, or that it issue a finding of no significant impact due to the action. Commenters assert that the proposed TRI industry expansion rule is not exempt from NEPA based on functional equivalence, because it has not provided the public with a meaningful opportunity to participate in the evaluation of environmental factors, or discussed the alternatives it may have considered, including a no-action alternative.

EPA does not believe that today's action is subject to the requirements of the National Environmental Policy Act. Although the commenter is correct that EPCRA does not contain a statutory exemption from NEPA, the procedures followed by EPA in promulgating this environmental regulation have provided the functional equivalent of the procedures required by NEPA--examination of the environmental impacts of the proposed rule and alternatives to it, with an opportunity for the public to comment on the proposal and consideration of those comments. Under these circumstances, the courts have applied the functional equivalence doctrine to hold that EPA's action is not subject to NEPA's procedural requirements. See Western Nebraska Resources Council v. EPA, 943 F.2d 867, 871-72 (8th Cir. 1991); Alabama v. EPA, 911 F.2d 499, 504 (11th Cir. 1990); Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719 (3d Cir. 1989); Wyoming v. Hathaway, 525 F.2d 66, 70 (10th Cir. 1975), cert. denied, 426 U.S. 906 (1976); South Terminal Corp. v. EPA, 504 F.2d 646, 676 (1st Cir. 1974); Portland Cement Ass'n v. Ruckelshaus, 486 F.2d 375, 380 (D.C. Cir. 1973), cert. denied, 417 U.S. 921 (1974).

VI. Economic Analysis

EPA has prepared an economic analysis of the impact of this action, which is contained in a document entitled Economic Analysis of the Final Rule to Add Certain Industries to EPCRA Section 313 (Ref. 12). That document is available in the public docket for this rulemaking. The analysis assesses the costs, benefits and associated impacts of the rule, including potential effects on small entities and the environmental justice implications of the rule, among others. The major findings of the analysis are briefly summarized here.

A. Market Failure

One purpose of federal regulations is to address significant market failures. Markets will fail to achieve socially efficient outcomes when differences exist between market values and social values. Two of the causes of market failure are externalities and information asymmetries. In the case of negative externalities, the actions of one economic entity impose costs on parties that are ``external'' to the market transaction. For example, entities may release toxic chemicals without accounting for the consequences to other parties, such as the surrounding community, and the prices of those entities' goods or services thus will fail to reflect those costs. The market may also fail to efficiently allocate resources in cases where consumers lack information. For example, where information is insufficient regarding toxic releases, individuals' choices regarding where to live and work may not be the same as if they had more complete information. Since firms ordinarily have a disincentive to provide information on their releases and other waste management activities involving toxic chemicals, the market fails to allocate society's resources in the most efficient manner.

This rule is intended to ameliorate in part the market failure created by the lack of information available to the public about the release and other waste management activities involving toxic chemicals, and to help address the externalities arising from the fact that market choices regarding toxic chemicals have not fully considered their external effects. Through the provision of such data, TRI overcomes firms' disincentive to provide that information, and thereby serves to inform the public of releases and other waste management of toxic chemicals. Individuals can then make choices that better optimize their well-being. Choices made by a more informed public, including consumers, corporate lenders, and communities, may lead firms to internalize into their business decisions at least some of the costs to society relating to their releases and other waste management activities involving toxic chemicals. In addition, by helping to identify hot spots, set priorities and monitor trends, TRI data can also be used to make more informed decisions regarding the design of more efficient regulations and voluntary programs, which also moves society towards an optimal allocation of resources.

If EPA were not to take this final action adding industries to TRI, the market failure (and the associated social costs) resulting from the lack of information on the use and disposition of toxic chemicals would continue. EPA believes that today's action will improve the scope of multi-media data on the use and disposition of toxic chemicals. This, in turn, will provide information to the public, empower communities to play a meaningful role in environmental decision-making, and improve the quality of environmental decision-making by government officials. In addition, this action will serve to generate information that reporting facilities themselves will find useful in such areas as highlighting opportunities to reduce chemical use and thereby lower costs of production. EPA believes that these are sound rationales for adding the selected industry groups to the TRI program.

B. Existing Reporting Requirements

The Toxics Release Inventory contains multimedia data on environmental releases and other management activities for over 600 toxic chemicals. While no other national data base is comparable to TRI, several other data sources exist that contain some media-specific environmental data. Sources maintained by EPA include the Aerometric Information Retrieval System (AIRS) Facility Subsystem or AFS, which tracks air emissions from industrial plants; the Permit Compliance System (PCS), which tracks permit compliance and enforcement status of facilities regulated under the National Pollutant Discharge Elimination System (NPDES) under the CWA; and the Biennial Reporting System (BRS), which tracks hazardous waste generation and disposal. Other sources include the chemical inventory data collected under sections 311 and 312 of EPCRA, and Clean Air Act Title V operating permits. TRI data cannot be replicated using these sources. Nor could information from these data bases be combined to form a satisfactory approximation of the data contained in TRI, because none of these sources provides the release and transfer or pollution prevention information that is reported to TRI. In addition, these other data collections differ in the information collected, chemical and facility coverage, applicable various thresholds and reporting frequencies, and how the data are reported. The definitional consistency provided by TRI creates important advantages over any data system that might be assembled from non-TRI sources. These other data sources perform the functions for which they were designed, but they were not intended to serve the same purposes as TRI. Therefore, EPA has concluded that while there may be some degree of overlap between the reporting required under EPCRA section 313 and PPA section 6607 and that required under other statutes, these reporting requirements do not duplicate or conflict with each other. This issue is discussed in detail in the *Economic Analysis* for the final rule (Ref. 12).

C. Summary of Reporting and Costs

Table 1 in Unit VI.F.4. of this preamble displays the reporting level and cost estimates by industry for the rule. EPA estimates that under this rule, a total of approximately 6,600 facilities will submit approximately 46,200 reports (both Form Rs and Form As) annually. This total is based on 6,300

facilities in the new industry groups submitting 42,500 reports, and approximately 360 facilities in the existing manufacturing sector submitting 3,600 reports as a result of the change in the definition of otherwise use. Total incremental compliance costs are also presented in Table I by industry sector. As shown, aggregate costs in the first year are estimated to be $226 million; in subsequent years they are estimated to be $143 million per year.

D. Associated Requirements

There are various state and federal requirements under other statutes and regulations that may be triggered when a facility files a report under EPCRA section 313. The associated requirements include state taxes and fees, state pollution prevention planning requirements, and special requirements in certain NPDES storm water permits issued by EPA. These associated requirements are discussed in detail in the *Economic Analysis* for the final rule (Ref. 12).

Although the state fees, taxes and pollution prevention planning requirements are associated with EPCRA section 313 reporting, they are not required by this or any other rule issued under EPCRA section 313. Therefore, EPA has not included either the costs or benefits of associated state requirements along with the costs and benefits of the rule. States imposing these associated requirements may wish to assess the benefits and costs of applying them to new industries.

EPA has also established associated requirements in certain general storm water permits under the NPDES program, which apply to some facilities regulated under those general permits. EPA has not included those NPDES requirements as costs of this rule, because they are not triggered by this action, but may be made applicable to facilities added to the TRI program by this rule only at the time the NPDES general permit is renewed. Should the Agency extend NPDES requirements to the facilities being added by this rule at some point in the future, that would be the appropriate time to consider the costs and benefits of those requirements.

E. Benefits

In enacting EPCRA and PPA, Congress recognized the significant benefits of providing information on toxic chemical releases and other waste management. TRI has proven to be one of the most powerful forces in empowering the federal government, state governments, industry, environmental groups and the general public to fully participate in an informed dialogue about the environmental impacts of toxic chemicals in the United States. TRI's publicly available data base provides quantitative information on toxic chemical releases and other waste management. With the collection of this information starting in 1987 came the ability for the public, government, and the regulated community to understand the magnitude of chemical releases in the United States, and to assess the need to reduce the uses and releases of toxic chemicals. TRI enables all interested parties to establish credible baselines, to set realistic goals for environmental progress over time, and to measure progress in meeting these goals over time. The TRI system has become a neutral yardstick by which progress can be measured by all stakeholders. The information reported to TRI increases knowledge of the levels of toxic chemicals released to the environment and the potential pathways of exposure, improving scientific understanding of the health and environmental risks of toxic chemicals; allows the public to make informed decisions on where to work and live; enhances the ability of corporate leaders and purchasers to more accurately gauge a facility's potential environmental liabilities; provides reporting facilities with information that can be used to save money as well as reduce emissions; and assists federal, state, and local authorities in making better decisions on acceptable levels of toxics in the environment.

Analytically, there are two types of benefits associated with TRI reporting--direct and follow-on. Direct benefits include the value of improved knowledge about the use and disposition of toxic chemicals, which leads to improvements in understanding, awareness and decision-making. It is expected that this rulemaking will generate such benefits by providing the public with readily accessible information that otherwise would not be available to them.

The second type of benefits derive from changes in behavior that may result from the information reported to TRI. These changes in behavior, including reductions in the releases and changes in the waste management practices for toxic chemicals, yield health and environmental benefits. These changes in behavior come at some cost, and the net benefits of the follow-on activities are the difference between the benefits of decreased chemical releases and transfers and the costs of the actions needed to achieve the decreases. These follow-on activities, however, are not required by the rule.

Because the current state of knowledge about the economics of information is not highly developed, EPA has not attempted to monetize the direct informational benefits of adding new industry groups to the list of industries required to report to TRI. Furthermore, because of the inherent uncertainty in the subsequent chain of events, EPA has also not attempted to predict the changes in behavior that result from the information, or the resultant net benefits, i.e., the difference between benefits and costs. EPA does not believe that there are adequate methodologies to make reasonable monetary estimates of either the direct or follow-on benefits related to this rule.

Rather, EPA assessed the potential for the rule to generate benefits comparable to those generated by currently reporting industries by seeking data on certain characteristics of the use and disposition of toxic chemicals, specifically air release data, which could be compared among the various sectors already subject to or now being added to the TRI program. EPA analyzed release data collected under authority of the CAA and maintained in the AFS. While limitations in the data set and methodology did not permit estimates to be made of the amounts of potential TRI releases, the analysis clearly supported EPA's belief that substantial volumes of TRI releases and other waste management of EPCRA section 313 toxic chemicals will be captured by expanding the coverage to include the additional industry groups. EPA believes this evidence supports its determination that the industry groups being added are likely to generate valuable information as part of the TRI program. In addition, the experience of the past 8 years shows that reporting to TRI by manufacturing facilities has produced real gains in understanding the use, release and othe waste management of toxic chemicals, and opportunities to minimize the potential for human and environmental exposure to toxics. EPA believes that the additional reporting to be generated by this rule will yield similar benefits.

F. Impacts on Small Entities

In accordance with the Regulatory Flexibility Act (RFA) and the Agency's longstanding policy of always considering whether there may be a potential for adverse impacts on small entities, the Agency has also evaluated the potential impacts of this rule on small entities. The Agency's analysis of potentially adverse economic impacts is included in the Economic Analysis for this rule (Ref. 12). The following is a brief overview of EPA's findings.

1. *Overall methodology*. This rule may affect both small businesses and small governments. For the purpose of its analysis for the final rule, EPA defined a small business using the small business size standards established by the SBA. In conjunction with the proposed rule, EPA had analyzed the small business impacts in two ways, using a definition of 10 to 49 employees and using SBA's size standards. Although EPA has chosen to use SBA's size standards for the final rule, it will continue to investigate whether an alternate small business definition such as 10 to 49 employees would be appropriate for the purpose of EPCRA section 313 rulemakings, and may choose such an alternate definition in future rulemakings. EPA defined small governments using the RFA definition of jurisdictions with a population of less than 50,000.

Only those small entities that are expected to submit at least one report are considered to be affected for the purpose of the small entity analysis. The number of affected entities will be smaller than the number of affected facilities, because many entities operate more than one facility. Economic impacts on affected small entities were calculated assuming that all TRI reports would be filed using the longer Form R (and not the Form A), which yields a conservative estimate of costs (i.e., it is likely to overestimate the true impacts). Impacts were calculated for both the first year of reporting and subsequent years. First year costs are typically higher than continuing costs because firms must familiarize themselves with the requirements. Once firms have become familiar with how the reporting requirements apply to their operations, costs fall. EPA believes that subsequent year impacts present the best measure to judge the impact on small entities because these continuing costs are more representative of the costs firms face to comply with the rule.

EPA analyzed the potential cost impact of the rule on small businesses and governments in each of the newly added industry sectors separately in order to obtain the most accurate assessment for each. EPA then aggregated the analyses for the purpose of detemining whether it could certify that the rule ``will not, if promulgated, have a significant economic impact on a substantial number of small entities.'' RFA section 605(b) provides an exemption from the requirement to prepare a regulatory flexibility analysis for a rule where an agency makes and supports the certification statement quoted above. For reasons detailed in the ``Assessment of the Impacts on Small Entities'' prepared and submitted to the rulemaking docket for this rule, EPA believes that the statutory test for certifying a rule and the statutory consequences of not certifying a rule all indicate that certification determinations may be based on an aggregated analysis of the rule's impact on all of the small entities subject to it.

2. *Small businesses*. EPA used compliance costs as a percentage of annual company sales to assess the potential impacts on small businesses of expanding the TRI program to additional industry groups. This is a good measure of a firm's ability to afford the costs attributable to a regulatory requirement, because comparing compliance costs to revenues provides a reasonable indication of the magnitude of the regulatory burden relative to a commonly available measure of a company's business volume. Where regulatory costs represent a small fraction of a typical firm's revenue (for example, less than 1 percent, but not greater than 3 percent), EPA believes that the financial impacts of the regulation may be considered not significant. As discussed above, EPA also believes that it is appropriate to apply this measure to subsequent year impacts.

At proposal, EPA indicated that the rule might have a potentially significant impact on some small businesses in the chemical wholesaling industry (SIC code 5169 - Chemicals Allied Products). EPA found that those chemical wholesalers required to submit reports would file between 1 and 27 reports each, but that the actual number of reports per facility would be distributed throughout this range. Impacts above 1 percent were predicted for small businesses reporting the high number of reports (i.e., 27 reports). However, EPA stated that the majority of companies would not have to submit the maximum number of reports and would face lower costs.

In response to comments, EPA has reanalyzed its data, including reporting levels from the three States that require reporting from this industry, and has adjusted its reporting estimates downward as a result. Although EPA calculated small business impacts for the proposed rule using only the minimum, maximum, and average number of reports per facility, EPA stated that there is a distribution of reports per facility between the low and high ends. For the final rule, EPA calculated small business impacts using a distribution, and was able to better estimate the actual small business impacts that are expected.

At proposal, EPA also found that there were sufficient uncertainties regarding the impacts on one other industry, RCRA subtitle C hazardous waste facilities in SIC code 4953, that the Agency could not confidently make a determination regarding the magnitude and incidence of the impacts. Therefore, EPA stated that its initial analysis of reporting by RCRA Subtitle C Facilities in SIC Code 4953 indicated that reporting could impose a significant burden on some small businesses in this industry. However, EPA stated that it was not highly confident of the accuracy of its estimated average number of reports per facility, and believed that it had overestimated the actual number and consequently overestimated the small business impacts.

In the **Federal Register** of August 21, 1996 (61 FR 43207) (FRL±5393±4), EPA published a notice announcing the availability of additional information related to the impact of changing the definition of otherwise use. This included information on the impact on facilities in SIC code 4953. After receiving public comment on this analysis, EPA further refined it to better estimate the number of reports from this industry.

Based on its calculations for all the industry sectors being added by the final rule, the Agency estimates that approximately 4,800 businesses will be affected by the rule, and that approximately 3,600 of these businesses qualify as small based on the applicable SBA size standards. For the first reporting year, EPA estimates that approximately 570 small businesses may bear compliance costs between 1 percent and 3 percent of revenues, and that approximately 120 may bear costs greater than 3 percent. In subsequent years, about 170 small businesses are predicted to face compliance costs between 1 percent and 3 percent of revenues; only about 60 businesses are estimated to experience impacts over 3 percent. As stated above, EPA believes that subsequent-year impacts are the appropriate measure of small business impacts.

3. *Small governments*. To assess the potential impacts on small governments, EPA used compliance costs as a percentage of annual government revenues to measure potential impacts. Similar to the methodology for small businesses, this measure was used because it provides a reasonable indication of the magnitude of the regulatory burden relative to a government's ability to pay for the costs, and is based on readily available data.

EPA has estimated that 49 publicly owned electric utility facilities, operated by a total of 41 municipalities, may be affected. Of these, an estimated 18 are operated by small governments (i.e., those with populations under 50,000). None of these small governments will bear costs greater than 1 percent of annual government revenues.

4. *All small entities*. As discussed above, only 230 small businesses are expected to bear costs over 1 percent of revenues (roughly 6 percent of the 3,600 small businesses affected by the rule) and only 60 (a subset of the 230) are expected to bear costs over 3 percent of sales (less than 2 percent of all affected small entities) after the first year of reporting. None of the affected small governments are estimated to bear costs greater than one percent of revenues. Thus, the total number of small entities with impacts above this level does not change when the results are aggregated for all small entities (i.e., both small businesses and small governments). Based on this analysis which itself is based on conservative assumptions, EPA certifies that this rule will not have a significant economic impact on a substantial number of small entities. In keeping with Agency policy, however, EPA has nontheless prepared an assessment of the small entity impact of this rule and of alternative regulatory approaches that might minimize that impact consistent with the objectives of EPCRA. (See Ref. 14) EPA considered this assessment in making final decisions about the scope and terms of the rule to ensure that the rule would not unduly burden small entities. That assessment, which builds on the initial regulatory flexibility analysis (IRFA) prepared for the proposed rule and on the Response to Comments on the IRFA, is available in the docket for this rulemaking.

Table 1.--Summary of Reporting and Costs

Industry	Number of Reporting Facilities	Number of Reports	Estimated Industry Costs ($ million per year)	
			First Year	Subsequent Years
Metal Mining	234	677	3.9	2.2
Coal Mining	321	642	5.4	2.1
Electric Utilities	977	9,898	44.9	29.4
Hazardous Waste Treatment Disposal Facilities	162	4,784	22.4	15.3
Chemicals Allied Products--Wholesale	717	8,352	39.6	25.3
Petroleum Bulk Stations Terminals--Wholesale	3,842	18,053	39.7	56.2
Solvent Recovery Services	14	117	0.6	0.4
Manufacturing	357	3,631	17.3	11.6
Total	**6,624**	**46,154**	**225.8**	**142.5**

VII. Agency Guidance and Stakeholder Process

As EPA has expanded the community right-to-know program, first by nearly doubling the number of chemicals for which release and other waste management information is required, and now through today's expansion, adding seven new industrial sectors, the Agency has had the opportunity to discuss various aspects of the program with a broad range of stakeholders, including industry, small businesses, states and citizens groups. Through this outreach, and the Agency's own experience in running the program, we have confirmed our belief that right-to-know is a fundamental part of how the Agency provides public health and environmental protection. TRI is the backbone of the Agency's community right-to-know program.

EPA, however, is committed to improving the TRI program by reducing the cost of reporting while increasing the utility of toxic release information. EPA believes that the program could be made even more effective through a careful evaluation of the current reporting forms (``Form R'' and ``Form A,'' the alternate threshold certification form) and the information gathering practices used by businesses in completing the forms. Specifically, EPA believes these forms can be revised to make it simpler and less costly for businesses to meet their recordkeeping and reporting obligations, while making it easier for communities and citizens groups to understand and use toxic chemical release information. EPA will also look at other ways to reduce reporting burdens, having to do with how companies handle records and how they make estimates of quantities for threshold determinations and for release and other waste management determinations. Upon the promulgation of this final rule, EPA is initiating an intensive stakeholder process-involving citizens groups, industry, small businesses and states--to conduct a comprehensive evaluation of the current TRI reporting forms and reporting practices with the explicit goal of identifying opportunities, consistent with community right-to-know and the relevant law, to simplify and/or reduce the cost of TRI reporting. EPA will announce the details of this process in a future **Federal Register** notice.

VIII. Public Record

EPA has established a public record for this rulemaking (docket control number OPPTS±400104). The record includes all information considered by EPA in developing this final rule. This includes all information discussed or referenced in the preamble as well as all information in the docket and referenced in documents in the docket. A public version of the record without any confidential information is available in the TSCA Public Docket Office from noon to 4 p.m., Monday through Friday, except legal holidays. The TSCA Public Docket Office is located in Rm. NE-G607, Northeast Mall, 401 M St., SW., Washington, DC.

IX. References

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16. USEPA/OPPT. *The Effect of Combustion on Trace Metals in Coal and Oil Fuels for Electric Generating Facilities*. U.S. Environmental Protection Agency, Washington, DC (1996)

17. USEPA/OTS. *Toxic Chemical Release Inventory Questions and Answers Revised 1990 Version*, U.S. Environmental Protection Agency, EPA 560/4-91-003 (January 1991).

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X. Regulatory Assessment Requirements

A. Executive Order 12866

Under Executive Order 12866 (58 FR 51735, October 4, 1993), it has been determined that this is a ``significant regulatory action'' because it is likely to have an annual effect of $100 million or more. This action therefore was submitted to the Office of Management and Budget (OMB) for review, and any substantive comments or changes made during that review have been documented in the public record.

B. Regulatory Flexibility Act

For the reasons explained in Unit VII.F. of this preamble, pursuant to section 605(b) of the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*), the Agency hereby certifies that this final rule will not have a significant economic impact on a substantial number of small entities. In brief, the factual basis of this determination is as follows: there are 18 small governments that may be affected by the rule (i.e., will have to file reports under the rule), none of which will bear costs greater than one percent of annual government revenues. Of the approximately 3,600 small businesses affected by the rule, EPA estimates that only approximately 230 or 6 percent will experience compliance costs exceeding 1 percent of annual sales, and of those 230, only 60 (less than 2 percent) will experience costs exceeding 3 percent of annual sales. Given these relatively small estimated impacts and the relatively small number of entities affected, for purposes of the RFA EPA believes that the rule will not have a significant economic impact on a substantial number of small entities. EPA's estimates are based on the economic analysis, and, as noted above, are discussed further above, in Unit VII.F. of this preamble, as well as in a document available in the public docket for this rulemaking, entitled *Assessment of the Impacts on Small Entities of the Final Rule Entitled ``Addition of Facilities in Certain Industry Sectors; Revised Interpretation of Otherwise Use; Toxics Release Inventory; Community Right-to-Know''* (Ref. 14). This determination is for the entire population of small entities potentially affected by this rule, since the test for certification is whether the rule as a whole has a significant economic impact on a substantial number of small entities.

At proposal, the Agency did not have sufficient information to determine whether or not the the rule would have a significant economic impact on a substantial number of small entities. Therefore, EPA prepared an initial regulatory flexibility analysis of the proposed regulation, and presented that analysis for public comment in conjunction with the proposed rule. EPA considered all comments received on its initial analysis and its assessment of the impacts of the proposed rule on small entities; these comments and EPA's responses are discussed in the *Response to Comments* document (Ref. 15) and in Ref. 14.

Notwithstanding the Agency's certification of this final rule under section 605(b) of the RFA, EPA remains committed to minimizing small entity impacts when feasible and to ensuring that small entities receive assistance to ease their burden of compliance. Therefore, EPA has reviewed the considerations identified in section 604 of the RFA relating to the final regulatory flexibility analysis, and that review is set forth in the above-referenced document, Assessment of the Impacts on Small Entities of the Final Rule Entitled (Ref. 14). In addition, although not required, EPA intends to prepare sector-specific guides for the new industry sectors in order to assist facilities in determining their compliance needs and in properly completing the appropriate form. EPA has prepared such documents for existing sectors and has received positive feedback on their utility from the targeted facilities. In addition, the Agency is always interested in any comments regarding the economic impacts that this regulatory action imposes on small entities, particularly suggestions for minimizing that impact. Such comments may be submitted to the Agency at any time, to the address listed above.

Information relating to this determination has been provided to the Chief Counsel for Advocacy of the Small Business Administration, and is

included in the docket for this rulemaking.

C. Paperwork Reduction Act

The information collection requirements contained in this rule have been approved by OMB under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.* Since this action generally involves the extension of a currently approved information collection requirement, OMB has approved this action as an addendum to the ICR approved under OMB Control No. 2070±0093. The OMB control number for this action is 2070-0157. Pursuant to section 3507 of the PRA and 5 CFR 1320.5(b) and 1320.6(a), an Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. This notice announces OMB's approval and the OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15, and, if applicable, also appear on the information collection instrument.

EPA's estimates with regard to the burden associated with the information collection requirements contained in the proposed rule (EPA ICR No. 1784.01), were submitted to OMB pursuant to 5 CFR 1320.11 and presented for public comment pursuant to 5 CFR 1320.8(d)(1). Pursuant to 5 CFR 1320.11(c), OMB provided comments on the proposed ICR, a copy of which has been included in the public docket for this rule. In addition, the Agency received a number of public comments. Both OMB's and relevant public comments are addressed in the final ICR, which also reflects any changes to the burden estimates that have been made as a result of the comments received.

Provision of this information is mandatory, upon promulgation of this final rule, pursuant to EPCRA section 313 (42 U.S.C. 11023) and PPA section 6607 (42 U.S.C. 13106). EPCRA section 313 requires owners or operators of certain facilities manufacturing, processing, or otherwise using any of over 600 listed toxic chemicals and chemical categories (hereinafter ``toxic chemicals'') in excess of the applicable threshold quantities, and meeting certain requirements (i.e., at least 10 FTEs or the equivalent), to report environmental releases and transfers of and waste management activities for such chemicals annually. Under section 6607 of the PPA, facilities must also provide information on the quantities of the toxic chemicals in waste streams and the efforts made to manage those waste quantities. The regulations codifying the EPCRA section 313 reporting requirements appear at 40 CFR part 372. Respondents may designate the specific chemical identity of a substance as a trade secret, pursuant to EPCRA section 322 (42 U.S.C. 11042). Regulations codifying the trade secret provisions can be found at 40 CFR part 350.

Currently, facilities subject to the reporting requirements under EPCRA 313 and PPA 6607 must use the EPA Toxic Chemical Release Inventory Form R (EPA Form No. 9350-1), unless they qualify to use the EPA Toxic Chemical Release Inventory Form A (formerly ``Certification Statement'') (EPA Form No. 9350-2). Form R must be completed if a facility manufactures, processes, or otherwise uses any listed chemical above threshold quantities and meets certain other criteria. For Form A, EPA established an alternate threshold for those facilities with low annual reportable amounts of a listed toxic chemical. A facility that meets the applicable reporting thresholds, but estimates that the total annual reportable amount of the chemical does not exceed 500 pounds, can take advantage of an alternate manufacture, process, or otherwise use threshold of 1 million pounds per year for that chemical, provided that certain conditions are met, and submit the Form A instead of the Form R. OMB has approved the reporting and recordkeeping requirements related to Form R, supplier notification, and petitions under OMB Control No. 2070-0093 (EPA ICR No. 1363) and those related to Form A under OMB Control No. 2070-0143 (EPA ICR No. 1704).

Currently, approximately 23,000 facilities report to the TRI. For Form R, EPA estimates the industry reporting burden for collecting this information (including recordkeeping) to average 74 hours per report in the first year, at an estimated cost of $4,587 per Form R. In subsequent years, the burden is estimated to average 52.1 hours per report, at an estimated cost of $3,203 per Form R. For Form A, EPA estimates the burden to average 49.4 hours per report in the first year, at an estimated cost of $3,101 per Form A. In subsequent years, the burden is estimated to average 34.6 hours per report, at an estimated cost of $2,160 per Form A. These estimates include the time needed to review instructions; search existing data sources; gather and maintain the data needed; complete and review the collection of information; and transmit or otherwise disclose the information. The actual burden on any specific facility may be different from this estimate depending on the complexity of the facility's operations and the profile of the releases at the facility.

This final rule is estimated to add 6,267 facilities to the number of respondents currently reporting to TRI, and to increase the number of reports submitted by 357 currently reporting facilities. These facilities will submit an estimated additional 39,000 Form Rs and 7,100 Form As. This final rule therefore results in an estimated total burden of 3.6 million hours in the first year, and 2.3 million hours in subsequent years, at a total estimated cost of $225.8 million in the first year and $142.5 million in subsequent years. In approving the information collection requirements contained in this final rule, which in essence increases the number of respondents subject to the requirements without changing the underlying requirements, OMB has increased the approved burden hours in its inventory for the two existing ICRs, in order to accommodate the burdens associated with the final rule.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes, where applicable, the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. EPA's burden estimates for the rule take into account all of the above elements, considering that under section 313, no additional measurement or monitoring may be imposed for purposes of reporting.

A copy of the final ICR may be obtained from Sandy Farmer, OPPE Regulatory Information Division, Environmental Protection Agency (2137), 401 M St., SW., Washington, DC 20460, by calling (202) 260-2740, or electronically by sending an e-mail message to ``farmer.sandy@epamail.epa.gov.'' A copy is also included in the Public Docket for the final rule, and is available electronically as a supporting document to the final rule on the EPA homepage.

D. Unfunded Mandates Reform Act and Executive Order 12875

Pursuant to Title II of the Unfunded Mandates Reform Act of 1995 (UMRA)

(Pub. L. 104-4), EPA has determined that this action contains a ``federal mandate'' that may result in expenditures of $100 million or more for the private sector in any 1 year, but that it will not result in such expenditures for state, local, and tribal governments, in the aggregate. Accordingly, EPA has prepared a written statement for this final rule pursuant to section 202 of UMRA, and that statement is available in the public docket for this rulemaking. The costs associated with this action are estimated in the economic analysis prepared for this final rule (Ref. 12), which is included in the public docket and summarized in Unit VI. above. The following is a brief summary of the UMRA statement for the final rule.

This rule is being promulgated pursuant to section 313(b)(1)(B) of EPCRA, 42 U.S.C. section 11023(b)(1)(B), and section 6607 of the Pollution Prevention Act, 42 U.S.C. section 13106. The economic analysis contains a calculation of the benefits and costs of this rule, which estimates that the total costs of the rule will be $226 million in the first year and $143 million thereafter, and concludes that the benefits will be significant but cannot be assigned a dollar value due to the lack of adequate methodologies. This information is also summarized above in Unit VI.D.-F. of this preamble. EPA believes that the benefits provided by the information to be reported under this rule will significantly outweigh the costs imposed by today's action. The benefits of the information will in turn have positive effects on health, safety, and the natural environment through the behavioral changes that may result from that information.

EPA has not identified any federal financial resources that are available to cover the costs of this rule. As set forth in the economic analysis, EPA has estimated the future compliance costs (after the first year) of this rule to be $143 million annually. Of those entities affected by today's action, EPA has not identified any disporportionate budgetary impact on any particular region, government, or community, or on any segment of the private sector. Based on the economic analysis, EPA has concluded that it is highly unlikely that this rule will have a measurable effect on the national economy.

EPA has determined that it is not required to develop a small government agency plan as specified by section 203 of UMRA or to conduct prior consultation with state, local, or tribal governments under section 204 of UMRA, because the rule will not significantly or uniquely affect small governments and does not contain a significant federal intergovernmental mandate. Nevertheless, EPA has engaged in numerous discussions with state and local officials. EPA's consultation and outreach activities are discussed in Unit II.B. of this preamble. The Agency believes that its extensive consultations with other levels of government throughout the rulemaking process for this regulatory action are consistent with both the intergovernmental provisions of sections 203 and 204 of UMRA, and Executive Order 12875, Enhancing the Intergovernmental Partnership. See 58 FR 58093 (October 28, 1993).

Finally, EPA believes this rule complies with section 205(a) of UMRA. The objective of this rule is to expand the public benefits of the TRI program by exercising EPA's discretionary authority to add SIC codes to the program, thereby increasing the amount of information available to the public regarding the use, management and disposition of listed toxic chemicals. In making additional information available through TRI, the Agency increases the utility of TRI data as an effective tool for empowering local communities, the public sector, industry, other agencies, and state and local governments to better evaluate risks to public health and the environment, particularly at the local level. Throughout the rulemaking process, EPA considered numerous regulatory alternatives concerning all aspects of the rule, including, for example, which SIC codes should be added to the program and for those added, whether some activities should not be subject to reporting, and whether existing or new alternate reporting provisions, regulatory exemptions, and/or other options should be applied or adopted. (Such alternatives were discussed in the preamble to the proposed rule, and are addressed elsewhere in this Preamble, and/or in the *Response to Comments* document (Ref. 15).) In many instances, EPA selected burden-reducing alternatives (e.g., deferring the addition of certain candidate industries or excluding certain activities for included industries) because information available at the time suggested that a burden would have been imposed without obtaining TRI reporting that EPA had confidence would contribute significantly to the purposes of the TRI program. In addition, existing burden-reducing measures (e.g., the use of readily available monitoring data or, if such data are not available, reasonable estimates; alternate reporting thresholds; and statutory and regulatory exemptions from reporting) will apply to the industry groups being added by this rule. EPA also will be assisting small entities subject to the rule, by such means as providing meetings, training, and compliance guides in the future, which also will ease the burdens of compliance.

While many steps have been and will be taken to further reduce the burden associated with this rule, EPA rejected some alternatives that also would have reduced burden (e.g., complete exclusion of certain candidate industry groups from the rule), because they would have significantly reduced the information obtained and thereby reduce the degree to which the rule met its objective. EPA believes that any further steps taken to minimize the burden of this rule by reducing its scope or requirements would necessarily lower the degree to which the rule achieves its objective, and to EPA's knowledge there is no available alternative to the final rule that would obtain the equivalent information in a less burdensome manner. For all of these reasons, EPA believes the rule complies with UMRA section 205(a).

E. Executive Order 12898

Pursuant to Executive Order 12898 (59 FR 7629, February 16, 1994), entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, the Agency has considered environmental justice related issues with regard to the potential impacts of this action on environmental and health conditions in relevant communities. As a part of its economic analysis (Ref. 12), which is summarized in Unit VI. of this preamble and included in the public docket, EPA examined the distribution patterns of the public information to be generated by today's final action. EPA believes that exploring the distribution of information benefits in demographic terms, particularly for rulemaking activities such as this one, is an important part of the Agency's compliance with this Executive Order and the Agency's overall environmental justice strategy.

EPA's analysis found that households with annual incomes less than $15,000, and minority and urban populations, are slightly over-represented in communities containing facilities in the industry groups that are expected to report releases and transfers of toxic chemicals under this rule. This rule will provide people in a large number of communities with TRI information about facilities in their vicinity for the first time. Therefore, EPA concludes the

rule will have beneficial environmental justice impacts.

F. Submission to Congress and the General Accounting Office

This action is a ``major rule'' as defined by 5 U.S.C. section 804(2). Therefore, pursuant to 5 U.S.C. section 801(a)(1), as added by the Small Business Regulatory Enforcement Flexibility Act of 1996, EPA has provided information about this action to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the General Accounting Office prior to its publication in today's **Federal Register**.

List of Subjects in 40 CFR Part 372

Environmental protection, Community right-to-know, Reporting and recordkeeping requirements, Toxic chemicals.

Dated: April 22, 1997.

Carol M. Browner,

Administrator.

Therefore, 40 CFR part 372 is amended to read as follows:

PART 372—[AMENDED]

1. The authority citation for part 372 continues to read as follows:

Authority: 42 U.S.C. 11023 and 11028.

2. In § 372.3, revise the definition for ``Otherwise use'' and add the following definitions in alphabetical order to read as follows:

§ 372.3 Definitions.

* * * * *

Beneficiation means the preparation of ores to regulate the size (including crushing and grinding) of the product, to remove unwanted constituents, or to improve the quality, purity, or grade of a desired product.

Boiler means an enclosed device using controlled flame combustion and having the following characteristics:

(1)(i) The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

(ii) The unit's combustion chamber and primary energy recovery sections(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and

(iii) While in operation, the unit must maintain a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

(iv) The unit must export and utilize at least 75 percent of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

(2) The unit is one which the Regional Administrator has determined, on a case-by-case basis, to be a boiler, after considering the standards in § 260.32 of this chapter.

* * * * *

Coal extraction means the physical removal or exposure of ore, coal, minerals, waste rock, or overburden prior to beneficiation, and encompasses all extraction-related activities prior to beneficiation. Extraction does not include beneficiation (including coal preparation), mineral processing, in situ leaching or any further activities.

* * * * *

Disposal means any underground injection, placement in landfills/surface impoundments, land treatment, or other intentional land disposal.

* * * * *

Industrial furnace means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy:

(1) Cement kilns.

(2) Lime kilns.

(3) Aggregate kilns.

(4) Phosphate kilns.

(5) Coke ovens.

(6) Blast furnaces.

(7) Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machine, roasters, and foundry furnaces).

(8) Titanium dioxide chloride process oxidation reactors.

(9) Methane reforming furnaces.

(10) Pulping liquor recovery furnaces.

(11) Combustion devices used in the recovery of sulfur values from spent sulfuric acid.

(12) Halogen acid furnaces (HAFs) for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least 3%, the acid product is used in a manufacturing process, and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of 20% as-generated.

(13) Such other devices as the Administrator may, after notice and comment, add to this list on the basis of one or more of the following factors:

(i) The design and use of the device primarily to accomplish recovery of material products;

(ii) The use of the device to burn or reduce raw materials to make a material product;

(iii) The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;

(iv) The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;

(v) The use of the device in common industrial practice to produce a material product; and

(vi) Other factors, as appropriate.

* * * * *

Otherwise use means any use of a toxic chemical, including a toxic chemical contained in a mixture or other trade name product or waste, that is not covered by the terms ``manufacture'' or ``process.'' Otherwise use of a toxic chemical does not include disposal, stabilization (without subsequent distribution in commerce), or treatment for destruction unless:

(1) The toxic chemical that was disposed, stabilized, or treated for destruction was received from off-site for the purposes of futher waste management; or

(2) The toxic chemical that was disposed, stabilized, or treated for destruction was manufactured as a result of waste management activities on materials received from off-site for the purposes of further waste management activities. Relabeling or redistributing of the toxic chemical where no repackaging of the toxic chemical occurs does not constitute otherwise use or processing of the toxic chemical.

Overburden means the unconsolidated material that overlies a

deposit of useful materials or ores. It does not include any portion of ore or waste rock.

* * * * *

RCRA approved test method includes Test Method 9095 (Paint Filter Liquids Test) in ``Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,'' EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992.

* * * * *

Treatment for destruction means the destruction of a toxic chemical in waste such that the substance is no longer the toxic chemical subject to reporting under EPCRA section 313. Treatment for destruction does not include the destruction of a toxic chemical in waste where the toxic chemical has a heat value greater than 5,000 British thermal units and is combusted in any device that is an industrial furnace or boiler.

Waste stabilization means any physical or chemical process used to either reduce the mobility of hazardous constitutents in a hazardous waste or eliminate free liquid as determined by a RCRA approved test method for evaluating solid waste as defined in this section. A waste stabilization process includes mixing the hazardous waste with binders or other materials, and curing the resulting hazardous waste and binder mixture. Other synonymous terms used to refer to this process are ``stabilization,'' ``waste fixation,'' or ``waste solidification.''

3. In ß 372.22, revise paragraph (b) to read as follows:

§ 372.22 Covered facilities for toxic chemical release reporting.

* * * * *

(b) The facility is in Standard Industrial Classification (SIC) (as in effect on January 1, 1987) major group codes 10 (except 1011, 1081, and 1094), 12 (except 1241), or 20 through 39; industry codes 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce); or 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, subtitle C, 42 U.S.C. section 6921 *et seq.*), or 5169, or 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis) by virtue of the fact that it meets one of the following criteria:

(1) The facility is an establishment with a primary SIC major group or industry code in the above list.

(2) The facility is a multi-establishment complex where all establishments have primary SIC major group or industry codes in the above list.

(3) The facility is a multi-establishment complex in which one of the following is true:

(i) The sum of the value of services provided and/or products shipped and/or produced from those establishments that have primary SIC major group or industry codes in the above list is greater than 50 percent of the total value of all services provided and/or products shipped from and/or produced by all establishments at the facility.

(ii) One establishment having a primary SIC major group or industry code in the above list contributes more in terms of value of services provided and/or products shipped from and/or produced at the facility than any other establishment within the facility.

* * * * *

4. In ß 372.38, add paragraphs (g) and (h) to read as follows:

§ 372.38 Exemptions.

* * * * *

(g) *Coal extraction activities*. If a toxic chemical is manufactured, processed, or otherwise used in extraction by facilities in SIC code 12, a person is not required to consider the quantity of the toxic chemical so manufactured, processed, or otherwise used when determining whether an applicable threshold has been met under ß 372.25 or ß 372.27, or determining the amounts to be reported under ß 372.30.

(h) *Metal mining overburden*. If a toxic chemical that is a constituent of overburden is processed or otherwise used by facilities in SIC code 10, a person is not required to consider the quantity of the toxic chemical so processed, or otherwise used when determining whether an applicable threshold has been met under ß 372.25 or ß 372.27, or determining the amounts to be reported under ß 372.30.

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