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Fact Sheet for the Chairman, Subcommittee on Commerce, Transportation and Tourism, Committee on Energy and Commerce, House of Representatives

December 1985

CHEMICAL INVENTORY

Environmental Protection Agency's Proposed Inventory Update

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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

RESOURCES, COMMUNITY,
AND ECONOMIC DEVELOPMENT
DIVISION

December 4, 1985

B-203051

The Honorable James J. Florio
Chairman, Subcommittee on Commerce,
Transportation and Tourism
House of Representatives

Dear Mr. Chairman:

Your letter of April 24, 1985, requested that we review the Environmental Protection Agency's (EPA's) proposed approach for updating its chemical substance inventory, authorized by the Toxic Substances Control Act (TSCA). In subsequent meetings with your office, we agreed to limit our work to providing information on EPA's rationale for exempting specific categories of chemicals from the inventory update and the views of major federal users of the inventory concerning these exemptions.

To answer these questions, we obtained information from the 1977 inventory reporting rule, the proposed update rule, and supporting documentation. In addition, we interviewed 22 inventory users representing six offices within EPA and four other federal agencies or entities.

Briefly, EPA has proposed to exempt four categories of chemicals from the inventory update: polymers, inorganic chemicals, microorganisms, and naturally occurring substances. EPA also proposed to exempt manufacturers from reporting on any chemical manufactured in quantities of less than 10,000 pounds annually at an individual production site. According to EPA, these exemptions were proposed in an effort to focus the inventory update on the chemicals for which EPA is most likely to need information. In addition, TSCA generally exempts small manufacturers from most reporting requirements. Accordingly, EPA has proposed to exempt small manufacturers from the update reporting requirements. According to the Special Assistant to the Director, Information Management Division, EPA also plans to add an exemption override to the final rule that will require manufacturers to report on certain chemicals that have been of regulatory concern to EPA under TSCA, even if these chemicals fall into one of the exempted categories.

Although 12 of the 22 users we interviewed agreed with all of EPA's proposed exemptions, 10 raised concerns with respect to one or more of these exemptions. One of these users raised a concern that is particularly noteworthy. An environmental engineer in EPA's Office of Emergency and Remedial Response commented that while he generally agreed with the proposed exemptions, he did not believe that chemicals that EPA has designated as hazardous or plans to designate as acutely toxic air pollutants should be exempt from the inventory update. He maintained that EPA needs production-related data on these chemicals in order to prepare for and respond to accidental releases of these chemicals. Given the proposed exemptions and exemption override provision, EPA will not obtain current production-related data through the inventory update on about 175 to 188 of 705 chemicals that EPA has designated as hazardous if accidentally released. In addition, according to EPA officials, of the 350 to 400 chemicals that EPA plans to designate as acutely toxic air pollutants in December 1985, 50 to 60 will not be covered by the inventory update.

EPA officials responsible for the inventory update told us that it would be better for EPA to use a separate data-gathering rule to obtain all necessary information on these hazardous chemicals. They believed that information is needed on firms that use chemical substances, as well as on manufacturers. However, as of November 1985, EPA had not decided whether or precisely how to gather these data.

Since EPA plans to update the chemical substance inventory including some chemicals in the exempted categories, the update would also provide an opportunity to obtain information on those substances that EPA has designated or plans to designate as hazardous. In addition, the question arises as to whether the updated inventory can serve as a reference for identifying the production location for chemicals involved in emergency situations (accidental releases) when so many are exempt from the inventory update.

The views of directly responsible agency officials were sought during the course of our work and are incorporated as appropriate. In accordance with your request, we did not ask EPA to review and comment officially on a draft of this report. As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 10 days after issuance. At that time, we will send copies to the EPA Administrator and other interested parties, and will make it available to others upon request. If you have any questions, I can be contacted at (202) 275-5489.

Sincerely yours,

Hugh J. Wessinger
Senior Associate Director

Contents

ABBREVIATIONS

CAS	Chemical Abstract Service
EPA	Environmental Protection Agency
GAO	General Accounting Office
OHM-TADS	Oil and Hazardous Materials--Technical Assistance Data System
OSHA	Occupational Safety and Health Administration
TSCA	Toxic Substances Control Act

OBJECTIVES, SCOPE, AND METHODOLOGY

On April 24, 1985, the Chairman, Subcommittee on Commerce, Transportation and Tourism, House Committee on Energy and Commerce, asked us to undertake a review of EPA's proposed update of its inventory of chemical substances to (1) determine and assess the merits of EPA's rationale for excluding approximately 75 percent of existing chemicals from the periodic reporting requirement and (2) identify how these exclusions will affect the federal government's ability to react to problems associated with the manufacture of these chemicals. After several briefings with the Subcommittee office on this subject, the Chairman, on September 6, 1985, asked us to provide information on EPA's proposed inventory update. Specifically, we were asked to answer the following questions:

--What information is now contained in the inventory? How many chemicals are covered and what items of information are compiled for each one?

--What chemicals will be covered in the recently announced inventory update? What items of information will be gathered for each one?

--What was EPA's rationale for excluding specific categories of chemicals from the update? What are the views of the major users of the inventory concerning the appropriateness of these exclusions?

To answer these questions, we obtained information from EPA's original 1977 inventory reporting rule, the resulting published inventory, EPA's proposed inventory update rule published in March 1985, and the supporting documentation in the rule-making record. Finally, we considered other applicable documentation and laws and regulations.

To obtain the views of the major inventory users concerning EPA's proposed update approach, we talked with 13 officials representing 6 offices which EPA identified as major inventory users: the Office of Toxic Substances, Office of Drinking Water, Office of Water Regulations and Standards, Office of Emergency and Remedial Response, Office of Solid Waste, and Office of Air Quality Planning and Standards. In addition, we identified four other federal agencies or entities that use the inventory by examining an EPA inventory user survey done in 1980. We interviewed nine officials representing the following four entities: the Interagency Testing Committee (a body set up under the Toxic Substances Control Act (TSCA) to identify chemicals that need to be tested), the Occupational Safety and Health Administration, the Consumer Product Safety Commission, and the National Toxicology Program of the National Institutes of Health.

We interviewed these 22 key officials from the above organizations to (1) determine how each organizational entity used the inventory data and (2) obtain their views on the appropriateness of excluding polymers, inorganic chemicals, naturally occurring substances, microorganisms, low-volume chemicals, and small manufacturers from the inventory update. Each official, however, did not comment on every exemption.

In addition to the above users, we also contacted two environmental special interest groups (the Natural Resources Defense Council and the Environmental Defense Fund) to obtain their views on EPA's proposed approach for updating the inventory. We also considered comments submitted by the chemical industry on the proposed inventory update rule.

Our audit work was conducted from April 1985 through October 1985 at EPA headquarters in Washington, D.C. The views of directly responsible agency officials were sought during the course of our work and are incorporated as appropriate. In accordance with the Chairman's request, we did not ask EPA to review and comment officially on a draft of this report.

APPENDIX II

EPA's PROPOSED UPDATE OF THE CHEMICAL SUBSTANCE INVENTORY

BACKGROUND

The Toxic Substances Control Act (TSCA) (15 U.S.C. 2601) which became effective on January 1, 1977, gives the Administrator of EPA broad regulatory authority over the thousands of commercial chemical substances. TSCA allows EPA to take appropriate control actions when chemicals are found to present an unreasonable risk to human health or the environment. These control actions can range from requiring warning labels on chemical products to banning the production and use of a particular chemical.

Section 8 of TSCA authorizes EPA to require the chemical industry to report a broad range of chemical-related information. Under Section 8(a) of TSCA, EPA is authorized to obtain information on a chemical's production level, use, exposure potential, and human health and environmental effects. Section 8(b) requires EPA to compile, keep current, and publish an inventory of the names of chemical substances manufactured, imported, or processed in the United States. Section 8(c) requires industry to keep records of significant adverse reactions to human health or the environment alleged to have been caused by a chemical; section 8(d) requires EPA to promulgate rules requiring industry to submit lists and copies of known health and safety studies relating to particular chemical substances. Finally, section 8(e) requires manufacturers, processors, and distributors to notify EPA when they obtain information indicating that a chemical may present a substantial risk of injury to human health or the environment.

INFORMATION CONTAINED IN THE 1977 INVENTORY

The primary purpose of the 1977 inventory was to establish a base list of the names of existing chemicals in commerce so that EPA and industry could determine which chemicals were new and thus needed to go through a new chemical review process mandated by TSCA. To respond to the requirements of TSCA section 8(b), in March 1977, EPA initially proposed a reporting rule, using section 8(a) authority, that required manufacturers and importers to report only the identity of chemicals. However, after reviewing comments received on the proposal, EPA decided to repropose the rule and expand its scope to require reporting of production data on each chemical. In this way, EPA was able to develop a profile of the production characteristics of the chemical industry.

In December 1977 EPA issued a final two-phase inventory reporting rule. During the first phase, manufacturers and

importers reported the identity of all chemicals manufactured or imported between January 1975 and December 1977. These firms also reported where the chemical was produced, in what quantities, and whether it was site-limited (i.e., manufactured and processed only within a plant site and not distributed for commercial purposes outside the plant site). Small manufacturers were required to report only the names of the chemicals they manufactured but not production data.[1] An initial inventory of over 43,000 chemicals was published on June 1, 1979.

In the second phase, after the publication of the initial inventory, chemical processors and importers of chemical substances were permitted to report additional chemical substances, not previously reported, that were processed, used, or imported as part of a mixture or an article, for commercial purposes. This exercise raised the total number of chemicals on the inventory to 55,103, and a revised inventory was published on July 28, 1980.

Under TSCA, any person who intends to manufacture or import a new chemical substance for commercial purposes must submit a premanufacture notification to EPA at least 90 days in advance. EPA reviews each chemical substance and assesses whether it either presents or may present an unreasonable risk to human health or the environment. Then, if warranted, EPA must impose controls on the manufacture and use of the new chemical to protect against any risks or potential risks. Controls can range from requiring warning labels to banning the product. Once manufacturing is allowed by EPA, with or without controls, and manufacturing begins, the name of the chemical is added to the inventory.

As of October 1, 1985, the inventory contained 62,980 chemicals--an increase of 7,877 chemicals since 1980. Of this total increase, 2,460 were new chemicals; adjustments and corrections to the original inventory data base account for the difference. Production-related data for specific chemicals on the inventory are either out of date or nonexistent. This is because (1) production data obtained for chemicals originally reported have never been updated and (2) actual production data were not obtained for new chemicals subsequently added to the inventory. Therefore, on March 12, 1985, EPA issued a proposed rule to update the production-related information for a portion of the chemicals on the inventory.

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[1]For purposes of the 1977 inventory rule, a small manufacturer was defined as one having sales of less than $5 million per year. These manufacturers, however, were required to report production data on chemicals manufactured in quantities greater than 100,000 pounds annually at an individual production site.

INFORMATION TO BE OBTAINED
IN PROPOSED INVENTORY UPDATE

EPA's proposed inventory update requires all manufacturers (except for certain small manufacturers) and importers of chemical substances (except for certain exempted categories, as discussed later in this section) to report for each chemical, by individual plant production site,

--a specific chemical name and a Chemical Abstract Service (CAS) registry number and/or other identifying number used on the inventory,

--the quantity manufactured or imported, and

--whether the chemical is site-limited.

The firms are also required to submit the name, address, and telephone number of a person who can answer questions about the information submitted.

According to the preamble to the proposed rule, EPA needs these data to support its investigations of human health and environmental effects and commercial uses of chemical substances, and the development of regulations under TSCA. According to the preamble to the proposed rule, EPA is seeking updated production volume information to assist in

--setting priorities for further investigation,

--identifying chemicals that may need to be tested for human health and environmental effects,

--estimating the potential for human and environmental exposure to particular chemicals,

--supporting the implementation of various TSCA regulations, and

--performing economic impact analyses for potential TSCA regulations.

In addition, EPA uses the plant site location data to identify and communicate with manufacturers and to estimate the extent and location of potential human and environmental exposure to chemicals. Information on whether a substance is distributed commercially beyond the production site or is site-limited will also be used by EPA in estimating exposure. According to the preamble to the proposed rule, a site-limited substance is considered to have less exposure potential than one distributed commercially.

In an effort to focus the inventory update on the chemicals for which EPA has the greatest need for current information, EPA has proposed to exempt four categories of chemical substances. These categories, totalling about 18,600 chemicals, are polymers, inorganic chemicals, naturally occurring substances, and microorganisms. EPA also proposed to exempt chemicals produced by manufacturers in quantities of less than 10,000 pounds annually at an individual production site, and small manufacturers (see p. 17). However, according to the Special Assistant to the Director of the Information Management Division, EPA plans to add an override provision to the final rule that would make those exemptions inapplicable (except the one for low-volume chemicals) for any chemical subject to proposed or final regulations under certain provisions of TSCA.[2] An override means that manufacturers must report on these chemicals even if they fall into one of the exempted categories. This override would affect

--new chemicals regulated because EPA either (1) did not have sufficient information on which to evaluate their risks or (2) believed that those chemicals presented an unreasonable risk to human health or the environment,

--chemicals that EPA has required manufacturers to test,

--existing chemicals regulated because EPA believed they presented an unreasonable risk to health or the environment, and

--chemicals for which EPA has restricted new uses.

According to EPA, as of October 1985, this override provision would require manufacturers to report on about 330 chemicals even if they are in one of the exempted categories.

Finally, the proposed rule also provided a requirement for reporting production-related data on a recurrent basis. According to the Special Assistant to the Director, Information Management Division, the final rule, as currently drafted, would require manufacturers and importers to provide information on all reportable substances every 4 years.

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[2]According to the Special Assistant to the Director, Information Management Division, the override will apply to chemicals regulated under sections 4, 5(b)(4), 5(e), section 6 rules resulting from a section 5(f) action, and section 7. In addition, except for those chemicals produced by small manufacturers, the override will apply to chemicals regulated under Significant New Use Rules, which require manufacturers to submit new uses for specified chemicals for premanufacture notification review.

EPA does not know precisely how many chemicals will be reported on under the proposed inventory update rule, but made an estimate in April 1984 on the basis of the then-current inventory of about 61,000 chemicals. (See table II.1.) The four chemical category exemptions will eliminate reporting on about 18,600 chemicals. As a result, EPA will request information on about 42,000 chemicals. On the basis of the 1977 production data on these 42,000 chemicals, EPA estimated that the low-volume and small manufacturers exemptions would eliminate about 12,800 and 1,700 chemicals, respectively. In addition, 12,500 of these chemicals were not produced in 1977. Thus, using the 1977 data, EPA estimated that it could receive new information on about 15,000 chemicals. This figure was used in EPA's economic impact analysis of the proposed rule. The Special Assistant to the Director, Information Management Division, pointed out, however, that this estimate was made using outdated production data and therefore EPA could conceivably receive new data on as many as 42,000 chemicals.[3]

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[3]EPA made this estimate around April 1984 and could not provide us with more current data on the number of chemicals falling into each of the exempted categories.

Table II.1

EPA's Estimate of the Number of Chemicals on Which New Information May be Received Based on 1977 Production Data (Data as of April 1984)

Total chemicals on TSCA inventory		60,743
Less: Exemptions from the update		
-Polymers	15,551	
-Inorganic chemicals	2,943	
-Microorganisms	196	
-Naturally occurring chemicals	0	
-Less duplicates	(127)	18,563
Total number of chemicals on which information will be requested		42,180
Less: Chemicals with		
-No production in 1977	12,520	
-Production less than 1,000 lbs. in 1977	8,542	
-Production from 1,000 to 10,000 lbs. in 1977	4,276	25,338
Subtotal		16,842
Less: Chemicals manufactured by small manufacturers		1,684
Total number of chemicals on which new information may be received		15,158[a]

[a]This is an EPA estimate based on 1977 data. The actual number of chemicals on which updated information will be received could be as high as 42,180.

As of November 1985 EPA was in the process of reviewing and finalizing the proposed rule. According to the Special Assistant to the Director, Information Management Division, the rule will then be sent to the Office of Management and Budget for review and will be published as a final rule in the Federal Register in late December 1985, with the rule becoming effective in March 1986. Manufacturers would then have to report the updated information to EPA within 120 days of the effective date.

According to the Special Assistant to the Director, Information Management Division, EPA will retain the 1977 inventory production data. He said that the new information will be added to the inventory data base, but maintained separately.

EPA's RATIONALE FOR UPDATE EXEMPTIONS AND USER VIEWS

As previously mentioned, EPA proposed to exempt four categories of chemicals from the update: polymers, inorganic chemicals, naturally occurring substances, and microorganisms. EPA also proposed to exempt chemicals produced by manufacturers in quantities of less than 10,000 pounds annually at an individual production site (low-volume chemicals). According to the preamble to the proposed rule, EPA made these exclusions in order to focus the inventory update on the chemicals for which it was most likely to need current information. In addition, TSCA generally exempts small manufacturers, as defined by EPA, from most reporting requirements under section 8(a). Accordingly, EPA has proposed to exempt small manufacturers from the update reporting requirements.

In general, the majority of users agreed with EPA's proposed exclusions from the inventory update rule. However, 10 of the 22 users we interviewed raised concerns with respect to one or more of these exemptions, as detailed below.

Polymers

EPA has proposed to exclude polymers from the inventory update. Polymers are naturally occurring or synthetic chemicals composed of large molecules formed from smaller molecules of the same substance. Examples of polymers are polyester, polyurethane, and polystyrene. (These are the commonly used names of these substances, not the official chemical names.) According to the Special Assistant to the Director, Information Management Division, for purposes of the final inventory rule, EPA plans to exclude all polymers whose chemical names contain the prefix "polym" or the words "polymer(s)" or "polymerized." While this would not eliminate all polymers, EPA selected this definition for simplicity's sake. EPA estimated that the inventory contained about 15,600 polymers meeting the exemption criteria as of April 1984.

EPA has proposed to exempt polymers from the update for two reasons. First, only a small percentage (according to EPA, about 11 percent) of polymers reported under the premanufacture notification program are selected for detailed review because of concern about their toxicity, exposure, or use. Second, EPA believes it will probably not use production volume as a means to identify polymers for further investigation under the existing chemical review program. Instead, EPA will identify problem polymers on the basis of concerns about use or toxicity. EPA can identify these types of concerns through such means as submissions on hazardous chemicals made under section 8(e) of TSCA. Therefore, EPA believes there is no need to collect information on all polymers under the inventory update rule when only a small number will be assessed any further under TSCA. In cases where production data are needed on specific polymers, EPA could collect the data under a chemical-specific rule under the authority of TSCA section 8.

Few polymers have surfaced as concerns in any of EPA's programs. For example, the Interagency Testing Committee has never referred a polymer to EPA for priority testing. None of the 126 chemicals designated as toxic under the Clean Water Act are polymers as defined by the proposed rule. Of the 517 reports submitted to EPA under TSCA Section 8(e) between January 1977 and December 1984, 31, or about 6 percent, concerned polymers.

On the other hand, EPA acknowledges that some types of polymers may be hazardous (harmful to human health or the environment). For example, in the premanufacture notification program, EPA, by regulation, allows most polymers to undergo a 21-day review period rather than the usual 90-day review. However, EPA has determined that polymers composed of small molecules and those in seven other specific categories are not eligible for the 21-day review. Those categories are excluded because either (1) EPA believes they may be harmful or (2) EPA believes it has inadequate data on which to gauge their potential risks. According to the Special Assistant to the Director, Information Management Division, only a small percentage of polymers on the inventory would fall into the problem categories, but he was unable to give us a specific number.

Fifteen of the 20 users we interviewed who commented on this exemption agreed with EPA's polymer exclusion. However, five expressed the opinion that certain polymers, for example low-molecular-weight polymers, can be harmful to human health or the environment.

Inorganic chemicals

For purposes of the proposed rule, inorganic chemicals are substances that do not contain carbon. Inorganic chemicals include lead, selenium, and mercury. EPA estimated that the

inventory contained about 3,000 inorganic chemicals as of April 1984.

According to the preamble to the proposed rule, inorganic chemicals should be excluded because the hazardous potential of many of these substances is relatively well established. In other words, according to the Special Assistant to the Director, Information Management Division, more is known about the toxic properties of inorganic chemicals than those of organic chemicals, and therefore EPA decided to focus the update on the organic chemicals about which less is known. In addition, according to the preamble to the proposed rule, it is unlikely that EPA would use production volume as a means to identify inorganic chemicals needing further attention. When information is needed on specific inorganic chemicals, EPA can obtain it under a separate data-gathering effort.

Twelve of the 21 inventory users we interviewed who commented on this exemption agreed with the exclusion of inorganics from the inventory update. However, nine officials disagreed. Officials in the Office of Air Quality Planning and Standards, Office of Water Regulations and Standards, and the Interagency Testing Committee were concerned because they have dealt with inorganics in the past and believe they will continue to deal with them in the future. For example, according to the Chief, Program Integration Division, Office of Air Quality Planning and Standards, of the 23 hazardous air pollutants on which EPA has made a commitment to make regulatory decisions under the Clean Air Act by the end of 1985, 4 are inorganic chemicals. Of the 126 chemicals designated as toxic under the Clean Water Act, 13 are inorganic heavy metals. Of the 91 chemicals the Interagency Testing Committee has recommended to EPA for consideration for priority testing, 3 are inorganic chemicals. (EPA ultimately decided, however, not to require testing of these three chemicals.)

Naturally occurring substances

EPA has proposed to exclude all naturally occurring substances that are unprocessed, or processed only by manual, mechanical, gravitational means, by dissolution in water, by floatation or by heating solely to remove water, or which are extracted from air by any means. These substances, which include water, air, natural gas, and crude oil, were also excluded from reporting under the original 1977 inventory rule and are not listed on the published inventory. (These substances are, however, recognized as existing chemicals.) This exclusion does not cover synthetic substances similar to those that are naturally occurring.

Seventeen of the 21 users we interviewed that commented on this exemption favored this exclusion. Four officials, however, pointed but that there could be problems with this exemption. For

example, the Chief of the Program Integration and Health Section, Office of Air Quality Planning and Standards, pointed out that the mining and extraction of these substances can cause increased exposure to humans and the environment that would otherwise never occur. For this reason, this official believed EPA should collect production-related data on these chemicals.

Microorganisms

For purposes of the proposed rule, the category of microorganisms includes bacteria, yeast, and fungi. As of April 1984, the inventory contained about 200 of these substances. EPA proposed to exempt these substances because it, in conjunction with other federal agencies, is in the process of forming its policy on biotechnology. On December 31, 1984, EPA published its proposed policy on how it plans to deal with certain microbial products (including microorganisms), under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and TSCA, in the Federal Register. According to EPA, information needs for microorganisms under TSCA are still being determined and will be covered in the final policy on biotechnology scheduled to be published in 1986.

Twenty of 21 users we interviewed that commented on this proposed exemption agreed with the exclusion of microorganisms from the inventory update. One official, the former Executive Secretary of the Interagency Testing Committee, raised a concern about microorganisms that are pathogenic (disease producing) or bioengineered (manipulated in the laboratory to produce a new, exotic microorganism). He pointed out that it would be important to have information on production volume and site location for these types of microorganisms in the event of an accidental release because of the potential danger to human health and the environment. This official also pointed out, however, that there are no bioengineered microorganisms currently on the inventory but some may be added in the future after going through the premanufacture notification review process.

Low-volume substances

Manufacturers producing fewer than 10,000 pounds of a chemical substance at a given plant site will be exempt from the initial reporting requirement for that chemical. EPA does not believe it will need readily available information on low-volume chemicals because it plans to use toxicity or use data rather than production volume to identify low-volume chemicals requiring further investigation. If a low-volume chemical is later identified as a problem, EPA could collect production information under a separate, chemical-specific rule.

While most users we interviewed agreed with this exemption, two raised concerns. For example, a representative of the National Toxicology Program, which coordinates toxicological research among federal agencies, indicated that production data on low-volume substances would be useful because other sources of information often do not contain these data for chemicals under study.

Small manufacturers exemption

TSCA generally exempts small manufacturers from most data-gathering efforts under section 8(a). It also requires EPA to promulgate a rule defining small manufacturers. For the original 1977 inventory reporting rule, EPA had not yet promulgated a small manufacturers exemption rule. Therefore, for purposes of the 1977 rule, EPA defined a business as small if its total annual sales were less than $5 million. All small manufacturers were required, however, to provide production data on chemicals produced at one site or imported in quantities greater than 100,000 pounds per year.

On November 16, 1984, EPA published a rule defining small manufacturer exemption standards that applied to all future data gathering efforts under TSCA Section 8(a). This rule defined a business as small if it met one of the two following criteria:

1. A business qualifies as small if the total annual sales of all plant sites that it owns or controls are less than $40 million. However, a business that qualifies under this standard must still report any substance manufactured at a site that is produced in quantities greater than 100,000 pounds per year.

2. A manufacturer may also qualify as small if the total annual sales of all the sites it owns or controls are less than $4 million. Manufacturers qualifying as small under this standard do not have to report on any substance regardless of the quantity produced.

According to EPA estimates, the small manufacturer exclusion could eliminate reporting on about 1,700 of the chemicals on the inventory. (See table II.1.)

Overall, most of the inventory users we interviewed agreed with the small manufacturers exclusion. Four officials, however, raised concerns. For example, the Director of Field Operations, Occupational Safety and Health Administration (OSHA), told us that the proposed exemption for small manufacturers will limit the usefulness of the inventory for OSHA's purposes. He said that OSHA plans to use the inventory data base to target manufacturers of hazardous chemicals for inspections. Based on OSHA's experience, small manufacturers are more likely to violate OSHA's regulations than large ones.

EPA DOES NOT PLAN TO USE THE INVENTORY UPDATE TO MEET EMERGENCY RESPONSE NEEDS

During our discussions with inventory users, one user raised a concern that is particularly noteworthy. An environmental engineer in EPA's Office of Emergency and Remedial Response commented that while he generally agreed with the proposed exemptions, he did not believe that chemicals that EPA had designated as hazardous (harmful to human health or the environment if accidentally spilled or released) should be exempted from the inventory update. These hazardous chemicals fall into two categories: (1) those that have been designated as hazardous under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and (2) those chemicals that EPA plans to designate as acutely toxic air pollutants (acute hazards) in December 1985. According to this same environmental engineer, EPA needs production-related data on these hazardous chemicals in order to prepare for and respond to accidental releases of these chemicals. While EPA officials responsible for the inventory update agreed that having production-related data on hazardous chemicals could be valuable, they told us that it would be better to gather such data under a separate data-gathering rule because more data are needed on these chemicals than is proposed to be gathered through the inventory update. As of November 1985, EPA had not made a decision on whether or precisely how to gather these data.

CERCLA reportable quantities

CERCLA requires that persons in charge of vessels or facilities that discharge hazardous substances in quantities equal to or greater than the reportable quantity must notify EPA's National Response Center of the release. Pursuant to this, EPA has designated 705 substances as hazardous and established a specific reportable quantity for each one. Reportable quantities range from 1 to 5,000 pounds. The list of chemicals was drawn, as provided by the law, from other lists of chemicals designated as hazardous under the Clean Air Act, the Clean Water Act, and the Resource Conservation and Recovery Act. A major purpose of this notification requirement is to alert appropriate government officials to releases of hazardous substances that may require rapid response to protect public health and the environment. Then, officials can evaluate the need for federal action and undertake any necessary response in a timely fashion.

To assist in responding to releases of hazardous substances, EPA has developed a data base, called the Oil and Hazardous Materials--Technical Assistance Data System (OHM-TADS), containing a wide variety of information on 1,000 chemicals, including the 705 for which reportable quantities have been established. Also included in OHM-TADS is the 1977 inventory data base information

on these 1,000 chemicals. According to the Project Officer for OHM-TADS, production volume and site information is valuable in emergency situations to facilitate contacting persons knowledgeable about the chemical and identifying the source of a release. Further, he told us that field personnel can use this information to identify the locations of potential releases and aid in contingency planning for emergencies. However, EPA will not obtain current production data on 175 to 188 chemicals that appear on both the inventory and the CERCLA list because of the proposed inventory update exemptions and exemption-override provision. Other substances among the 705 hazardous chemicals will not be covered by the inventory update because they are specifically excluded from TSCA and therefore do not appear on the inventory. One such example is pesticides, which are regulated under the Federal Insecticide, Fungicide, and Rodenticide Act.

In discussing this issue, EPA officials responded that the inventory update was not the proper vehicle for gathering information on the chemicals on the CERCLA list. These officials told us that to fully meet emergency response needs, EPA needs to obtain not only the types of production-related data that will be gathered through the inventory update but also additional information, which is not contained in the inventory data base, such as data on chemical processors (firms that use chemicals to produce goods). Therefore, they believed that a separate data-gathering rule would be a more effective means of gathering data on those chemicals. According to the officials, there have been some internal discussions concerning whether EPA should gather data on these hazardous chemicals and alternatives for obtaining the data. However, as of November 1985, EPA had not yet made a decision on whether or precisely how to gather the necessary data.

Acute hazards list

The development of an acute hazards list was begun in response to the accidental release of methyl isocyanate (MIC) that killed and injured thousands in Bhopal, India, in 1984. First, EPA is developing a list of chemicals that, if accidentally released into the air, could pose a significant risk to public health and safety because of their toxicity and physical and chemical properties. According to the Special Assistant to the Director, Office of Toxic Substances, the list will contain 350 to 400 chemicals. Second, EPA is developing information to assist state and local officials in contingency planning for accidental releases. According to EPA's draft guidance on gathering data needed to develop contingency plans, states will need to know where and in what quantities chemicals on the acute hazards list are handled. This basic information could be obtained, for manufacturers and importers, through the inventory update. However, according to EPA officials, 50 to 60 of the chemicals on a preliminary acute

hazards list would not be covered by the inventory update because of the exemption for inorganic chemicals.[4] Again, information on other substances on the acute hazards list will not be obtained through the inventory update because they are pesticides, which are not regulated under TSCA and do not appear on the inventory.

We discussed this issue with EPA officials. They told us that most of the chemicals on the list would be covered by the inventory update. For the few that would not be updated, the 1977 inventory information would still be available. Agency officials emphasized that if EPA decides to obtain data on these chemicals, it should be done under a separate data-gathering rule under which additional information, such as data on chemical processors, could be obtained. They told us that although there had been internal discussions on whether to gather data on chemicals on the acute hazards list, no decision had been made as of November 1985.

While we recognize that EPA will have the 1977 production-related data on the hazardous chemicals that will not be covered by the update, EPA has already stated in its justification for the update that the 1977 data base can no longer be relied upon for accurate information. In addition, it will take time to develop a separate data-gathering rule and obtain those data. The question arises, therefore, as to whether EPA should rely on outdated information on hazardous chemicals until such time that all the necessary information on those chemicals can be gathered separately. Through the inventory update, EPA has an opportunity to gather production-related data for chemicals on the CERCLA and acute hazards lists by extending the exemption-override provision to cover these chemicals.

Furthermore, given the proposed exemptions to the TSCA inventory update, EPA will not know where many chemicals on the inventory are currently manufactured. If an emergency involving an exempted chemical occurred at an individual production site, EPA would not immediately know other locations where the chemical is being manufactured so that it could take immediate action to prevent the same type of accident. This leads to the question of whether the inventory can serve as a reference for identifying the production location for chemicals involved in emergency situations.

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[4]As of November 1985, the acute hazards list had not been finalized and therefore we could not obtain precise numbers. We were also unable to determine to what extent the 50 to 60 inorganic chemicals on the acute hazards list that will not be covered by the inventory update duplicate the 175 to 188 chemicals on the CERCLA list that will not be covered by the update.

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