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EPA'S TOXIC RELEASE INVENTORY PROGRAM

More Comprehensive Data and Better Public Outreach Needed

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Subcommittee on Superfund, Ocean and Water
Protection
Committee on Environment and Public Works
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Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to be here today to discuss the Environmental Protection Agency's (EPA) progress in implementing the Toxic Release Inventory Program. As you know, section 313(k) of the Emergency Planning and Community Right-to-Know Act of 1986 required that we assess how EPA and the states have implemented the program. Our report, which we are issuing today, discusses, among other things, (1) the extent to which EPA, other federal agencies, states, and the public have used the data; (2) the comprehensiveness of the inventory; and (3) efforts to make the inventory available and accessible to the public.[1]

In summary, we found that EPA has done a creditable job of getting the inventory program up and running. Although the inventory has been available only since 1989, it has become a valuable source of environmental information. For example, federal and state governments have used the data to enact laws designed to control and reduce toxic emissions. Also, the public availability of the data has prompted some companies to set emissions reduction goals.

Still, the inventory would be more useful to regulators and the public if it were more comprehensive. At present, it does not include information on many toxic chemicals or emissions from

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[1]Toxic Chemicals: EPA's Toxic Release Inventory Is Useful But Can Be Improved (GAO/RCED-91-121, June 27, 1991).

thousands of nonmanufacturers--including federal facilities--which are not required to report. The inventory also does not include data from at least 10,000 of the 30,000 facilities required to report their releases. Because of backlogs in the enforcement process and other problems, EPA has penalized relatively few nonreporters. Finally, because most of the data have not been verified, their reliability is questionable.

Segments of the public--predominantly environmental and public interest groups--use the data extensively. EPA, states, and manufacturers told us, however, that they have received much fewer requests for the data from individual citizens. More than half of the residents we polled in three counties with high levels of emissions wanted more information about the pollution in their communities, but were unaware that such data were available to the public. Although EPA has made some efforts to publicize the inventory, these efforts have been limited because of other program priorities.

BACKGROUND

Before discussing our findings in more detail, I would like to briefly mention the origin, purpose and basic requirements of the Toxic Release Inventory Program.

Chemical disasters--such as the accidental release of deadly gas in Bhopal, India, in 1984 that killed and injured thousands of people--have increased demand for better information about toxic chemical emissions. In response, the Congress passed the Emergency Planning and Community Right-to-Know Act of 1986, requiring manufacturers to report each year on their toxic chemical emissions to EPA and the states. EPA compiles these reports into an annual inventory. In 1990, over 19,000 facilities reported that they had emitted about 6.2 billion pounds of toxic chemicals in 1988.

In passing this act, the Congress envisioned that the Toxic Release Inventory would give the public unprecedented access to environmental data that it could use to prompt industry to control emissions. The data were also intended to serve as a tool for government regulators to better measure the success of environmental programs and to help them work with industry to identify ways to reduce pollution.

The act requires manufacturers with 10 or more full-time employees that produce, import, or process over 25,000 pounds, or use over 10,000 pounds of 1 or more of over 300 chemicals to report their emissions to EPA and the states. Congress selected reportable chemicals from lists developed by New Jersey and Maryland for their community right-to-know programs. Facilities must estimate the quantity of chemicals emitted directly into the air, land, and water or sent to locations that treat, store, or

dispose of toxic waste. The act also requires that EPA make the inventory available and accessible to the public through such means as an on-line computerized data base, national report, and a computer diskette. I would like now to discuss our findings in more detail.

USE OF THE INVENTORY IS EXTENSIVE

First, we found that the inventory has quickly become an important source of environmental data for federal and state agencies and for various nongovernmental groups. For example, sponsors of the 1990 Clean Air Act Amendments used the data on air emissions to successfully show the need to regulate more air pollutants. EPA and industry are using the inventory to jointly develop pollution prevention strategies for 17 of the inventory chemicals that are believed to present significant risks to human health and the environment. EPA's goal is to reduce, through use of the inventory, aggregate nationwide emissions of these chemicals by 33 percent by 1992 and by at least 50 percent by 1995.

States, such as Massachusetts and Oregon, have used the data to pass more stringent laws to reduce the use and the emission of toxic chemicals. In Oregon, for example, all companies that submit reports, as well as hazardous waste generators, must set goals to reduce pollution by September 1991 or, for small-quantity generators, by September 1992. Massachusetts established a goal of

reducing the amount of toxic waste generated statewide by 50 percent by 1997. In addition, pressure created by the public availability of the inventory data has prompted some major companies to voluntarily set pollution reduction goals. For example, one large nationwide chemical corporation, listed in the 1987 inventory as a top air polluter, plans to reduce its emissions by almost 90 percent by 1992.

COMPREHENSIVENESS OF INVENTORY COULD BE IMPROVED

Although the 1988 inventory reported 6.2 billion pounds of emissions, we found a number of opportunities for improving the inventory's comprehensiveness. First, the inventory could be more useful if it contained more comprehensive information. At present, it omits data from many sources of toxic emissions. For example, nonmanufacturing facilities, such as those that are involved in oil and gas extraction, mineral mining and processing, industrial dry cleaning, and agricultural operations, are not required to report. In addition, facilities with fewer than 10 full-time employees are not required to report, even if they have emissions as great as those of larger facilities. Finally, federal facilities also are not required to report, although EPA has identified about 850 federal facilities subject to other federal environmental laws. Forty states and 67 percent of reporting

facilities strongly supported requiring federal facilities to also report their releases.

The inventory also omits data on many toxic chemicals, including many regulated under other federal environmental laws, such as the Clean Air Act. Some known or possible human carcinogens--such as coke oven emissions--are excluded, as are most of the pesticides used by the agricultural sector--such as alar.

Many persons whom we contacted during our review believed that the inventory's reporting requirements should be revised. We found strong support among government officials, states, reporting facilities, and environmental and public interest groups for expanding the program's reporting requirements to cover industries outside the manufacturing sector. Some of the activities mentioned were industrial dry cleaners, utility plants, research facilities and mining operations.

EPA, in fact, has authority to extend reporting requirements to nonmanufacturers and toxic chemicals not currently reported but it has not comprehensively identified and prioritized which sources and chemicals should be added to the inventory. To require federal facilities and facilities with fewer than 10 employees to report, EPA would need additional legislative authority.

Second, the inventory would be more comprehensive if more facilities met their reporting requirements. Many facilities are unaware of, or are ignoring, these requirements. EPA and states estimate that at least 10,000 facilities are not complying with their legal obligation to report. On the basis of data we obtained from 39 states, we estimate that nationwide at least 36 percent of facilities required to report did not do so for the 1988 inventory. Many state officials estimated higher rates for their states, with some states estimating nonreporting rates well over 50 percent.

In our view, improvements in EPA's enforcement efforts could help to reduce this high level of nonreporting. We found that several EPA regions were not using adequate screening measures to identify nonreporters. And EPA has been slow to resolve enforcement cases. As of March 1990, EPA regions had identified 403 nonreporters but had issued only 209 civil complaints and resolved just 68 of these complaints. Moreover, the absence of explicit inspection authority under the act may make it difficult for EPA to enforce the program. At present, EPA has to rely on inspection authorities granted under other environmental laws.

To improve the inventory's usefulness, EPA also needs to ensure the data's reliability. Users would have greater confidence in the inventory if EPA verified more of the emissions data. We found that EPA has limited knowledge of the data's quality. For

example, at the time of our review EPA regions had conducted data quality reviews at only 27 of the more than 19,000 facilities that submitted reports. The few reviews that EPA did perform found problems such as the failure to submit required reports for all chemicals and the under- or overestimation of emissions. According to EPA regional officials, it can be difficult to accurately report emissions. For example, because the trade names of chemicals can differ from their generic names, facilities sometimes mistakenly conclude that the chemicals they use are not covered by the reporting requirements. Also, some facilities have problems obtaining accurate information from their suppliers on the chemical composition of their purchases.

EPA compliance and enforcement officials told us that they intend to give greater attention to data quality reviews. However, they do not expect the number of reviews to increase dramatically in the near future. Understandably, EPA prefers to use its limited inspection resources to identify facilities that have not reported at all rather than to evaluate the quality of reported data.

PUBLIC OUTREACH CAN BE IMPROVED

Although the inventory has proved useful to a variety of public and private sector agencies, it may not be reaching individual citizens, as the Congress also intended.

In an effort to reach as many different types of users as possible, EPA makes the inventory data available to the public through a variety of formats, including an on-line data base, a national report, and a computer diskette. We found that certain groups--chiefly environmental and public interest groups--are using the data extensively. However, EPA, state, and industry representatives report that they have received much fewer requests for the inventory data from individual citizens. In fact, EPA regions, 31 states, and over 80 percent of facilities reported a "mild to weak" public demand for the inventory data. Also, relatively few private citizens have used the on-line inventory data base maintained at the National Library of Medicine. Only 8 percent of the users of this data base in its first 15 months of operation were individual citizens.

In a telephone poll we conducted in three counties that reported high levels of emissions, we found that more than half of the residents--ranging from 54 to 60 percent--were unaware that the data were publicly available. However, many of the individuals in these counties--ranging from 69 to 75 percent--expressed interest in learning more about toxic emissions in their communities.

Although the act did not require EPA to implement a public outreach campaign, program officials recognize that a successful program requires such an effort. Consequently, EPA is working with several groups of professionals, such as librarians and

journalists, to publicize the availability of the data and to educate these groups about the inventory. However, other program demands, particularly the task of establishing the public data base, have limited EPA's public outreach efforts.

CONCLUSIONS

In summary, we are pleased to report that the Toxic Release Inventory has, within a relatively short period of time, become a major source of environmental information, that has led government regulators, industry representatives, and community-based groups to begin to work constructively towards creative solutions to our nation's toxic pollution problems. However, in its present form, the inventory only provides a partial picture of the toxic pollution problem we face in this country. We believe the inventory's usefulness could be increased if it included information from nonmanufacturing facilities, federal facilities, and facilities with fewer than 10 employees, and if it included data on additional toxic chemicals.

In addition, solving this nation's toxic pollution problem can not be accomplished by federal laws and regulations alone. It will require the cooperation of industry and the action of the public and our community leaders. To foster this action, the public must be kept informed of the pollution problems. Although EPA has sponsored various types of public outreach activities, we believe

these efforts could be strengthened if EPA develops a strategy to more effectively publicize the availability of the inventory data.

RECOMMENDATIONS

As we state in our report, there are a number of actions that EPA and the Congress can take to enhance the comprehensiveness and usefulness of the inventory. Specifically, we recommend that the Administrator of EPA, (1) identify which additional sources of toxic emissions, including nonmanufacturers and facilities with fewer than 10 full-time employees, should be required to report and which toxic chemicals should be added to the inventory; (2) develop an inspection strategy to better identify nonreporters and issue national guidance for implementing this strategy; (3) place greater emphasis on verifying the data, especially the emissions estimates; and (4) develop a public outreach strategy that more effectively publicizes the availability of the data.

We are also recommending that the Congress amend the Emergency Planning and Community Right-to-Know Act to (1) require federal facilities to submit emissions reports, taking national security implications into account and (2) provide EPA with explicit authority to inspect facilities.

Mr. Chairman, this concludes my prepared statement. We will be glad to respond to any questions that you or the Subcommittee Members may have.