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EPA's Chemical Testing Program Has Made Little Progress

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Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss the Environmental Protection Agency's (EPA) chemical testing program for toxic substances. The chemical testing program was established to develop data on the health and environmental effects of potentially harmful chemicals in commerce so that toxic chemicals can be identified and regulated. My testimony is based on our report on the testing program, which is being released today.[1]

Overall, our work showed that EPA has made little progress in identifying chemicals that should be tested to determine their health and environmental effects. In fact, EPA's testing program has considered for testing about 386 chemicals or less than 1 percent of the more than 60,000 chemicals currently used in the United States. Although not all 60,000 chemicals may need to be tested, EPA has not produced a list of those that do not require testing. As of the end of fiscal year 1989, EPA had obtained complete test data for only six chemicals even though the program had been in existence about 12 years. What is even more disturbing is that EPA has not finished assessing any of those six chemicals to determine, from a toxicity standpoint, whether they should be regulated.

Specifically, we identified three major program deficiencies which, if not corrected, will only further impede the testing program's progress.

-- The first area relates to the Interagency Testing Committee (ITC), which was established to recommend chemicals to EPA for testing. We found that ITC continues to lack crucial

[1]TOXIC SUBSTANCES: EPA's Chemical Testing Program Has Made Little Progress (GAO/RCED-90-112, Apr. 25, 1990).

data it needs to identify potentially toxic chemicals and to justify its recommendations for EPA action. In addition, ITC's efforts have not been made easier because of members' poor attendance at meetings set up to make those critical decisions.

-- Secondly, even after ITC recommends the chemicals and EPA publishes proposed test rules, EPA continues to drag its feet in issuing final test rules to begin testing--a critical point in the testing process.

-- Finally, we found that although EPA has established various policies and procedures for implementing the chemical testing program, it has not developed overall objectives for the program or a strategy for achieving them.

The remainder of my statement discusses these three deficiencies in more detail. However, before I begin, I would like to briefly provide some background information.

BACKGROUND

The chemical testing program for toxic substances was authorized under section 4 of the Toxic Substances Control Act (TSCA). The Congress enacted TSCA in October 1976 to provide regulatory authority over chemicals not covered at that time by existing legislation. The act applies to all chemicals except those in eight product categories covered by other laws--pesticides, tobacco, nuclear material, firearms and ammunition, food, food additives, drugs, and cosmetics.

Our review focused on chemicals already in commerce, which are listed in TSCA's inventory of "existing chemicals." All chemicals not listed in the inventory are "new chemicals" and are subject to

premanufacture notification requirements established under another section of TSCA. Our report does not address new chemicals.

Section 4 authorized EPA to require chemical manufacturers and processors to test potentially harmful chemicals that are already in the marketplace for the purpose of developing adequate data on their health and environmental effects. To start this process, EPA must show that existing data are insufficient to determine whether the chemicals in fact have toxic consequences and that testing is needed to make that determination.

To assist EPA, section 4 created ITC. The committee was established to recommend to EPA chemicals that should receive priority attention for testing. Composed of representatives from eight federal agencies involved in environmental and health matters, ITC must report semiannually to EPA and include a list of no more than 50 chemicals recommended for testing. By law, EPA must respond within 1 year by proposing a test rule or explaining its reasons for not doing so in the Federal Register.[2] TSCA established no time requirements for EPA to issue a final test rule.[3]

ITC'S EFFECTIVENESS HAMPERED BY INSUFFICIENT DATA AND LOW MEMBER PARTICIPATION

Let me now elaborate on problems ITC has encountered in making chemical recommendations to EPA for action. At the time of our

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[2]EPA proposes a test rule when it determines that testing is necessary. A proposed rule specifies the chemical to be tested and such things as the type of testing required, test standards to follow, and schedules for submission of test data. A primary purpose of the proposed rule is to allow for public comment.

[3]After EPA reviews the public comments on a proposed test rule, it issues either a final test rule to require industry to begin testing or a decision not to require testing.

review, ITC had recommended to EPA a total of 386 chemicals for testing. This number represents less than 1 percent of the more than 60,000 chemicals in TSCA's existing chemical inventory and an average of approximately 32 chemicals recommended per year. About 80 percent of these 386 chemicals were recommended by ITC almost 10 years ago. ITC believes that its lack of production and exposure data has prevented it from making more recommendations in more recent years.

To recommend chemicals to EPA for testing, ITC needs data on their production and exposure levels. In addition to being legislatively required to consider such data, ITC needs this information to determine the chemicals' potential harm to humans and the environment and to determine whether the chemicals should be given priority for testing.

Throughout its chemical reviews, ITC has had to use outdated production data. Before 1979, ITC was able to obtain only limited production data from whatever existing chemical databases were available because complete data for the more than 60,000 chemicals in the TSCA inventory did not exist. In 1979, EPA created its first TSCA inventory, which included production data that ITC subsequently used. However, in the process, ITC found that production levels for a number of chemicals had changed significantly since the data were obtained. For example, methyl-tert-butyl ether, a chemical additive to unleaded gasoline, went from virtually no production in 1979 to approximately 2 billion pounds in 1985.

Consequently, ITC could not rely with any confidence on the 1979 inventory data. EPA updated the TSCA inventory data with 1985 production data, and, according to an EPA official responsible for the inventory, EPA thereafter decided to update the inventory about every five years and is currently working on a 1990 update. Thus,

ITC's production data will still be outdated since production levels can change dramatically from year to year.

ITC has also had difficulty obtaining adequate exposure data. In general, such data are not readily available from chemical manufacturers and processors unless specifically requested. In 1980, EPA and ITC identified 2,226 chemicals that they believed might be harmful. To help ITC, EPA proposed a rule under section 8 of TSCA requiring chemical manufacturers to submit this information. (Section 8 authorizes EPA to require manufacturers and processors to maintain records and submit any information EPA needs to effectively enforce the act.) However, in the 1982 final rule, EPA required data for only 250 chemicals. EPA reduced the number of chemicals by almost 90 percent, in part, because of the reporting burden on industry. Thus, over 1,700 potentially toxic chemicals are not being tested because of the lack of sufficient data about them.

Because ITC's review was limited by the reduced number of chemicals covered in the final rule, ITC chose to obtain the additional information it needed on its own by researching whatever was available in published literature. In this way, ITC obtained data on an additional 250 chemicals. However, as of November 1989, ITC still did not have exposure information for more than 1,700 of the original 2,226 chemicals EPA and ITC had identified 10 years ago as being potentially harmful.

In addition to having data problems, ITC has low membership turnout for its meetings. ITC members meet monthly to decide which chemicals are of most concern and should be recommended to EPA. Members are needed, among other things, to provide their specific expertise on chemicals under consideration and vote on which chemicals should be recommended to EPA for testing.

We found that between January 1986 and April 1989, attendance by members at ITC's monthly meetings averaged about 61 percent. We also found that reviews of chemicals had to be postponed several times because members were not present to provide the needed input. ITC members who were often absent were representatives from the Council on Environmental Quality and the Department of Commerce.

EPA CONTINUES TO BE SLOW IN ISSUING FINAL TEST RULES

Let me now turn to EPA's continued slowness in issuing final test rules. Unless final test rules are issued, testing does not begin and the health and environmental effects of potentially harmful chemicals remain unknown.

In 1984, we first reported EPA's slowness in issuing final test rules.[4] At that time, we stated that EPA had issued no final test rules and was taking over 3 years to make a proposed rule final. Based on our analysis, we then recommended that, after proposing test rules, EPA make them final within a reasonable time, such as 12 to 18 months.

EPA has proposed 15 test rules in response to chemical recommendations ITC made since our 1984 report. EPA took an average of more than 27 months in completing 12 of these test rules. It met the 12- to 18-month time frame for only 1 of the 12 rules. As of November 1989, EPA had not completed the remaining three proposed rules; two of these were over 2 years old.

In addition, as of the end of fiscal year 1989, EPA still needed to complete four rules that it initiated before June 1984. These four rules covered 134 chemicals, or more than one-third of

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[4]EPA's Efforts to Identify and Control Harmful Chemicals in Use (GAO/RCED-84-100, June 13, 1984).

the 386 chemicals recommended by ITC for testing. Since the end of fiscal year 1989, EPA has made final one of these rules, which covered about 40 of the 134 chemicals.

According to the Chief of the Test Rules Development Branch, EPA continued to be slow in issuing final test rules because of recent high staff turnover. He stated that the testing program had a turnover of 30 percent in fiscal year 1988 and 40 percent in fiscal year 1989. As a result, the completion of rules had to be postponed until experienced staff members were available to work on them. The Branch Chief acknowledged that under normal circumstances 12 to 18 months is a reasonable time for making a proposed test rule final. Furthermore, the Branch Chief noted that EPA is placing a high priority on issuing proposed rules, rather than final rules. He said that EPA does this to ensure that it responds to ITC's recommendations within the 1-year statutory deadline.

Because EPA has been slow to issue final test rules, chemicals that have not yet been tested include aryl phosphates and glycidol and its derivatives. Aryl phosphates (used as plasticizers, in hydraulic fluids, and in lubricants) are produced in quantities exceeding millions of pounds per year and have the potential for substantial human exposure and environmental release. Aryl phosphates are suspected of producing damage to the central nervous system and paralysis. Glycidol and its derivatives (used in epoxy glues) are produced in quantities exceeding 1,000 pounds per year and have exposure estimates of over 100,000 workers; they are suspected of causing cancer and gene mutations.

ITC recommended aryl phosphates and glycidol and its derivatives for testing more than 10 years ago. They represent 84 of the 386 chemicals recommended by ITC. EPA initiated test rules for these chemicals in 1983 but has still not issued final rules to begin their testing.

TESTING PROGRAM LACKS OVERALL OBJECTIVES AND STRATEGY

The two deficiencies I've just discussed appear to have resulted from the lack of overall program objectives and strategy. Establishing clear program direction and priorities are key elements in any federal program. Although EPA has established various policies and procedures for implementing the chemical testing program, it has not established any overall objectives or a strategy for achieving those objectives. In particular, it has not identified the universe of chemicals that it needs to address or the pace at which it plans to address these chemicals. Without these matters defined, EPA officials remain unclear about the chemical testing program's direction and priorities.

Federal programs need objectives and strategies for adequate internal control. They provide focus and direction and help establish priorities. In addition, they provide the agency a perspective on the magnitude of the tasks it faces and help identify resource needs. They can also provide timing for expected results and benchmarks for measuring a program's performance. Furthermore, specified objectives and a strategy can provide the Congress with a sense of what can be achieved with the level of resources committed.

In 1983, GAO issued internal control standards to be followed by executive agencies,[5] as required by the Federal Managers' Financial Integrity Act of 1982. Internal controls are the combination of policies and procedures managers use to help ensure that their agencies, programs, or functions are effective and efficient. GAO's document specifically identified the

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[5]Standards for Internal Controls in the Federal Government, 1983.

establishment of objectives and strategies as internal control standards.

In a 1988 draft report on its chemical review program, EPA acknowledged its own lack of clear direction in its overall review of existing chemicals under TSCA, which includes the chemical testing program.[6] The draft report discussed the differences among staff and management about the goals of the program. It also stated that the absence of explicit written documentation concerning such matters as program direction has contributed significantly to the lack of productivity and misdirection of the program. The report is still not final.

CONCLUSIONS AND RECOMMENDATIONS

In conclusion, unless EPA corrects ITC's insufficient data and low member participation problems, places increased attention to issuing final test rules in a timely manner, and establish clear program direction and priorities, the chemical testing program will continue to make little progress. The program will continue not only to lack adequate internal controls to ensure that it is implemented effectively and efficiently, but, more importantly, will not be identifying harmful chemicals that may be presenting risks to our health or the environment.

Accordingly, in our report being released today, we are recommending that EPA exercise its data-gathering authority under section 8 of TSCA to obtain the data that ITC needs to make recommendations and that it work with ITC to improve its member's participation. In addition, we are recommending that EPA place a high priority on issuing final test rules by ensuring that adequate staff resources are devoted to completing test rules within a reasonable time, such as the 12- to 18-month time frame

[6]Existing Chemical Review Program: Operations Manual.

that we recommended in 1984. We are also recommending that EPA develop overall objectives for the chemical testing program and a strategy for achieving those objectives.

Furthermore, we stated in our report that the Congress may want to require EPA to develop a comprehensive plan for the chemical testing program that sets forth its objectives, a strategy, and time frames, and submit the plan to the Congress for approval. We believe the plan will provide the Congress with a sense of what can be achieved with the level of resources committed.

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That concludes my testimony. We would be happy to answer any questions.