



Highlights of [GAO-06-1032T](#), testimony before the Committee on Environment and Public Works, U.S. Senate

Why GAO Did This Study

Chemicals play an important role in everyday life, but some may be harmful to human health and the environment. Chemicals are used to produce items widely used throughout society, such as cleansers and plastics as well as industrial solvents and additives. However, some chemicals, such as lead and mercury, are highly toxic at certain doses and need to be regulated because of health and safety concerns. In 1976, the Congress passed the Toxic Substances Control Act (TSCA) to authorize the Environmental Protection Agency (EPA) to control chemicals that pose an unreasonable risk to human health or the environment.

This testimony is based on GAO's June 2005 report, *Chemical Regulation: Options Exist to Improve EPA's Ability to Assess Health Risks and Manage Its Chemical Review Program* (GAO-05-458). GAO's report describes EPA's efforts to (1) assess chemicals used in commerce, (2) control the use of chemicals not yet in commerce, and (3) publicly disclose information provided by chemical companies under TSCA. GAO recommended that the Congress consider providing EPA additional authorities under TSCA to improve EPA's ability to assess chemical risks, and that the EPA Administrator take several actions to improve EPA's management of its chemical review program. EPA did not disagree with our findings and is currently implementing some of our recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-06-1032T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact John B. Stephenson at (202) 512-3841 or stephensonj@gao.gov.

CHEMICAL REGULATION

Actions Are Needed to Improve the Effectiveness of EPA's Chemical Review Program

What GAO Found

EPA's authority under TSCA to obtain the data needed to assess existing chemicals does not facilitate its review process because the costly and time-consuming burden of obtaining the data is on EPA, rather than chemical companies. Consequently, EPA has used its authorities to require testing of fewer than 200 of the 62,000 chemicals in commerce when EPA began reviewing chemicals under TSCA in 1979. To obtain more data on existing chemicals, EPA implemented its High Production Volume Challenge Program, under which chemical companies voluntarily provide test data on about 2,800 chemicals produced or imported in amounts of 1 million pounds or more a year. While the purpose of the program is laudable, several problems remain, including that the chemical industry has not agreed to provide test data for over 200 chemicals with high production volumes. Moreover, after obtaining test data, EPA is required under TSCA's provisions to determine that a chemical poses an unreasonable risk before EPA can act to regulate its production or use. EPA officials say the act's legal standards for demonstrating unreasonable risk are so high that they have generally discouraged EPA from using its authorities to ban or restrict the manufacture or use of existing chemicals. Since Congress enacted TSCA in 1976, EPA has issued regulations to ban or limit the production of only five existing chemicals or groups of chemicals.

EPA's reviews of new chemicals provide only limited assurance that health and environmental risks are identified because TSCA does not require companies to test chemicals before they notify EPA of their intent to manufacture the chemicals. Because of a general lack of data on new chemicals, EPA has developed methods to predict their potential exposure and toxicity levels by using scientific models to compare the new chemicals with chemicals that have similar molecular structures and for which toxicity information is available. However, the use of these models can be problematic because the models are not always accurate in predicting chemical properties and EPA's evaluation of general health effects of the chemicals is contingent upon the availability of information on chemicals with similar molecular structures. Additionally, the estimates of a chemical's production volume and anticipated uses, which EPA uses to assess exposure, can change substantially after EPA completes its review. Despite these limitations, EPA's reviews have resulted in some action being taken to reduce the risks of over 3,600 new chemicals.

EPA's ability to provide the public with information on chemical production and risk is generally limited by the confidential business information provisions of TSCA. As a result, state agencies and foreign governments interested in obtaining this data for important purposes are denied access to the information. Recently, chemical companies have expressed interest in working with EPA to identify ways of enabling the agency to share confidential information with other organizations, provided that appropriate safeguards are adopted to prevent the unauthorized use of the information.