

The Toxic Substances Control Act (TSCA): A Summary of the Act and Its Major Requirements

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Summary

This report summarizes the Toxic Substances Control Act (TSCA) and the major regulatory programs dealing with chemical production and distribution in U.S. commerce. Issues related to TSCA implementation over time are addressed in CRS Report RL34118, *The Toxic Substances Control Act (TSCA): Implementation and New Challenges*, by Linda-Jo Schierow.

President Ford signed TSCA into law on October 11, 1976. Subsequently, five titles were added to address specific concerns—asbestos in 1986 (Title II, P.L. 99-519), radon in 1988 (Title III, P.L. 100-551), lead in 1992 (Title IV, P.L. 102-550), environmental and energy issues in schools in 2007 (Title V, P.L. 110-140), and formaldehyde emissions from composite wood products in 2010 (Title VI, P.L. 111-199). In 2008, Congress added provisions to Title I, Section 6 and Section 12, banning certain activities with respect to elemental mercury (P.L. 110-414).

TSCA authorizes EPA to identify potentially dangerous chemicals in U.S. commerce that should be subject to federal control. The act authorizes EPA to gather and disseminate information about production, use, and possible adverse effects to human health and the environment of existing chemicals, and to issue "test rules" that require manufacturers and processors of potentially dangerous chemicals to conduct and report the results of scientific studies to fill information gaps. For chemicals new to U.S. commerce, TSCA requires pre-market screening and regulatory tracking of new chemical products.

If EPA identifies unreasonable risks associated with existing or new chemicals, TSCA requires the agency to initiate rulemaking to reduce risks to a reasonable level. EPA may regulate the manufacture, importation, processing, distribution, use, and/or disposal of chemicals. TSCA provides a variety of regulatory tools to EPA, ranging in severity from a total ban on production, import, and use to a requirement that a product must bear a warning label at the point of sale. However, TSCA directs EPA to use the least burdensome option that can reduce risk to a level that is reasonable, given the benefits provided by the chemical product or process.

Title I of the original statute establishes the core program, directs EPA to control risks from polychlorinated biphenyls (PCBs), and bans certain activities with respect to elemental mercury. Title II directs EPA to set standards for asbestos mitigation in schools and requires asbestos contractors to be trained and certified. Title III directs EPA to provide technical assistance to states that choose to support radon monitoring and control. Title IV provides similar assistance with respect to abatement of lead-based paint hazards. Title V addresses environmental issues at schools, including energy efficiency. Finally, Title VI directs EPA to set standards for emissions of formaldehyde from composite wood products.

In the 114th Congress, there has been debate on legislation that would amend Title I of TSCA (S. 697, S. 725, and H.R. 2576). These bills would revise the chemical evaluation process and the criteria by which chemical substances would be regulated and to address certain other related purposes. Additional information regarding these bills is available in CRS Report R44024, *Proposed Amendments to the Toxic Substances Control Act (TSCA) in the 114th Congress: S. 697, S. 725, and H.R. 2576*, by Jerry H. Yen and Alexandra M. Wyatt.

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Introduction

The Environmental Protection Agency (EPA) is responsible for identifying and regulating toxic substances in U.S. commerce under the authority of the Toxic Substances Control Act (TSCA). This report defines key terms, provides a brief history of toxic substances control law, and describes key provisions of TSCA. The report is descriptive rather than analytic, highlights key provisions rather than providing a comprehensive inventory of the act's numerous sections, and addresses authorities and limitations imposed by statute, rather than the status of EPA implementation or other policy issues. **Table 1** lists TSCA as enacted in 1976 and the major amendments to the law. **Table 2** is a table that cross references sections of the *U.S. Code* with corresponding sections of the act. The text is excerpted, with minor modifications, from the corresponding chapter of CRS Report RL30798, *Environmental Laws: Summaries of Major Statutes Administered by the Environmental Protection Agency*, coordinated by David M. Bearden, which summarizes more than a dozen environmental statutes.

Overview

The Toxic Substances Control Act (15 U.S.C. 2601 *et seq.*) authorizes the EPA to screen existing and new chemicals used in manufacturing and commerce to identify potentially dangerous products or uses that should be subject to federal control. Both naturally occurring and synthetic chemicals are subject to TSCA, with the exception of chemicals regulated under other federal laws concerning food, drugs, cosmetics, firearms, ammunition, pesticides, tobacco, or mixtures. EPA may require manufacturers and processors of chemicals to conduct and report the results of tests to determine the effects of potentially dangerous chemicals on living things. Based on test results and other information, EPA must regulate the manufacture, importation, processing, distribution, use, and/or disposal of any chemical that presents an unreasonable risk of injury to human health or the environment. A variety of regulatory tools is available to EPA under TSCA, ranging in severity from a total ban on production, import, and use to a requirement that a product bears a warning label at the point of sale. TSCA directs EPA to use the least burdensome option that can reduce risk to a level that is reasonable, given the benefits provided by the chemical product or process.

Table 1.Toxic Substances Control Act and Major Amendments (codified as 15 U.S.C. 2601-2697)

| Year | Act | Public Law Number |
|------|---|-------------------------|
| 1976 | Toxic Substances Control Act | P.L. 94-469 |
| 1986 | Asbestos Hazard Emergency Response Act | P.L. 99-519 |
| 1988 | Radon Program Development Act | P.L. 100-551 |
| 1990 | Radon Measurement | P.L. 101-508, §10202 |
| 1990 | Asbestos School Hazard Abatement Reauthorization Act | P.L. 101-637 |
| 1992 | Residential Lead-Based Paint Hazard Reduction Act of 1992 | P.L. 102-550 |
| 2007 | Energy Independence and Security Act of 2007, subtitle E - Healthy High-Performance Schools | P.L. 110-140 |
| 2008 | Mercury Export Ban Act of 2008 | P.L. 110-414 |
| 2010 | Formaldehyde Standards for Composite Wood Products Act | P.L. 111-199 |

The President's Council on Environmental Quality proposed comprehensive federal legislation in 1971 to identify and control potentially dangerous chemicals in U.S. commerce that were not adequately regulated under other environmental statutes. Its report, "Toxic Substances," defined a need for comprehensive legislation to identify and control chemicals whose manufacture, processing, distribution, use, and/or disposal was potentially dangerous and not adequately regulated under other environmental statutes. The House and Senate each passed bills in both the 92nd and 93rd Congresses (in 1972 and 1973, respectively), but controversies over the scope of chemical screening prior to commercial production and distribution, level of costs, and the relationship to other regulatory laws stalled final action. Episodes of environmental contamination—including contamination of the Hudson River and other waterways by PCBs, the threat of stratospheric ozone depletion from chlorofluorocarbon (CFC) emissions, and contamination of agricultural produce by polybrominated biphenyls (PBBs) in the state of Michigan—together with more exact estimates of the costs of imposing toxic substances controls, opened the way for final passage of the legislation. President Ford signed the TSCA into law on October 11, 1976. The original legislation included a single title, which has since been designated Title I.

TSCA (Title I) directs EPA to

- require manufactures and processors to conduct tests for existing chemicals if (1) their manufacture, distribution, processing, use, or disposal may present an unreasonable risk of injury to health or the environment; or they are to be produced in substantial quantities and the potential for environmental release or human exposure is substantial or significant; (2) existing data are insufficient to predict the effects of human exposure and environmental releases; and (3) testing is necessary to develop such data (§4);
- prevent future risks through pre-manufacture screening and regulatory tracking of new chemical products (§5);
- control unreasonable risks already known, including risks from polychlorinated biphenyls (PCBs), as well as risks for existing chemicals that may be discovered in the future (§6); and
- gather and disseminate information about chemical production, use, and possible adverse effects to human health and the environment (§8).

Authorization for appropriations for these activities and a state grant program for control of toxic substances in the environment expired on September 30, 1983, although appropriations for these programs have continued.

In October 2008, Congress amended TSCA Title I when it enacted the Mercury Export Ban Act of 2008 (P.L. 110-414). It prohibits certain activities with respect to elemental mercury.

Subsequently, five titles have been added to TSCA to address specific concerns—asbestos in 1986 (Title II, P.L. 99-519), radon in 1988 (Title III, P.L. 100-551), lead in 1992 (Title IV, P.L. 102-550), schools in 2007 (Title V, P.L. 110-140), and formaldehyde in 2010 (Title VI, P.L. 111-199). Title II directs EPA to set standards for asbestos mitigation in schools, and requires asbestos contractors to be trained and certified. Title III directs EPA to provide technical assistance to states that choose to support radon monitoring and control. Title IV provides similar assistance with respect to abatement of lead-based paint hazards. Title V addresses environmental issues at schools, including energy efficiency. Finally, Title VI establishes limits on emissions of formaldehyde from composite wood products.

Title I

Testing of Chemicals

Many chemicals, even some in widespread use, are not well characterized in terms of their potential health and environmental effects. One of the major goals of TSCA was to induce the development of test data by producers (i.e., manufacturers, importers, and processors) of chemicals in commerce. Section 4 of TSCA directs EPA to require the development of test data on existing chemicals when certain conditions prevail: (1) the manufacture, processing, distribution, use, or disposal of the chemical "may present an unreasonable risk;" or (2) the chemical is produced in very large volume and there is a potential for a substantial quantity to be released into the environment or for substantial or significant human exposure. Under either condition, EPA must issue a rule requiring tests if (a) existing data are insufficient to resolve the question of safety, and (b) testing is necessary to develop the data.

Because there were more than 55,000 chemicals in U.S. commerce at the time EPA was to begin developing test rules, Congress established a special interagency committee to help EPA determine which chemicals should be considered first, and to coordinate testing needs and efforts among government agencies. At least every six months the Interagency Testing Committee (ITC) must consider candidate chemicals for inclusion on a list of substances that the ITC recommends to EPA for development and promulgation of test rules. TSCA directs the ITC to "designate" a subset of chemicals on the list for EPA action within 12 months. The list can contain no more than 50 "designated" chemicals at any time. When a chemical is designated, EPA has one year to respond by issuing a proposed test rule or a notice explaining why no testing is needed.

TSCA requires the ITC to consider the following factors when it makes listing decisions: (1) quantity of the substance to be manufactured, (2) quantity of the chemical in environmental releases, (3) number of people who will be exposed occupationally and the duration of exposure, (4) extent of non-occupational human exposure, (5) similarity of the chemical to any other chemical known to present an unreasonable risk, (6) existence of data concerning environmental or health effects of the chemical, (7) the quantity of information to be gained by testing, and (8) the availability of facilities and personnel for performing testing. Chemicals known or suspected to cause or contribute to cancer, gene mutations, or birth defects are to be assigned a higher priority. In response to information that indicates "there may be a reasonable basis to conclude that a chemical ... presents or will present a significant risk of serious or widespread harm to human beings from cancer, gene mutations, or birth defects," TSCA requires EPA action to prevent or reduce that risk or publication of a finding that the risk is not unreasonable.

Pre-manufacture Notification for New Chemicals or Uses

TSCA (§5) requires manufacturers, importers, and processors to notify EPA at least 90 days prior to producing or otherwise introducing a new chemical product into the United States. Any information or test data that is known to, reasonably ascertainable by, or in possession of the notifier, and that might be useful to EPA in evaluating the chemical's potential adverse effects on human health or the environment, must be submitted to EPA at the same time. TSCA also requires EPA to be notified when there are plans to produce, process, or use an existing chemical in a way that differs from previously permitted uses, if the Administrator has determined by rule that new uses of the chemical may produce significant changes in human and environmental exposures and therefore require notification. The 90-day notice provides EPA with the opportunity to evaluate

the chemical use and, if necessary, to prohibit or limit such activity before it occurs to prevent unreasonable risk of injury to human health or the environment.

EPA has 45 days after notification (or up to 90 days if it extends the period for good cause) to evaluate the potential risk posed by the chemical. If EPA determines that there is a reasonable basis to conclude that the substance presents or will present an unreasonable risk, the Administrator must promulgate requirements to protect adequately against such risk. Alternatively, EPA may determine that the proposed activity related to a chemical does not present an unreasonable risk; this decision may be based on the available data, or, when no data exist to document the effects of exposure, on what is known about the effects of chemicals in commerce with similar chemical structures and used in similar ways.

The purpose of EPA's screening procedure is to identify potential hazards, and control them before use of a chemical becomes widespread. If data are inadequate to make an informed judgment and (1) manufacture, processing, distribution in commerce, use, or disposal may present an unreasonable risk; or (2) a chemical is to be produced in substantial quantities, and the potential for environmental release or human exposure is substantial or significant, EPA may issue a proposed order to prohibit or limit such activities until sufficient data are submitted.

Although the legislative history of TSCA includes a presumption that testing of new products would take place before they were widely used, either as the chemical was developed, or as its markets grew, TSCA also forbids promulgation of blanket testing requirements for all new chemicals. This reflects concern that uniform testing requirements might stifle innovation in the chemical industry. Thus, EPA must decide which chemicals, or which categories of chemicals, warrant the costs of pre-market testing. EPA reviews approximately 1,000 new chemical manufacturing notices annually.

Regulatory Controls for Hazardous Chemicals

TSCA requires EPA to regulate manufacturing, processing, distribution in commerce, use, or disposal of a chemical if it will present an unreasonable risk of injury to health or the environment, and the risk cannot be reduced to a sufficient degree under another federal law administered by EPA. The alternative means available to EPA for controlling chemical hazards that present unreasonable risks are specified in Section 6 of TSCA. EPA has the authority to

- prohibit or limit the amount of production or distribution of a substance in commerce;
- prohibit or limit the production or distribution of a substance for a particular use;
- limit the volume or concentration of the chemical produced;
- prohibit or regulate the manner or method of commercial use;
- require warning labels and/or instructions on containers or products;
- require notification of the risk of injury to distributors and, to the extent possible, consumers;
- require record-keeping by producers;
- specify disposal methods; and
- require replacement or repurchase of products already distributed.

EPA also may impose any of these requirements in combination or for a specific geographical region. However, EPA is required by TSCA to regulate only "to the extent necessary to protect

adequately" against a risk, and to use the "least burdensome" regulatory approach, even in controlling unreasonable risks.

Two chemical substances are directly addressed in Title I: PCBs and elemental mercury. TSCA directs EPA to regulate PCBs and to ban most uses. In addition, TSCA prohibits the sale, distribution, or transfer of elemental mercury by federal agencies.

Information Gathering

Section 8 of TSCA requires EPA to develop and maintain an inventory of all chemicals, or categories of chemicals, manufactured or processed in the United States. The first version of this inventory identified approximately 55,000 chemicals in commerce in 1979. All chemicals not on the inventory are, by definition, "new" and subject to the notification provisions of Section 5. These chemicals must be added to the inventory if they enter U.S. commerce. Chemicals need not be listed if they are only produced in very small quantities for purposes of experimentation or research.

To aid EPA in its duties under TSCA, the agency was granted considerable authority to collect information from industries. EPA may require maintenance of records and reporting of chemical identities, names, and molecular structures; categories of use; amounts manufactured and processed for each category of use; descriptions of byproducts resulting from manufacture, processing, use, and disposal; environmental and health effects; number of individuals exposed; number of employees exposed and the duration of exposure; and manner or method of chemical disposal.

Manufacturers, processors, and distributors of chemicals are required to maintain records of significant adverse reactions to health or the environment alleged to have been caused by a substance or mixture. Records of adverse effects on the health of employees must be retained for 30 years from the date of reporting. Industry also must submit lists and copies of health and safety studies. Studies showing adverse effects previously unknown must be submitted to EPA as soon as they are completed or discovered.

Imminent Hazards

Section 7 provides EPA authority to take emergency action through the district courts to control a chemical substance or mixture which presents an imminent and unreasonable risk of serious widespread injury to health or the environment.

Relation to Other Laws

Section 9 requires EPA to report cases of chemical risk to other federal agencies with the authority to prevent or reduce the risk. If the other agency determines that the activity does not present the risk described by EPA in its report, or initiates action under the law to protect against the risk, TSCA prohibits EPA from taking regulatory action with respect to such risk. For statutes under EPA's jurisdiction, TSCA gives the Administrator discretion to decide if a risk can best be handled under the authority of TSCA.

Enforcement and Judicial Review

Section 11 authorizes EPA to inspect any facilities subject to TSCA requirements and to issue subpoenas requiring attendance and testimony of witnesses, production of reports and documents,

answers to questions and other necessary information. Section 13 mandates TSCA enforcement at the national borders by the Department of the Treasury.

Section 15 identifies acts prohibited under TSCA, while Section 16 describes penalties for acts violating these prohibitions, as well as recourse available to anyone accused of such violations. Section 16 authorizes civil penalties, not to exceed \$25,000 per violation per day, and affords the defendant an opportunity to request a hearing before an order is issued and to petition for judicial review of an order after it is issued. Criminal penalties also are authorized for willful violations. Section 17 provides jurisdiction to U.S. district courts in civil actions to enforce TSCA Section 15 by restraining or compelling actions that violate or comply with it, respectively. Chemicals may be seized and condemned if their manufacture, processing, or distribution violated the act.

Section 19 authorizes any person to file a petition for judicial review of specified rules within 60 days of issuance under TSCA. The court is directed to set aside specified rules if they are not supported by substantial evidence in the rulemaking record taken as a whole.

Section 20 authorizes civil suits by any person against any person in violation of the act. It also authorizes suits against EPA to compel performance of nondiscretionary actions under TSCA. Section 21 provides the public with the right to petition for the issuance, amendment, or repeal of a rule requiring toxicity testing of a chemical, regulation of the chemical, or reporting.

Confidential Business Information

Section 14 provides broad protection of proprietary confidential information about chemicals in commerce. Disclosure by EPA employees of such information generally is not permitted, except to other federal employees, or when necessary to protect health or the environment. Data from health and safety studies of chemicals are not protected unless their disclosure would reveal a chemical process or chemical proportion in a mixture. Wrongful disclosure of confidential data by federal employees is prohibited, and may result in criminal penalties.

Chemical Categories

Section 26 allows EPA to impose regulatory controls on categories of chemicals, rather than on a case-by-case basis. However, EPA cannot regulate a group merely because it is composed of new chemical substances.

State Preemption

TSCA Section 18 preempts state actions that establish or continue in effect requirements applicable to a chemical substance or mixture that is regulated under TSCA Section 5 or 6, unless the state requirement is identical to the federal requirement, implements another federal law, or prohibits use of the substance or mixture within the state. However, a state may ask EPA to allow a state requirement that provides a significantly higher degree of protection from risk than does the federal requirement.

Other Provisions

TSCA Section 10 directs EPA to conduct and coordinate among federal agencies research, development, and monitoring that is necessary to the purposes of the act.

Section 12 excludes chemical products manufactured for export from TSCA requirements except for reporting and record keeping requirements in Section 8. In 2008, Congress excluded

elemental mercury from this exemption, banning its export beginning in 2013, with the exception of mercury contained in coal. Other exemptions for essential uses may be granted by rule.

Section 22 waives compliance when in the interest of national defense.

Section 23 provides protection of employees who assist in carrying out the provisions of the act (i.e., "whistle-blowers").

The potential effects of TSCA rules on employment must be monitored by EPA, according to Section 24.

Section 25 mandates study of the need for indemnification of people affected by federal laws administered by EPA and of the feasibility of establishing a standard classification system for chemical substances and of storing and retrieving information about them.

Section 26 authorizes data sharing and cooperative action to facilitate TSCA implementation between EPA and other federal agencies. It also authorizes collection of fees for EPA processing of data submitted in response to an order under Section 4 or 5. EPA is directed to establish an office to assist the regulated community. The agency also must establish a procedure to ensure disclosure of financial interests in the regulated community by EPA employees. Final orders issued under TSCA must contain a statement of basis and purpose. Finally, Section 26 established within EPA a new Assistant Administrator for Toxic Substances.

TSCA Section 27 authorizes research and development of test methods for chemicals by the Public Health Service in cooperation with EPA.

Grants to states are authorized by Section 28 to establish and operate programs to prevent or eliminate unreasonable risks to health or the environment.

Section 29 authorized appropriations through 1983.

An annual report is mandated by Section 30.

Title II (Asbestos in Buildings)

Growing public concern about the presence of potentially hazardous asbestos in buildings, especially in schools, led to congressional efforts to address this problem. Title II of TSCA, the Asbestos Hazard Emergency Response Act (AHERA), was enacted in 1986 (P.L. 99-519) and amended in July 1988 (P.L. 100-368). It required EPA to set standards by October 1987, for responding to the presence of asbestos in schools. The standards, set at levels adequate to protect public health and the environment, identify appropriate response actions that depend on the physical condition of asbestos. Schools, in turn, were required to inspect for asbestos-containing material, and to develop and implement a plan for managing any such material. Plans for managing asbestos were to be submitted by schools before May 1989, and implementation was to begin by July 1989. The law contains no deadlines for schools to complete implementation.

Title II requires asbestos contractors and analytical laboratories to be certified, and schools to use certified persons for abatement work. Training and accreditation requirements also apply to inspectors, contractors, and workers performing asbestos abatement work in all public and commercial buildings. EPA may award training grants to nonprofit organizations for asbestos health and safety programs. However, authorization of appropriations for this grant program expired September 30, 1995. Other Title II requirements (such as mandates that buildings be inspected for asbestos) have not been extended to non-school buildings.

To enforce requirements, TSCA authorizes EPA to take emergency action with respect to schools if school officials do not act to protect children. The act also authorizes citizen action with respect to asbestos-containing material in a school and to compel action by EPA, either through administrative petition or judicial action. Civil penalties not to exceed \$5,000 are authorized for violations such as failing to conduct an inspection or to develop a school management plan.

Concern about how schools would pay for required actions was addressed in separate legislation (the Asbestos School Hazard Abatement Act of 1984, or ASHAA, P.L. 98-377). It established a program offering grants and interest-free loans to schools with serious asbestos problems and demonstrated financial need. Although EPA for several years did not request funding for this program, Congress appropriated funds. Authorization of appropriations for this program expired September 30, 1995, and Congress has not appropriated funds since FY1993; a total of \$382 million in grant and loan funds were appropriated from FY1984 through FY1993. Repaid ASHAA loans are returned to an Asbestos Trust Fund, established in TSCA Title II, to become a dedicated source of revenues for future asbestos control projects.

Title III (Radon Programs)

In October 1988, Congress amended TSCA by adding Title III—Indoor Radon Abatement (15 U.S.C. 2661 *et seq.*, P.L. 100-551). The basic purpose of Title III is to provide financial and technical assistance to the states that choose to support radon monitoring and control; neither monitoring nor abatement of radon is required by the act.

Title III required EPA to update its pamphlet "A Citizen's Guide to Radon," to develop model construction standards and techniques for controlling radon levels within new buildings, and to provide technical assistance to states. EPA is to provide technical assistance by establishing an information clearinghouse; publishing public information materials; establishing a national database of radon levels detected, organized by state; providing information to professional organizations representing private firms involved in building design and construction; submitting to Congress a plan for providing financial and technical assistance to states; operating cooperative projects with states; conducting research to develop, test, and evaluate radon measurement methods and protocols; developing and demonstrating new methods of radon measurement and mitigation, including methods that are suitable for use in nonresidential child care facilities; operating a voluntary program to rate radon measurement and mitigation devices and methods and the effectiveness of private firms and individuals offering radon-related services; and designing and implementing training seminars. The proficiency rating program and certification for training programs collect fees for service, and therefore are meant to be self-supporting, but Congress authorized \$1.5 million to be appropriated to establish these programs. Congress authorized \$3 million to be appropriated for each of three years beginning in 1989 for the other provisions of Sections 303, 304, and 305.

A matching grant program was established for the purpose of assisting states in developing and implementing programs for radon assessment and mitigation. For this program, \$30 million was authorized to be appropriated over three years, with funds targeted to states or projects that made efforts to ensure adoption of EPA's model construction standards and techniques for new buildings; gave preference to low-income persons; or addressed serious and extensive radon contamination problems or had the potential to reduce risk or to develop innovative assessment techniques, mitigation measures, or management approaches.

Other sections of Title III require EPA to conduct a study to determine the extent of radon contamination in schools; identify and list areas of the United States with a high probability of having high levels of indoor radon; make grants or cooperative agreements to establish and

operate at least three regional radon training centers; and provide guidance to federal agencies on radon measurement, risk assessment, and remedial measures.

All authorizations for appropriations specific to this title expired September 30, 1991, although appropriations have continued.

Title IV (Lead Exposure Reduction)

The 102nd Congress added Title IV to TSCA when it enacted the Residential Lead-Based Paint Hazard Reduction Act of 1992 as Title X in the Housing and Community Development Act of 1992 (P.L. 102-550). TSCA Title IV aims to accelerate federal efforts to reduce risks to young children who daily are exposed to lead-based paint in their homes. In addition, it was intended to stimulate development of lead inspection and hazard abatement services in the private sector, while ensuring that the services provided and any products employed are reliable and effective in reducing risk. To these ends, Title IV directs EPA to

- promulgate definitions of lead-contaminated dust, lead-contaminated soil, and lead-based paint hazards;
- ensure that people engaged in detection and control of lead hazards are properly trained and that contractors are certified;
- publish requirements for the accreditation of training programs for workers;
- develop criteria to evaluate the effectiveness of commercial products used to detect or reduce risks associated with lead-based paint;
- establish protocols, criteria, and minimum performance standards for laboratory analysis of lead in paint films, soil, and dust;
- establish a program to certify laboratories as qualified to test substances for lead content; and
- publish and distribute to the public a list of certified or accredited environmental sampling laboratories.

Title IV explicitly applies these requirements to federal facilities and activities that may create a lead hazard.

In addition, Congress directed EPA to conduct a study of lead hazards due to renovation and remodeling activities that may incidentally disturb lead-based paint. EPA is required to promulgate guidelines for the renovation and remodeling of buildings or other structures when these activities might create a hazard.

Title IV directs EPA to establish a clearinghouse and hotline to distribute information about the hazards of lead-based paint, how to avoid exposure and reduce risk, and new technologies for removing or immobilizing lead-based paint. In addition, Congress mandated development of a lead hazard information pamphlet; public education and outreach activities for health professionals, the general public, homeowners, landlords, tenants, consumers of home improvement products, the residential real estate industry, and the home renovation industry; and information to be distributed by retailers of home improvement products to provide consumers with practical information related to the hazards of renovation where lead-based paint may be present.

Title IV authorizes states to propose programs to train and certify inspectors and contractors engaged in the detection or control of lead-based paint hazards. States also may develop the required informational pamphlets. TSCA requires EPA to promulgate a model state program that

may be adopted by any state. Congress gave EPA the authority to approve or disapprove authorization for state proposals and to provide grants for states to develop and implement authorized programs. A federal program must be established, administered, and enforced by EPA in each state without an authorized program.

The Department of Health and Human Services also has responsibilities under Title IV of TSCA. It mandates a study by the Centers for Disease Prevention and Control (CDC) and the National Institute for Environmental Health Sciences to determine the sources of lead exposure to children who have elevated lead levels in their bodies. The National Institute for Occupational Safety and Health is directed to study ways of reducing occupational exposure to lead during abatement activities.

The act established a rule-making docket to ensure the availability to the general public of all documents submitted to agencies that are relevant to regulatory decisions pursuant to this legislation. The docket is required to include the drafts of all proposed rules submitted by EPA to the President's Office of Management and Budget (OMB), written comments on the drafts, and written responses to comments. In addition, the agency must provide an explanation for any major change to a proposed rule that appears in the final rule, and such changes may not be made based on information not filed in the docket. Dockets are required to be established in each EPA regional office.

Congress authorized to be appropriated "such sums as may be necessary" for TSCA Title IV.

In addition to amending TSCA, Title X of the Housing and Community Development Act of 1992 authorized grants to states for risk assessments and lead-based paint removal and immobilization in private housing for low-income residents; establishing state training, certification, or accreditation programs for inspectors and abatement contractors; and research at the Department of Housing and Urban Development (HUD). Authorization for appropriations for these grants expired September 30, 1994, but appropriations have continued. Title X directed HUD to establish guidelines for federally supported work involving risk assessments, inspections, interim controls, and abatement of lead-based paint hazards. In addition, the National Institute for Occupational Safety and Health (NIOSH) was provided \$10 million for training people who remove or immobilize paint.

Title V (Reducing Risks in Schools)

At the end of 2007, the 110th Congress added a fifth title to TSCA, subtitled Healthy High-Performance Schools. Enacted as Title IV, Subtitle E (§461) of P.L. 110-140, the Energy Independence and Security Act of 2007, TSCA Title V authorizes EPA to establish a state grant program to provide technical assistance for EPA programs to schools and develop and implement state school environmental health programs. State programs must include standards for school building design, construction, and renovation, and identify ongoing school building environmental problems and recommended solutions. Environmental problems specifically mentioned in the law include "contaminants, hazardous substances, and pollutant emissions." EPA's authority to provide grants expires five years after the date of enactment.

Title V requires the EPA Administrator, in consultation with the Secretary of Education and the Secretary of Health and Human Services, to issue voluntary guidelines within 18 months of Title V enactment for selecting sites for schools (presumably new schools). The guidelines are to account for the "special vulnerability of children to hazardous substances or pollution exposures in any case in which the potential for contamination at a potential school site exists," modes of

transportation available to students and staff, efficient use of energy, and potential use of a school at the site as an emergency shelter.

Title V also requires the EPA Administrator, in consultation with the Secretary of Education and the Secretary of Health and Human Services, to issue voluntary guidelines within two years of enactment for developing and implementing state environmental health programs for schools. These guidelines must take into account the findings of federal initiatives established under "relevant federal law with respect to school facilities," including initiatives related to water and energy conservation authorized by Sections 431 through 441, and work related to highperformance green buildings authorized by Section 492 of P.L. 110-140. In particular, the guidelines must take into account "environmental problems, contaminants, hazardous substances, and pollutant emissions"; natural day lighting; ventilation; heating and cooling; moisture control and mold; maintenance, cleaning, and pest control; acoustics; and "other issues relating to the health, comfort, productivity, and performance of occupants of the school facilities." In addition, Title V requires that the guidelines provide "technical assistance on siting, design, management, and operation of school facilities"; collaborate with children's environmental health centers in school environmental investigations"; assist states and the public to better understand and improve the environmental health of children; and take into account "the special vulnerability of children in low-income and minority communities to exposures from contaminants, hazardous substances, and pollutant emissions."

Several provisions in Title V refer to entities established under other sections of the Energy Independence and Security Act of 2007 (P.L. 110-140). For example, Title V contains directives for the Federal Director of the Office of Federal High-Performance Green Buildings in the General Services Administration, which was created by Section 436(a). In addition, there is reference to the national high-performance green building clearinghouse established in Section 423(1) "to carry out public outreach to inform individuals and entities of the information and services [related to high-performance green buildings] available governmentwide." Title V requires the Federal Director to ensure, "to the maximum extent practicable," that the public clearinghouse "receives and makes available information on the exposure of children to environmental hazards in school facilities." The EPA Administrator is directed to prepare an annual report to Congress on activities carried out under Title V authority, and this report also must be made available to the public through the clearinghouse.

For the purposes of carrying out the provisions of Title V, Congress authorized appropriations of \$1.5 million annually through 2013.

Title VI (Limiting Formaldehyde Emissions)

In July 2010, Congress enacted the Formaldehyde Standards for Composite Wood Products Act (P.L. 111-199), adding a new Title VI to TSCA. The new title mandates specific formaldehyde emission standards for hardwood plywood, medium-density fiberboard, and particleboard that is sold, supplied, offered for sale, or manufactured in the United States. The standards are phased in over two years from enactment and are based on the voluntary national formaldehyde emissions standards established by ASTM International (formerly known as the American Society for Testing and Materials), method ASTM E-1333-96 (2002).

The standards apply to plywood, particleboard, and medium-density fiberboard in the form of an unfinished panel or incorporated into a finished good. Certain products are excluded, including many forms of lumber and panels used for outdoor applications, such as structural plywood, prefabricated wood I-joists, most windows, antiques or other previously owned goods, and composite wood products used inside automobiles, trucks, rail cars, boats, and aircraft.

EPA is required to promulgate regulations ensuring compliance with the emission standards and must include provisions relating to labeling, chain of custody requirements, sell-through provisions; ultra-low-emitting formaldehyde resins, finished goods, third-party testing and certification; auditing and reporting of third-party certifiers; recordkeeping; enforcement, laminated products; and exceptions for products and components containing "de minimis amounts" of composite wood products. The new law prohibits stockpiling of products manufactured before the effective date of the act for sale after that date. Also prohibited is any requirement for labeling products manufactured prior to the "designated date of manufacture."

P.L. 111-199 requires an annual report to Congress on the status of implementation and the extent to which relevant industries have achieved compliance. Finally, the act directs the Secretary of Housing and Urban Development to update regulations concerning formaldehyde emissions from composite wood in manufactured homes (24 Code of Federal Regulations 3280.308) to ensure that the standards established by TSCA Title VI are implemented.

Table 2. Major U.S. Code Sections, Toxic Substances Control Act (codified as 15 U.S.C. 2601-2692)

| 15 U.S.C. | Section Title | Toxic Substances Control Act (as amended) |
|--------------|---|---|
| Subchapter I | Control of Toxic Substances | |
| 2601 | Findings, policy and intent | § 2 |
| 2602 | Definitions | § 3 |
| 2603 | Testing of chemical substances and mixtures | § 4 |
| 2604 | Manufacturing and processing notices | § 5 |
| 2605 | Regulation of hazardous chemical substances and mixtures | § 6 |
| 2606 | Imminent hazards | §7 |
| 2607 | Reporting and retention of information | §8 |
| 2608 | Relationship to other federal laws | §9 |
| 2609 | Research, development, collection, dissemination, and utilization of data | §10 |
| 2610 | Inspections and subpoenas | §11 |
| 2611 | Exports | §12 |
| 2612 | Entry into customs territory of the United States | §13 |
| 2613 | Disclosure of data | §14 |
| 2614 | Prohibited acts | §15 |
| 2615 | Penalties | §16 |
| 2616 | Specific enforcement and seizure | §17 |
| 2617 | Preemption | §18 |
| 2618 | Judicial review | §19 |
| 2619 | Citizens' civil actions | §20 |
| 2620 | Citizens' petitions | §21 |
| 2621 | National defense waiver | §22 |
| 2622 | Employee protection | §23 |

| 15 U.S.C. | Section Title | Toxic Substances Control Act (as amended) |
|----------------|---|---|
| 2623 | Employment effects | §24 |
| 2624 | Studies | §25 |
| 2625 | Administration | §26 |
| 2626 | Development and evaluation of test methods | §27 |
| 2627 | State programs | §28 |
| 2628 | Authorization of appropriations | §29 |
| 2629 | Annual report | §30 |
| Subchapter II | Asbestos Hazard Emergency Response | |
| 2641 | Congressional findings and purpose | §20 I |
| 2642 | Definitions | §202 |
| 2643 | EPA regulations | §203 |
| 2644 | Requirements if EPA fails to promulgate regulations | §204 |
| 2645 | Submission to state Governor | §205 |
| 2646 | Contractor and laboratory accreditation | §206 |
| 2647 | Enforcement | §207 |
| 2648 | Emergency authority | §208 |
| 2649 | State and federal law | §209 |
| 2650 | Asbestos contractors and local educational agencies | §210 |
| 2651 | Public protection | §211 |
| 2652 | Asbestos ombudsman | §212 |
| 2653 | EPA study of asbestos-containing material in public buildings | §213 |
| 2654 | Transition rules | §214 |
| 2655 | Worker protection | §215 |
| 2656 | Training grants | §216 |
| Subchapter III | Indoor Radon Abatement | |
| 2661 | National goal | §30 I |
| 2662 | Definitions | §302 |
| 2663 | EPA's citizen guide | §303 |
| 2664 | Model construction standards and techniques | §304 |
| 2665 | Technical assistance to states for radon programs | §305 |
| 2666 | Grant assistance to states for radon programs | §306 |
| 2667 | Radon in schools | §307 |
| 2668 | Regional radon training centers | §308 |
| 2669 | Study of radon in federal buildings | §309 |

| 15 U.S.C. | Section Title | Toxic Substances Control Act (as amended) |
|---------------|---|---|
| 2670 | Regulations | §310 |
| 2671 | Additional authorizations | §311 |
| Subchapter IV | Lead Exposure Reduction | |
| 2681 | Definitions | §401 |
| 2682 | Lead-based paint activities training and certification | §402 |
| 2683 | Identification of dangerous levels of lead | §403 |
| 2684 | Authorized state programs | §404 |
| 2685 | Lead abatement and measurement | §405 |
| 2686 | Lead hazard information pamphlet | §406 |
| 2687 | Regulations | §407 |
| 2688 | Control of lead-based paint at federal facilities | §408 |
| 2689 | Prohibited acts | §409 |
| 2690 | Relationship to other federal law | §410 |
| 2691 | General provisions relating to administrative proceedings | §411 |
| 2692 | Authorization of appropriations | §412 |
| Subchapter V | Healthy High-Performance Schools | |
| 2695 | Grants for healthy school environments | §501 |
| 2695a | Model guidelines for siting of school facilities | §502 |
| 2695b | Public outreach | §503 |
| 2695c | Environmental health program | §504 |
| 2695d | Authorization of appropriations | §505 |
| Subchapter VI | Formaldehyde Standards for Composite Wood Products | |
| 2697 | Formaldehyde Standards | §601 |

Note: This table shows only the major code sections. For more detail and to determine when a section was added, the reader should consult the official printed version of the *U.S. Code*.

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