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TSCA: A Safety Professional's Comprehensive Overview

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Introduction

The 1970's were a time of environmental revolution in Washington, D.C. The decade began with the National Environmental Policy Act ("NEPA")[2] and the formation of the Environmental Protection Agency ("EPA"). Major amendments to existing statutes created what was to become the modern day implementations of the Clean Air Act ("CAA"), Clean Water Act ("CWA"), Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"), and Resource Conservation and Recovery Act ("RCRA"). The decade also saw the creation of the Endangered Species Act ("ESA") and Safe Drinking Water Act ("SDWA"). The 1970's ended with the creation of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA").[3] In the middle of this decade was the creation of the Toxic Substance and Control Act ("TSCA"). Unlike statutes like the CAA, CWA, and RCRA which deal with the waste or product from manufacturing or other processes, TSCA seeks to regulate chemicals when they first enter into the stream of commerce (i.e., when imported, manufactured, etc.). Since the original inception of TSCA in 1976, Congress has enacted five major amendments, each adding a new section to TSCA.

The original purpose of TSCA was to provide a mechanism for the development of data regarding the effect of chemical substances on the health and the environment and to provide the authority to regulate those chemical substances which present an unreasonable risk of injury to health or the environment.[4] When testifying regarding the need for TSCA, the EPA used as an example "fluorocarbons (Freons), bischloromethylether (BCME), polybrominated biphenyls (PBBs), and polychlorinated biphenyls (PCBs) as chemicals . . . present in the environment that 'point to the inadequacy of . . . approach to controlling toxic substances'." In 1975 it was estimated that 600 new chemical compounds were introduced annually for commercial use[5] and that current statutes did not provide protection to health or the environment.

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[1] Nothing herein should be construed to constitute legal counsel or to impart any rights upon any party. You are urged to seek competent local counsel when seeking to determine your duties and responsibilities under any statute, regulation, or any other agency or governmental action.

[2] Though named the National Environmental Policy Act of 1969, NEPA was enacted on January 1, 1970 and was the first of a long line of major environmental statutes and amendments to occur during this period of time.

[3] CERCLA was actually passed in 1980, though was the last of the major environmental statutes and amendments arising in the 1970's.

[4] 15 U.S.C. §2601(b) (2010).

[5] Press Release, Environmental Protection Agency, Quarles Testifies on the Need for Toxic Substances Act (July 10, 1975).

This paper provides an overview of TSCA and its implementing regulations. It is impossible for any paper of 10 or even 20 pages to provide a complete summary of all TSCA requirements[6] that are set forth in the hundreds of pages that comprise both the Act and the regulations. Rather it is the intent of this paper to provide EHS professionals with a comprehensive overview of the TSCA requirements to allow the understanding of what TSCA regulates, an overview of how it regulates, and where to find a complete explanation of the individual TSCA requirements. Note also that many provisions of TSCA allow the individual states to takeover implementation, and this is an additional avenue EHS Professionals must review when determining requirements.

The Elements of TSCA

Control of Toxic Substances[7]

Title 1 of TSCA, the Control of Toxic Substances, establishes requirements concerning the manufacture or processing of chemical substances and mixtures.[8] Section 4 of TSCA allows the EPA to establish a rule requiring testing where the EPA finds that manufacture, distribution in commerce, processing, use, or disposal of a chemical substance or mixture represents an unreasonable risk of injury to health or the environment, that there is insufficient data or experience upon which the effects can be determined, and that testing is necessary to develop such data.[9] The EPA is required to publish in the Federal Register whenever testing data under Section 4 is submitted.[10] The EPA has established regulations for the reimbursement of parties subject to a testing rule for the use of testing data from other parties.[11]

Section 5 of TSCA provides that any manufacturer of a new chemical substance or a manufacturer or processor of any chemical substance for which the EPA has determined is a significant new use must, at least 90 days before manufacturing or processing, provide the EPA notice.[12] The EPA must determine significant new uses based on projected volume, use changes, the type or form of exposure, use increases, the magnitude and duration of exposure, and anticipated manner of manufacturing, processing, distribution, and disposal.[13]

Section 6 of TSCA allows the EPA to apply, through rulemaking, requirements regarding the manufacture, processing, or distribution where the EPA finds that there is a reasonable basis

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[6] Where "TSCA" is utilized in this paper it refers to the Act as implemented by Congress. "TSCA regulations" or "regulations" are used to refer to the EPA's implementing regulations under TSCA. "Requirements" or "rules" are used to refer to the legal obligations or responsibilities that arise under either TSCA or the TSCA regulations.

[7] *See generally* http://www.epa.gov/lawsregs/topics/toxic.html. The EPA provides individual pages for many of the programs and topics they administer. Throughout this paper each section will provide the main EPA webpage where one exists.

[8] The terms manufacture, process, chemical substance, and mixture are given very broad definitions which, except for specific items, are generally intended to encompass all personnel involved with the import, purchase, processing, manufacture, etc. of items meeting the definition of a chemical substance. *See* 15 U.S.C. §2602 (2010). *See also* 40 C.F.R. §710.3 (2011).

[9] 15 U.S.C. §2603 (2010).

[10] 15 U.S.C. §2603(d) (2010).

[11] 40 C.F.R. §791 (2011).

[12] 15 U.S.C. §2604 (2010). These are referred to as pre-manufacture notices ("PMN"). *See* 40 C.F.R. §720 (2011).

[13] 40 C.F.R. §721 (2011). Currently identified significant new use uses for specific chemicals can be found at 40 C.F.R. 721, Subpart E (2011).

to conclude that the manufacture, processing, distribution in commerce, use, or disposal will present an unreasonable risk of injury to health or the environment. These requirements include such methods as prohibition of manufacturing, processing, or distribution; limiting the amount of manufacturing, processing, or distribution; prohibition of a certain use or a use exceeding a certain concentration; limiting the amount for a certain use; marking with clear and adequate warnings; and prohibiting or regulating specific commercial uses.[14]

For imminently hazardous chemicals,[15] Section 7 of TSCA allows the EPA to pursue a civil action for either seizure of an imminently hazardous chemical or for other temporary or permanent relief. Reliefs can include: notice to purchasers; public notice of risk; recall; replacement or repurchase; or any combination of these reliefs.[16]

Section 8 of TSCA allows the EPA to establish specific recordkeeping and reporting rules.[17] This section also requires the EPA to establish and maintain an inventory of each chemical substance which is manufactured or processed within the United States.[18] All manufacturers and processors are required to maintain records of significant adverse reactions for 30 years and records of other adverse reactions for 5 years; these records must be provided to the EPA upon request.[19] Where a manufacturer or processor obtains information "which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment shall immediately inform" the EPA.[20]

Polychlorinated Biphenyls[21]

TSCA required the EPA to prescribe methods for the disposal of polychlorinated biphenyls ("PCBs"), require PCBs to be clearly marked with adequate warnings and instructions, to prohibit the manufacture, process, or distribution of PCBs in commerce except in a totally enclosed manner, and to then prohibit the manufacture, processing and distribution of PCBs in total.[22] The implementing regulation provides categories of PCB concentration and assumptions that can be

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[14] 15 U.S.C. §2605(a) (2010).

[15] Imminently hazardous chemical is defined as presenting an imminent and unreasonable risk of serious or widespread injury to health or the environment if it can be shown that the manufacture, processing, distribution in commerce, use, or disposal is likely to result in injury to health or the environment before a rulemaking under TSCA §6 can be completed.

[16] 15 U.S.C. §2606 (2010).

[17] 15 U.S.C. §2607(a) (2010). *See also* 40 C.F.R. §704 (2011).

[18] 15 U.S.C. §2607(b) (2010). Formerly known as the Inventory Update Reporting ("IUR") rule this was recently amended and renamed to the Chemical Data Reporting ("CDR") rule. TSCA Inventory Update Reporting Modification; Chemical Data Reporting, 76 Fed. Reg. 50,816 (August 16, 2011) (to be codified at 40 C.F.R. pts. 704, 710 and 711). Among other changes this amendment codifies the requirement for reporting to be submitted electronically.

[19] 15 U.S.C. §2607(c) (2010).

[20] 15 U.S.C. §2607(e) (2010).

[21] *See generally* http://www.epa.gov/epawaste/hazard/tsd/pcbs/index.htm. It should be noted that the PCB regulations are generally considered to be one of the more complicated and confusing of the environmental regulations. EHS Professionals without experience with PCBs are cautioned to read not only the TSCA statute and regulations but to look at the large number of PCBs guidance documents issued by the EPA in order to adequately understand these requirements before attempting to implement. EHS Professionals should also be aware of the EPA's current review and proposed changes to these regulations.

[22] 15 U.S.C. §2605(e) (2010).

made in regards to PCB concentration for mineral oil-filled equipment, transformers, and capacitors.[23]

With limited exceptions, the regulations prohibit the use of any PCB or PCB Item[24] unless totally enclosed.[25] PCBs and PCB Items are required to be labeled/marked.[26] PCB disposal requirements are based upon the concentration of PCBs when removed from service or when sampled during service[27] and the form and location of the PCBs in the PCB Item[28] and the regulatory classification of the PCBs[29]. For example, PCB Remediation Waste[30] and PCB Bulk Product Waste[31] have individual disposal requirements. Cleanup verifications are based upon the method of PCB introduction or contamination and the nature of the remaining surface.[32] PCB Waste must be stored in accordance with the regulatory requirements and may be stored for up to one year from the time of removal from service (or determined to be waste).[33] Decontamination procedures and requirements are based upon the surface characteristics and source of PCB contamination.[34] For the remediation of spills the EPA has established a PCB Spill Cleanup Policy.[35] TSCA's PCB requirements do not provide any exclusion for disasters and EHS Professionals involved in emergency and incident response should plan accordingly.[36]

Though PCBs in solid materials such as caulk and paint are covered by the TSCA PCB regulations, the application of these regulations to such materials has proved difficult. The EPA has recently issued a proposed change which would allow surfaces contaminated with PCBs due to substances such as caulk or paint to be treated as a PCB Bulk Product Waste along with the existing PCB-containing caulk or paint.[37] The EPA's current interpretation is that the contaminated surfaces constitute a PCB Remediation Waste while the caulk or paint is a PCB Bulk Product Waste.[38] Additionally, the EPA is currently considering comments received under a prior Advance Notice of Proposed Rulemaking which includes consideration of use of 50 parts per million ("ppm") level for excluded PCB products; use of non-liquid PCBs; marking of PCB

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[23] 40 C.F.R. §§761.2-3 (2011).
[24] PCB Item is defined as "any PCB Article, PCB Article Container, PCB Container, PCB Equipment, or anything that deliberately or unintentionally contains or has as a part of it any PCB or PCBs". 40 C.F.R. §761.3 (2011).
[25] 40 C.F.R. §761.20(a) (2011). *See* 40 C.F.R. §761.30 (2011) for exemptions.
[26] 40 C.F.R. §761.40 (2011).
[27] This is unlike the common RCRA approach of sampling or classification after containerized as a waste.
[28] 40 C.F.R. §§761.50-60 (2011).
[29] *See generally* 40 C.F.R. §761.3 (2011).
[30] 40 C.F.R. §761.61 (2011).
[31] 40 C.F.R. §761.62 (2011).
[32] *See generally* 40 C.F.R. §§761.60-62 (2011).
[33] 40 C.F.R. §761.65 (2011). *See also* Environmental Protection Agency, Polychlorinated Biphenyl (PCB) Site Revitalization Guidance under the Toxic Substance Control Act (TSCA) (November 2005) *and* Environmental Protection Agency, Revisions to the PCB Q and A Manual (January 2009).
[34] 40 C.F.R. §761.79 (2011).
[35] 40 C.F.R. §§761.120-135 (2011).
[36] Environmental Protection Agency, Planning for Polychlorinated Biphenyl (PCB)-Containing Disaster Debris (June 2011).
[37] PCBs Bulk Product v. Remediation Waste, 77 Fed. Reg. 12,293 (proposed February 29, 2012) (to be codified at 40 C.F.R. 761).
[38] *See* http://www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/caulk/reinterpret.htm.

articles in use; use, distribution in commerce, marking, and storage for reuse of liquid PCBs; and use and distribution in commerce of PCBs in porous surfaces.[39]

Other Chemical Specific Regulations

Manufacturers, processors, and importers of microorganisms for commercial purposes are subject to reporting requirements under TSCA §5 along with the filing of Microbial Commercial Activity Notice ("MCAN").[40] Certain exemptions apply for research and develop activities[41], test marketing[42], or as listed by the EPA[43].

The EPA regulates under TSCA various metalworking fluids. This includes mixed mono and diamides of an organic acid[44], triethanolamine salt of a substituted organic acid[45], triethanolamine salt of tricarboxylic acid and tricarboxylic acid[46]. These regulations provide for specific warnings and limitations on the use of these chemical substances.

Also regulated under TSCA are various hexavalent chromium-based water treatment chemicals for use in air-conditioning and cooling systems. These regulations provide for specific labeling, recordkeeping, and reporting on the use of these chemical substances.[47]

The EPA regulates testing requirements for Dibenzo-Para-Dioxins/Dibenzofurans under TSCA §4.[48] Manufacturers and processors of certain chemical substances to submit test data, allegations of significant adverse reactions, health and safety studies, letters of intent to test and protocols for the analysis of chemical substances.[49]

Safe Chemicals Act of 2011[50]

Currently pending in Congressional Committee is the Safe Chemicals Act of 2011. This Act, if enacted, would provide the first major updating of the original purpose and body of TSCA. The Safe Chemicals Act includes the finding that despite the implementation of TSCA that people and the environment "are still exposed to thousands of chemicals whose safety has not been adequately reviewed and may harm health and the environment."[51] The Act's Congressional authors also found that "manufacturers and processors of chemicals should supply sufficient health and environmental information ***before*** distributing products in commerce".[52] In order to rectify these findings the Act would require the EPA to develop regulations that establish "minimum data sets" that must be submitted by each manufacturer and processor of a chemical substance.[53]

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[39] Polychlorinated Biphenyls (PCBs); Reassessment of Use Authorizations, 75 Fed. Reg. 17,645 (proposed April 7, 2010) (to be codified at 40 C.F.R. 761).
[40] 40 C.F.R. §725 (2011).
[41] 40 C.F.R. §§725.200-288 (2011).
[42] 40 C.F.R. §§725.300-370 (2011).
[43] 40 C.F.R. §725.400 (2011).
[44] 40 C.F.R. §747.115 (2011).
[45] 40 C.F.R. §747.195 (2011).
[46] 40 C.F.R. §747.200 (2011).
[47] 40 C.F.R. §749.68 (2011).
[48] 40 C.F.R. §766.1 (2011).
[49] *See* 40 C.F.R. §766.25 for the list of chemical substances affected.
[50] S.847, 112th Cong. (2011).
[51] S.847, 112th Cong. §3(3) (2011).
[52] S.847, 112th Cong. §3(8) (2011). *Emphasis added.*
[53] S.847, 112th Cong. §4 (2011).

Another significant change of the Act would be to require the EPA to establish a prioritization of chemical substances. Three priority classes would be established: Priority Class I) chemical substances requiring immediate risk management; Priority Class 2) Chemical Substances requiring safety standard determinations; and Priority Class 3) Chemical Substances requiring no immediate action. The EPA would be required to impose conditions on the manufacturing, processing, use and distribution of substances assigned to Priority Class 1. The manufacturers and processors of a chemical substance would bear the burden of proving that a chemical substance meets the applicable safety standards and to provide sufficient information to the EPA to determine that a chemical substance meets the applicable safety standards. The EPA would be provided significant authority to limit or place conditions upon the manufacture, use, or distribution of a chemical substance based upon their risk assessment and findings.[54]

The Act would also add new provisions to TSCA including requiring the EPA to take various actions to minimize the use of animals in the testing of chemical substances[55] and to "establish a program to create market incentives for the development of safer alternatives to existing chemical substances that reduce or avoid the use and generation of hazardous substances"[56].

How does TSCA compare to REACH?

While a discussion of the European Union's ("EU") Registration, Evaluation and Authorization of Chemicals ("REACH") legislation is outside the scope of this paper a brief discussion is warranted since it is this comparison that has led to the above proposed Safe Chemicals Act. Under TSCA companies are not required to develop information for either new or existing chemicals. Absent an EPA rulemaking companies are only required to submit any available data but not to develop health or environmental data. REACH generally requires that companies develop and provide health and environmental data.[57]

TSCA allows the EPA to impose restrictions or limitations on chemicals where the EPA can demonstrate that the chemical poses an unreasonable risk. In the first 30 years of TSCA the EPA only regulated five chemical classes under TSCA §6 due both to the required process of regulating and the lack of data necessary for the EPA to develop the necessary substantial evidence to regulate. REACH places the burden on chemical companies to ensure that the chemicals they produce do not adversely affect human health or the environment and to provide that information to the EU.[58]

TSCA does not directly address the testing of chemical substances on animals. EPA programs do encourage companies to consider other approaches of testing. REACH sets the

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[54] S.847, 112th Cong. §6 (2011).
[55] S.847, 112th Cong. §30 (2011).
[56] S.847, 112th Cong. §31 (2011).
[57] U.S. Gov't Accountability Office, GAO-07-825, Chemical Regulation: Comparison of U.S. and Recently Enacted European Union Approaches to Protect against the Risks of Toxic Chemicals 7 (2007).
[58] U.S. Gov't Accountability Office, GAO-07-825, Chemical Regulation: Comparison of U.S. and Recently Enacted European Union Approaches to Protect against the Risks of Toxic Chemicals 18-24 (2007).

principle that animal testing should be considered a last resort and encourages the sharing and joint submission of data.[59]

Asbestos Hazard Emergency Response[60]

TSCA was first modified by the Asbestos Hazard Emergency Response Act ("AHERA") of 1986[61]. In adding Title[62] II, Congress noted that the EPA's Asbestos in Schools Rule lacked: standards for the proper identification of asbestos-containing materials ("ACM"); appropriate response actions with respect to friable ACM; or a requirement that response actions be carried out in a safe and complete manner. Congress also identified that there was no uniform program for asbestos personnel accreditation, no requirements to utilize accredited personnel, and no federal standards regulating daily exposure to asbestos in public and commercial buildings. As such, AHERA provided that the EPA establish regulations requiring the inspection for ACM and implementation of appropriate response actions in school buildings, safe and complete periodic reinspections, and for the EPA to study the extent of the human health danger presented by asbestos in public and commercial buildings.

The initial implementation of AHERA solely regulated asbestos activities in schools.[63] The EPA's regulations implementing AHERA established requirements for: initial inspections; reinspections on a three year basis; routine periodic surveillance between inspections; development of management plans; assessing the condition and hazard presented by ACM; appropriate response actions; placement of warning labels and signage; sampling and analysis procedures; and recordkeeping. The AHERA regulations also provided an asbestos worker protection standard[64] and for the prohibition of certain asbestos-containing products.[65]

When AHERA was reauthorized by Congress, the training and accreditation requirements were extended to public and commercial buildings.[66] Persons inspecting for ACM or designing or conducting response actions for friable asbestos-containing materials must be trained and accredited in accordance with AHERA.[67] While the requirements for inspections, periodic surveillance, and management plans are not extended other than in schools, EHS professionals could consider them as a best management practice.

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[59] U.S. Gov't Accountability Office, GAO-07-825, Chemical Regulation: Comparison of U.S. and Recently Enacted European Union Approaches to Protect against the Risks of Toxic Chemicals 36 (2007).
[60] *See generally* http://www.epa.gov/asbestos/.
[61] Asbestos Hazard Emergency Response Act of 1986, Pub. L. No. 99-519.
[62] While the amendments to TSCA are generally referred to as "Titles" they are also referred to as "Subchapters" by some sources.
[63] Schools were considered to be from grades K-12. Due to the latency period of asbestos-related diseases this was considered the sensitive population.
[64] While OSHA has jurisdiction over worker protection the OSHA asbestos standards do not apply to government employees. This regulation provided worker protection rules to those government employees that were not covered under OSHA. *See* 40 C.F.R. Part 763, Subpart G.
[65] Certain friable ACM materials had previously been prohibited. This regulation established a phased approach toward the prohibition of manufacture, import, processing and distribution of ACM in the form of flooring felt, new uses of asbestos, commercial paper, corrugated paper, rollboard, and specialty paper. *See* 40 C.F.R. Part 763, Subpart I.
[66] Asbestos School Hazard Abatement Reauthorization Act of 1990, Pub. L. No. 101-637.
[67] 15 U.S.C. §2646(a) (2010).

Indoor Radon Abatement[68]

The Indoor Radon Abatement Act of 1988[69] added Title III of TSCA and established the national long-term goal that "air within buildings in the United States should be as free of radon as the ambient air outside of buildings."[70] The primary provisions of this Subchapter include: an updated version of the "A Citizen's Guide to Radon"[71] and future updates as necessary, the establishment of model construction standards and techniques, provide both technical and grant assistance to states, and provide funding to establish regional radon training centers. The Subchapter also required the EPA to undertake a study of radon in schools and to work with other federal agencies to conduct radon surveys in federal buildings.

While radon is often considered to be a consumer issue related to housing, schools are also considered to provide a significant potential for exposure, and even potentials for exposure from the workplace should be considered. While there are no regulatory mandates for radon testing or mitigation within this TSCA subchapter, EHS Professionals should be familiar with the potential/expected radon levels in the geographical areas they work and consider that information in both the placement and design of new sites and buildings, and in the EHS assessments of existing facilities.

Lead Exposure Reduction[72]

The Residential Lead-Based Paint Hazard Reduction Act of 1992[73] amended TSCA to add Title IV. This subchapter is primarily concerned with lead-based paint hazards in target housing[74] and public buildings but does define lead-based paint and lead-based paint hazards.[75] The EPA was required to establish programs on lead-based paint activities, including renovation and remediation, worker training, and contractor certification. The Act required Federal Agencies and Departments to identify and control lead-based paint hazards and to comply with all Federal, State, and local requirements regarding lead-based paint. The EPA was also required to provide the public with a lead hazard information pamphlet.

As required by TSCA, the EPA has enacted training programs for workers, a contractor certification program, and requirements of lead-safe work practices in renovation and remediation. Most recently in April 2008 the EPA issued the Renovation, Repair, and Painting Rule ("RRP").[76] While the EPA rules are only required for housing and certain public and commercial buildings[77], they do establish a system for worker training and contractor certification

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[68] *See generally* http://www.epa.gov/radon/.
[69] Indoor Radon Abatement Act of 1988, Pub. L. No. 100-551.
[70] 15 U.S.C. §2661 (2010).
[71] Environmental Protection Agency, A Citizen's Guide to Radon, *available at* http://www.epa.gov/radon/pubs/citguide.html.
[72] *See generally* http://www.epa.gov/lead/.
[73] Residential Lead-Based Paint Hazard Reduction Act of 1992, Pub. L. No. 102-550.
[74] Target housing is defined as "housing constructed prior to 1978 . . . ."
[75] Note that while OSHA's lead regulations regulate worker exposure to lead regardless of the source (or the concentration within the source) this amendment to TSCA only regulates lead-based paint "which means paint of other surface coatings that contain lead in excess of 1.0 milligrams per centimeter squared or 0.5 percent by weight". 15 U.S.C. §2682 (2010). *See also* 40 C.F.R. §745(2011).
[76] Available at http://www.epa.gov/lead/pubs/renovation.htm.
[77] TSCA and the corresponding regulations are intended for the protection of the population most sensitive to the affects of lead exposure, children less than six years of age. As such, RRP defines

which may be useful as guidance for EHS professionals working in facilities not covered by these rules. Additionally, these rules establish lead-safe work practices and procedures which could be extended to non-covered facilities or used as the basis for developing one's own safe work practices.

In May 2010 the EPA published an advance notice of proposed rulemaking announcing their intent to regulate the renovation, repair, and painting of public and commercial buildings.[78] The intent is to establish lead-safe work practices and other requirements for exterior renovations and to determine whether interior renovation, repair, and painting projects create lead-based paint hazards and to regulate where these hazards are created. While the comment period closed in July 2010, the EPA has not yet issued proposed rules.

Healthy High-Performance Schools[79]

While NEPA and the various state and local implementation of similar statutes require that municipal actions be evaluated for their environmental impact, these statutes do not provide standards or acceptable considerations for the siting or environmental health of facilities. The *Energy Independence and Security Act of 2007*[80] in December 2007 established Title V of TSCA to require that the EPA provide voluntary guidance in regards to these issues for one specific sensitive population, school children.[81] While many of the aspects of this Act are outside the scope of this paper, the evaluation and consideration of EHS considerations in site selection is in accordance with good EHS management.

The EPA's publication on school siting guidelines provides a summary for the screening of environmental, public health and safety hazards at both new and existing sites.[82] This screening includes existing structure environmental factors (lead paint, asbestos, PCBs, etc.), site factors (existing soil or groundwater contamination, soil vapor intrusion, radon, geological stability, etc.), and local factors (local air contaminant emission sources, emergency response requirements, agricultural operations, etc.). After the preliminary assessment, the guidelines provide information on conducting a comprehensive environmental review, developing and implementing remediation/mitigation measures, and establishing a long-term stewardship plan.

While many EHS professionals have experience with Phase I (i.e., All-Appropriate Inquiries) audits under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and subsequent Phase II investigations and Phase III remediation, this TSCA subchapter and corresponding EPA guidance provides very useful factors for consideration in decision making and planning (rather than the clean-up and liability considerations under CERCLA). While intended specifically for the use of schools this guidance provides elements that can be utilized by an EHS Professional when considering the placement of any new facility.

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child-occupied facilities as commercial and public buildings that are subject to the regulation based upon the frequency and length of visits by the sensitive population.

[78] Lead; Renovation, Repair, and Painting Program for Public and Commercial Buildings, 75 Fed. Reg. 24,848 (proposed May 6, 2010)(to be codified at 40 C.F.R. 745).

[79] *See generally* http://cfpub.epa.gov/schools/index.cfm.

[80] Energy Independence and Security Act of 2007, Pub. L. No. 110-140.

[81] This Act included a five-year sunset clause. The EPA's authority to fulfill the requirements of Title V is set to expire on December 19, 2012.

[82] Environmental Protection Agency, School Siting Guidelines 53 (2011).

Formaldehyde Standards for Composite Wood Products[83]

Though for years the hazards associated with formaldehyde exposure have been known, it was not until July 2010 that formaldehyde was officially added by Congress as Title VI of TSCA.[84] This newly enacted statute defines finished goods, hardwood plywood, laminated products, manufactured and modular homes, recreational vehicle, medium-density fiberboard, particleboard, no-added formaldehyde-based resin ("NAFB Resin"), and ultra low-emitting formaldehyde resin ("ULEF Resin").[85]

The statute provides acceptable emission standards for products made with either NAFB Resin or ULEF Resin. By 2013 the EPA is required to promulgate regulations to implement these statutory requirements and those regulations must be effective within 180 days of promulgation.[86] The regulations will include requirements for labeling, chain of custody, sell-through provisions[87], NAFB Resin, ULEF Resin, 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[88]. By July 1, 2013 the EPA must work with other departments and agencies to establish/revise import regulations to meet this subchapter.[89]

Summary

TSCA and its implementing regulations provide comprehensive requirements in regards to toxic chemicals not only to manufacturers and processors but also to end users. EHS professionals should understand TSCA applicability and become familiar with any applicable requirements and guidance prior to performing any tasks or services related to those chemical substances. While some TSCA requirements and guidance are only applicable to specific categories of facilities or exposures, these requirements can also provide useful guidance where TSCA compliance is not required.

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[83] *See generally* http://www.epa.gov/opptintr/chemtest/formaldehyde/index.html.
[84] Formaldehyde Standards for Composite Wood Products Act, Pub. L. No. 111-199.
[85] 15 U.S.C. §2697(a) (2010).
[86] 15 U.S.C. §2697(d)(1) (2010).
[87] The sell-through provisions will be based on a designated date of manufacture (which shall be no earlier than the effective date of the regulation) and not the date of sale and will provide that any inventory of composite wood products or finished goods manufactured before the designated date of manufacture will not be subject to these regulations. However, note that the statute prohibits the stockpiling of product to be sold after the effective date of the regulations. *See also* 15 U.S.C. §2697(d)(3) (2010).
[88] Note that the statute specifically precludes the EPA from providing exceptions to the emissions standards for these products. *See* 15 U.S.C. §2697(d)(2) (2010).
[89] 15 U.S.C. §2697(d)(4) (2010).

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