



Toxic Substances Control Act

Marcus Aguilar

Land Division

EPA Region 9

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Outline

- Background
- TSCA Reform
- New Requirements
- New Rules

What is TSCA?

- 1976 Toxic Substances Control Act
 - [15 USC Chapter 53 Subchapters I to VI](#)
 - Law to regulate the manufacture and use of chemicals
 - Prohibited the manufacture, process, or use of Polychlorinated Biphenyls (PCBs)
 - Established the Assistant Administrator for Toxics and the Office of Toxics at EPA
 - ~60,000 chemicals in commerce “grandfathered”
 - ~86,000 chemicals currently in commerce

History of TSCA

- Section 6 Prohibitions and limits
 - PCBs,
 - chlorofluorocarbons,
 - dioxin,
 - asbestos, and
 - hexavalent chromium.

History of TSCA (cont.)

- 1978 Love Canal, Niagara Falls, NY
- 1991 Asbestos ban was judicially overturned
- 2010 Deep Water Horizon oil well blowout, Gulf of Mexico
- 2014 4-methylcyclohexane methanol (MCHM) spill in Elk River, WV
- 1980-present States enacted a variety of toxics and consumer products laws
- 2010's National retailers banning chemicals in consumer products

TSCA Amendments and Reform

- Amendments
 - 1986 Asbestos Hazard Emergency Response Act
 - 1988 Radon Program Development Act
 - 1992 Residential Lead-Based Paint Hazard Reduction Act
 - 2007 Energy Independence and security Act, Subtitle E Healthy High-Performing Schools
 - 2008 Mercury Export Ban Act
 - 2010 Formaldehyde Standards for Composite Wood Products Act
- Reform
 - 2016 Frank R. Lautenberg Chemical Safety for the 21st Century Act

TSCA New Requirements

- Sec. 2 Definitions
- Sec. 4 Manufacturing and processing notices
- Sec. 5 Prioritization, risk evaluation, and regulation of chemical substances and mixtures
- Sec. 11 Exports
- Sec. 17 Preemption

TSCA New Requirements (cont.)

- **Sec. 2 Definitions**

- Conditions of use: “the circumstances, as determined by the Administrator, under which a chemical substance is intended, known, or reasonably foreseen to be manufactured, processed, distributed in commerce, used, or disposed of.”
- Guidance: “any significant written guidance of general applicability prepared by the Administrator.”
- Potentially exposed or susceptible subpopulation: “a group of individuals within the general population identified by the Administrator who, due to either greater susceptibility or greater exposure, may be at greater risk than the general population of adverse health effects from exposure to a chemical substance or mixture, such as infants, children, pregnant women, workers, or the elderly.”

TSCA New Requirements (cont.)

- **Sec. 4 Manufacturing and processing notices**
- New chemicals
 - ~1,000 per year
- Affirmative finding of five possible outcomes:
 - Presents an unreasonable risk
 - Insufficient information available
 - May present an unreasonable risk
 - Significant human or environmental exposure
 - Not likely to present an unreasonable risk

TSCA New Requirements (cont.)

- **Sec. 5 Prioritization, risk evaluation, and regulation of chemical substances and mixtures**
- Existing chemicals
 - ~86,000 on the market
- Risk based standard
 - No consideration of costs or other nonrisk factors
 - Risks must be mitigated
- Industry requested risk evaluations
- 10 Risk evaluations initiated in first year
- 20 Active risk evaluations by third year and going forward
- 3.5 years to complete risk evaluations

TSCA New Requirements (cont.)

- **Sec. 11 Exports**
- Exports of chemicals found to have an “unreasonable risk” are banned
- 2008 Mercury Export Ban Act
- Banned the export of elemental mercury, Hg_2
- Effective 2013
- Exception: OECD member nations with existing mercury waste management programs
- TSCA reform added 5 more mercury compounds to export ban
 - Mercury (I) chloride or calomel, Hg_2Cl_2
 - Mercury (II) oxide, HgO
 - Mercury (II) sulfate, HgSO_4
 - Mercury (II) nitrate, $\text{Hg}(\text{NO}_3)_2$
 - Mercury sulphide or cinnabar, HgS , and
- Any mercury compound that can be processed to regenerate or recover elemental mercury, as determined by rule by the Administrator.
- Petition: any person may petition the Administrator to add a mercury compound to the export prohibition list

TSCA New Requirements (cont.)

- **Sec. 17 Preemption**

- Existing state laws before April 22, 2016 are grandfathered
- Future state regulations can mirror, but not exceed, federal regulations and compliance and enforcement penalties
- State waivers: state regulations that deviate from EPA's regulations must apply for a waiver

TSCA New Rules

- **Sec. 5 prohibitions and bans**

- Degreaser

- Trichloroethylene (TCE)

- Vapor degreasing: “a cleaning process involving heating a solvent to produce a hot vapor which is then used to remove contaminants such as grease, oils, dust, and dirt from fabricated parts and other materials.”
 - Aerosol degreasing and spot cleaning

- Paint strippers

- Methylene chloride (MC)
 - N-methylpyrrolidone (NMP)

- Formaldehyde

- Sets formaldehyde emission standards for consumer products that mirror CARB standards
 - Composite wood products: laminate floors, particle board furniture, pre-fabricated mobile homes, etc.
 - Docket ID: [EPA-HQ-OPPT-2016-0461](#)

TSCA Initial 10 Risk Evaluations

- 1,4-Dioxane
 - Uses: solvent, adhesives, polishes, etc.
 - Docket ID: [EPA-HQ-OPPT-2016-0723](#)
- 1-Bromopropane
 - Uses: solvent, dry cleaning, aerosols for adhesives and cleaning, etc.
 - Docket ID: [EPA-HQ-OPPT-2016-0741](#)
- Asbestos
 - Uses: historical insulation, imported brake pads and building materials, etc.
 - Docket ID: [EPA-HQ-OPPT-2016-0736](#)
- Carbon Tetrachloride
 - Uses: historical dry cleaning and adhesives, limited chemical manufacturing and laboratory tests
 - Docket ID: [EPA-HQ-OPPT-2016-0733](#)
- Cyclic Aliphatic Bromide Cluster (HBCD)
 - Uses: flame retardant in construction insulation and textiles in automobiles
 - Docket ID: [EPA-HQ-OPPT-2016-0735](#)

TSCA Initial 10 Risk Evaluations (cont.)

- Methylene Chloride
 - Uses: paint stripper, paints, adhesives, cleaners, etc.
 - Docket ID: [EPA-HQ-OPPT-2016-0742](#)
- N-Methylpyrrolidone
 - Uses: paint stripper, paints, cleaners, adhesives, etc.
 - Docket ID: [EPA-HQ-OPPT-2016-0743](#)
- Pigment Violet 29
 - Uses: dye used in paints, plastics, paper, etc.
 - Docket ID: [EPA-HQ-OPPT-2016-0725](#)
- Trichloroethylene
 - Uses: degreaser, dry cleaning, adhesives, etc.
 - Docket ID: [EPA-HQ-OPPT-2016-0737](#)
- Tetrachloroethylene
 - Uses: dry cleaning, adhesives, etc.
 - Docket ID: [EPA-HQ-OPPT-2016-0732](#)

TSCA Procedural Rules

- Rules required by TSCA reform
- **June 2017:**
- Initial 10 risk evaluations
- Confidential Business Information (CBI)
- Fees
- Risk evaluation
- TSCA inventory active/inactive
- Prioritization
- **June 2018:**
- Mercury use
- **June 2019:**
- Byproducts
- Persistent, Bioaccumulative, and Toxic (PBT)
- More information available at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/frank-r-lautenberg-chemical-safety-21st-century-act-5>

Resources

- Regulations:
 - www.regulations.gov
- EPA Chemicals and Toxics:
 - <https://www.epa.gov/environmental-topics/chemicals-and-toxics-topics>
- EPA TSCA:
 - <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca>
- EPA TSCA Risk Evaluations:
 - <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/evaluating-risk-existing-chemicals-under-tsca>
- Marcus Aguilar
 - (415) 972-3428
 - aguilar.marcus@epa.gov



Questions?