



The New Occupational Safety and Health Legislation is...TSCA?

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Toxic Substances Control Act (TSCA)

October 11, 1976

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Toxic Substances Control Act (TSCA)

- Require testing, record-keeping, and issue restrictions;
- **Create an inventory** of chemicals and uses (83,000 chemicals);
 - *Existing chemicals and uses on the inventory “grandfathered;”*
- Pre-market notification (PMN) of new chemicals or new uses;
- Issue significant new use rules (SNURs) if use could result in exposure to or release of a substance of concern;
- Require compliance by manufacturers, distributors, importers; and
- Food, drugs, and cosmetics are excluded from coverage.

Frank R. Lautenberg Chemical Safety for the 21st Century Act

June 22, 2016



Frank R. Lautenberg

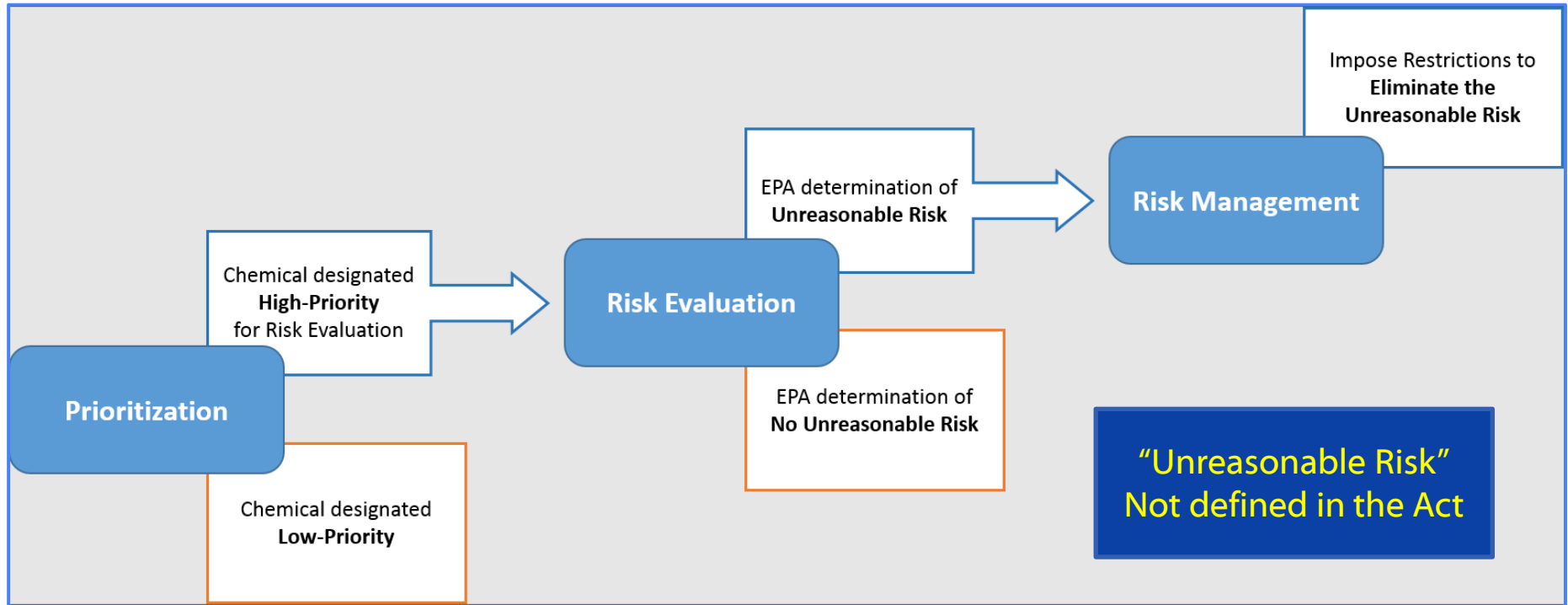
Chemical Safety for the 21st Century Act

- Modified TSCA - Examine both new and existing chemicals and uses:
 - Review the TSCA Inventory – which chemicals/uses are still in use;
 - Chemical prioritization: high/low priority;
 - Risk Evaluations:
 - High priority triggers deadlines for risk evaluation;
 - First 180 days: 10 ongoing risk evaluations;
 - Within 3.5 years: EPA must have 20 ongoing risk evaluations.
 - Risk Evaluation based on **unreasonable risk**:
 - Excludes consideration of cost or non-risk factors; and
 - Potentially Exposed or **Susceptible Subpopulations**

Potentially Exposed or Susceptible Subpopulations

“A group of individuals within the general population identified by the Administrator who, due to either great 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.”

How EPA Evaluates the Safety of Existing Chemicals



EPA's Options for Risk Management

- Prohibit, restrict, or regulate:
 - Manufacture;
 - processing ; or
 - Distribution.
- Establish an existing chemical exposure limit (ECEL);
- Require adequate minimum warnings;
- Require recordkeeping, monitoring, or testing;
- Prohibit or regulate manner or method of disposal.

New Chemicals or New Uses of Chemicals

- **NEW Requirement:** EPA must make an affirmative finding on the safety of a new chemical or significant new use of an existing chemical before it is allowed into the marketplace.
- If EPA finds “unreasonable risk” they can:
 - Prohibit or limit manufacture, or restrict its conditions of use;
 - Issue New Chemical Exposure Limit (NCEL);
 - 8-hour Time Weighted Averages, like OSHA PELs;
 - Prescribe performance criteria for sampling and analysis;
 - Require periodic monitoring;
 - Mandate respirators (if measured exposures are over NCEL); and
 - Prescribe recordkeeping requirements.

Existing Chemicals Undergoing Risk Evaluation

- Asbestos
 - Part 1: Chrysotile
 - Part 2: Other types
 - 1-bromopropane
 - Carbon tetrachloride
 - Pigment Violet 29
 - 1,4 – dioxane
 - Methylene chloride
 - Perchloroethylene
 - Trichloroethylene
 - p-dichlorobenzene
 - 1,2-dichloroethane
 - Dibutyl phthalate
 - Phthalic anhydride
 - Formaldehyde
- ... more*

EXAMPLE: Methylene Chloride

- **Environment:** EPA found *no unreasonable risks* to the environment from any conditions of use.
- **Consumers:** EPA found *unreasonable risks* to consumers from all consumer uses of methylene chloride.
- **Workers and Occupational Non-Users:** EPA found *unreasonable risks* to workers from most commercial uses of methylene chloride including workers nearby, but not in direct contact with methylene chloride (known as occupational non-users).
- **Industrial Use:** The following conditions of use of methylene chloride *do not present an unreasonable risk* of injury to health or the environment:
 - Manufacturing (Domestic Manufacture)
 - Processing, as a reactant
 - Distribution in commerce
 - As laboratory chemical
- Workers using methylene chloride products should continue to follow label instructions and applicable workplace regulations and should properly *use appropriate personal protective equipment*.

Risk Management (2019)

- Banned methylene chloride sold to consumers
- Permitted some workplace uses of methylene chloride

[Final Rule on Regulation of Methylene Chloride in Paint and Coating Removal for Consumer Use | US EPA](#)

Public Reaction...

- Methylene chloride has been widely used since the 1940s, with “**no evidence of risk to workers or other exposed individuals**” when workplace standards and other regulations are followed, says Faye Graul, executive director of the Halogenated Solvents Industry Alliance, which represents manufacturers of chlorinated solvents.
- Environmental groups claim that the risks of methylene chloride to workers are even greater than the EPA found because the agency **assumed that all workers would wear appropriate personal protective equipment.**

56

Minimum number of accidental exposure deaths—both occupational and non-occupational—linked to methylene chloride since 1980.



2,700

Estimated number of calls to poison control centers regarding methylene chloride from 2009 through 2013.

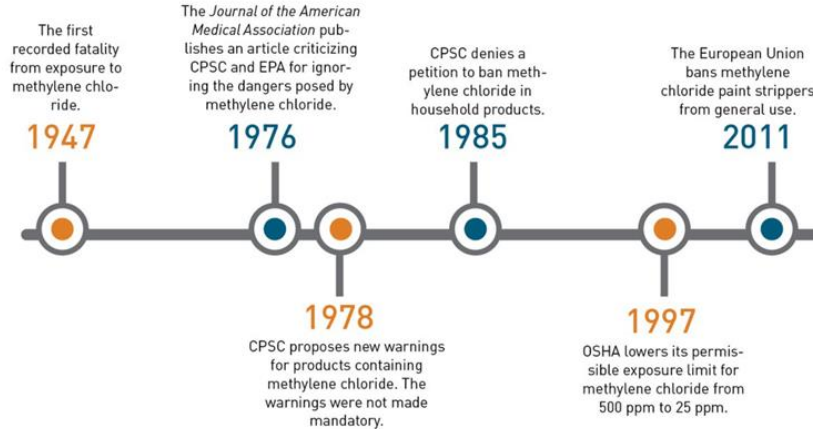
\$1,508

Fine imposed by Tennessee-OSHA on the employer of 18-year-old Jonathan Welch, who died in 1997 from exposure to methylene chloride while stripping furniture at work.



\$9,000

Estimated cost of engineering controls to fix the ventilation at the shop where Welch worked.



Source: The Synergist, November 2015

EPA is Hiring!



OUTREACH NOTICE

Industrial Hygienists/Chemical Engineers

The U. S. Environmental Protection Agency is seeking Industrial Hygienists and Chemical Engineers to conduct occupational exposure analyses as part of chemical risk evaluations for implementation of the Toxic Substance Control Act (TSCA).

The work is challenging and important! You will join a team of occupational exposure assessors with unique skills in evaluating occupational exposures to industrial chemicals, bringing your expertise and experience to enhance the TSCA program, while having the opportunity to engage in high priority risk evaluations.. You will be part of collaborative interdisciplinary team comprised of colleagues with expertise in biology, ecology, toxicology, ecotoxicology, industrial hygiene, chemical engineering, chemistry, environmental engineering, and more. Positions are located at EPA headquarters in Washington, DC and salaries range from the GS-11 level to the GS-13 level (see <https://www.opm.gov> for more information on salary and benefits).

Are you ready to make a real difference by assessing worker exposure to industrial chemicals? Do you want to apply the best available science to immediately feed into regulatory action?

What can YPSW-AIHA members do?

- Monitor EPA announcements and stay aware of the chemicals on the docket: [Chemicals Undergoing Risk Evaluation under TSCA | US EPA](#)
- Offer comments to EPA during the open comment periods, particularly on matters such as:
 - Exposure assessment methods;
 - Application of the hierarchy of controls;
 - How to assess the use of PPE in risk analysis;
- Respond to AIHA's call for volunteers to review EPA draft risk assessments and proposed risk management rules;
- Encourage young OSH professionals to consider the EPA's job announcement.



For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

