

The Creation and Amendments of the Toxic Substances Control Act of 1976

Frank Hearl

Hearl Environmental Consulting LLC
Frederick, Maryland USA

Yuma Pacific-Southwest Section (YPSW-AIHA)
51st Annual Meeting January 21-23, 2026

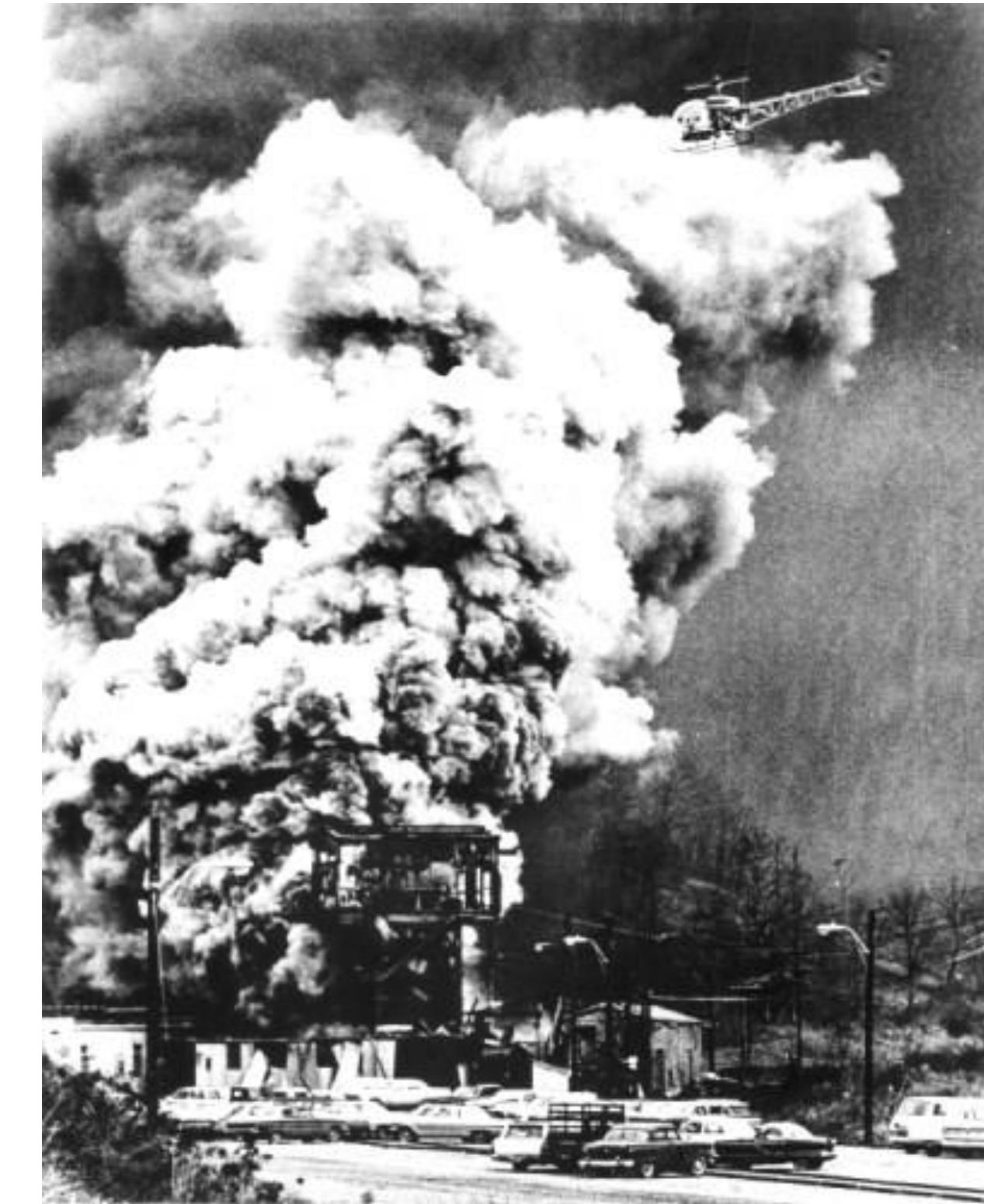
Outline

- Motivation for Action (usually a disaster of some sort)
- Toxic Substances Control Act (TSCA)
- European Union: Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- Frank Lautenberg Chemical Safety for the 21st Century Act
- What's Next?



Farmington Mine Disaster (1968)

- November 20, 1968
- 99 miners in the mine
- 21 were rescued, 78 died



Legislative Changes

- 1969 – **Coal Mine Safety and Health Act**
 - Mining Enforcement and Safety Administration
- 1970 – **Occupational Safety and Health Act**
 - National Institute for Occupational Safety and Health
 - Occupational Safety and Health Administration



President Richard Nixon signs the Occupational Safety and Health Act. December 29, 1970



Air pollution

Smog in Los Angeles



Highland Park Optimist Club wearing smog-gas masks at banquet, circa 1954



[Smog in Los Angeles - Wikimedia Commons](#)

Attribution: [UCLA Library](#)



#YPSW-AIHA

Water Pollution - Cuyahoga River Fire (1969)



["The River Caught Fire": The Cuyahoga River Fire of 1969 — Collaborative for Health & Environment](#)



#YPSW-AIHA

Environmental Legislation

- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) – 1947
- Federal Environmental Pesticide Control Act (FEPCA) - 1970
- Clean Air Act of 1970
 - National Ambient Air Quality Standards (NAAQS)
- National Environmental Policy Act (NEPA) - 1970
 - President's Council on Environmental Quality (CEQ)
 - Regulations to require Environmental Impact Statements (EIS)
- Clean Water Act – 1972
- Resource Conservation and Recovery Act (RCRA) – 1976
 - Solid Waste “Cradle to Grave”
 - Underground Storage Tanks (UST)



Toxic Chemicals Issues

- Bioaccumulation of persistent chemicals in waterways (PCBs)
- Lead-based paints
- Asbestos in construction and insulation
- Ozone layer destruction by chlorofluorocarbons (CFCs)

Polychlorinated Biphenyl (PCBs)



Council on Environmental Quality (CEQ) in its 1971 report, “Toxic Substances,” called for new legislation to control toxic substances



<https://www.acs.org/content/dam/acsorg/policy/acsonthehill/briefings/tscareform/crs-tsca-implementation-2008.pdf>



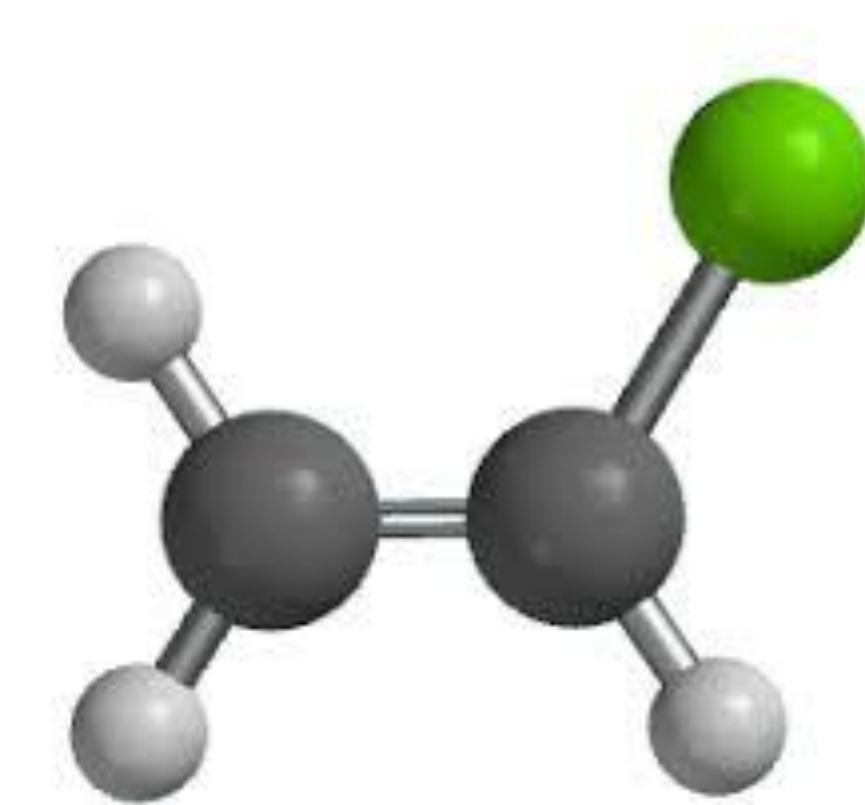
#YPSW-AIHA

Vinyl Chloride identified as carcinogen - 1974

WASHINGTON, May 7 (AP) — The United States Consumer Products Safety Commission served notice today that it **intended to ban use of vinyl chloride in most household aerosol sprays** because the chemical is considered a potential health hazard.

Vinyl chloride has been implicated in at least a dozen cases of a rare form of liver cancer among industrial workers and has been shown to cause various tumors in laboratory rats that were forced to inhale the chemical.

The commission said it was concerned “about home use of aerosol products containing vinyl chloride and seeks additional information about production, distribution and use patterns.”



ACGIH® TLV®: 200 ppm → 5 ppm → 1 ppm
Notation A1 – Human Carcinogen

[CPSC Issues Ban On Vinyl Chloride In Aerosols | CPSC.gov](http://CPSC.gov)



#YPSW-AIHA

Public Law 94-469
94th Congress

An Act

Oct. 11, 1976
[S. 3149]Toxic Substances
Control Act.
15 USC 2601
note.

Congress passes Toxic Substances Control Act, Sept. 28, 1976



President Gerald Ford signed the legislation.

To regulate commerce and protect human health and the environment by requiring testing and necessary use restrictions on certain chemical substances, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE AND TABLE OF CONTENTS.

This Act may be cited as the "Toxic Substances Control Act".

TABLE OF CONTENTS

- Sec. 1. Short title and table of contents.
- Sec. 2. Findings, policy, and intent.
- Sec. 3. Definitions.
- Sec. 4. Testing of chemical substances and mixtures.
- Sec. 5. Manufacturing and processing notices.
- Sec. 6. Regulation of hazardous chemical substances and mixtures.
- Sec. 7. Imminent hazards.
- Sec. 8. Reporting and retention of information.
- Sec. 9. Relationship to other Federal laws.
- Sec. 10. Research, development, collection, dissemination, and utilization of data.
- Sec. 11. Inspections and subpoenas.
- Sec. 12. Exports.
- Sec. 13. Entry into customs territory of the United States.
- Sec. 14. Disclosure of data.
- Sec. 15. Prohibited acts.
- Sec. 16. Penalties.
- Sec. 17. Specific enforcement and seizure.
- Sec. 18. Preemption.
- Sec. 19. Judicial review.
- Sec. 20. Citizens' civil actions.
- Sec. 21. Citizens' petitions.
- Sec. 22. National defense waiver.
- Sec. 23. Employee protection.
- Sec. 24. Employment effects.
- Sec. 25. Studies.
- Sec. 26. Administration of the Act.
- Sec. 27. Development and evaluation of test methods.
- Sec. 28. State programs.
- Sec. 29. Authorization for appropriations.
- Sec. 30. Annual report.
- Sec. 31. Effective date.

SEC. 2. FINDINGS, POLICY, AND INTENT.

(a) FINDINGS.—The Congress finds that—

(1) human beings and the environment are being exposed each year to a large number of chemical substances and mixtures;

(2) among the many chemical substances and mixtures which are constantly being developed and produced, there are some whose manufacture, processing, distribution in commerce, use, or disposal may present an unreasonable risk of injury to health or the environment; and

(3) the effective regulation of interstate commerce in such chemical substances and mixtures also necessitates the regulation of intrastate commerce in such chemical substances and mixtures.

(b) POLICY.—It is the policy of the United States that—

(1) adequate data should be developed with respect to the effect of chemical substances and mixtures on health and the environ-

15 USC 2601.



Public Law 94-469
94th Congress

An Act

Congress passes Toxic Substances Control Act, Sept. 28, 1976

To regulate commerce and protect human health and the environment by requiring testing and necessary use restrictions on certain chemical substances, and for other purposes.

Oct. 11, 1976
[S. 3149]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Toxic Substances Control Act

SEC. 2. FINDINGS, POLICY, AND INTENT.

(a) FINDINGS.—The Congress finds that—

(1) human beings and the environment are being exposed each year to a large number of chemical substances and mixtures;

(2) among the many chemical substances and mixtures which are constantly being developed and produced, there are some whose manufacture, processing, distribution in commerce, use, or disposal may present an unreasonable risk of injury to health or the environment; and

(3) the effective regulation of interstate commerce in such chemical substances and mixtures also necessitates the regulation of intrastate commerce in such chemical substances and mixtures.

15 USC 2601.

(1) human beings and the environment are being exposed each year to a large number of chemical substances and mixtures;

(2) among the many chemical substances and mixtures which are constantly being developed and produced, there are some whose manufacture, processing, distribution in commerce, use, or disposal may present an unreasonable risk of injury to health or the environment; and

(3) the effective regulation of interstate commerce in such chemical substances and mixtures also necessitates the regulation of intrastate commerce in such chemical substances and mixtures.

(b) Policy.—It is the policy of the United States that—

(1) adequate data should be developed with respect to the effect of chemical substances and mixtures on health and the environ-

President Gerald Ford signed the legislation.



#YPSW-AIHA

Exclusions

- Pesticides as defined in FIFRA
- Tobacco or any tobacco products
- Source material (radionuclides) defined in the Atomic Energy Act
- Food, drugs, cosmetics, and devices defined in Food Drug and Cosmetic Act (FDCA)
- Meat and meat food products, eggs and egg products defined by the Federal Meat Inspection Act and Egg Products Inspection Act.

“Grandfathered chemicals”:

- Any chemical already used in commerce is presumed to be “safe”
- TSCA Section 8 (b) – Inventory of substances and uses



Basic Elements of TSCA

Section 4

Testing of Chemical Substances and Mixtures

- If the Administrator finds:
 - Unreasonable risk
 - Insufficient data
- Require testing of new chemicals

Burden is on EPA

Section 5:

Manufacturing and Processing Notices

- Pre-manufacture Notice (PMN) for chemicals not on **Section 8 (b) list**
- Report Significant New Use Notice (SNUN)
- Manufacturers to submit test data if required by EPA

Section 6:

Regulation of Hazardous Chemicals and Mixtures

PUBLIC LAW 94-469—OCT. 11, 1976

90 STAT. 2003

Public Law 94-469
94th Congress

An Act

To regulate commerce and protect human health and the environment by requiring testing and necessary use restrictions on certain chemical substances, and for other purposes.

Oct. 11, 1976
[S. 3149]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE AND TABLE OF CONTENTS.

This Act may be cited as the "Toxic Substances Control Act".

Toxic Substances Control Act.
15 USC 2601 note.

TABLE OF CONTENTS

- Sec. 1. Short title and table of contents.
- Sec. 2. Findings, policy, and intent.
- Sec. 3. Definitions.
- Sec. 4. Testing of chemical substances and mixtures.
- Sec. 5. Manufacturing and processing notices.
- Sec. 6. Regulation of hazardous chemical substances and mixtures.
- Sec. 7. Imminent hazards.
- Sec. 8. Reporting and retention of information.
- Sec. 9. Relationship to other Federal laws.
- Sec. 10. Research, development, collection, dissemination, and utilization of data.
- Sec. 11. Inspections and subpoenas.
- Sec. 12. Exports.
- Sec. 13. Entry into customs territory of the United States.
- Sec. 14. Disclosure of data.
- Sec. 15. Prohibited acts.
- Sec. 16. Penalties.
- Sec. 17. Specific enforcement and seizure.
- Sec. 18. Preemption.
- Sec. 19. Judicial review.
- Sec. 20. Citizens' civil actions.
- Sec. 21. Citizens' petitions.
- Sec. 22. National defense waiver.
- Sec. 23. Employee protection.
- Sec. 24. Employment effects.
- Sec. 25. Studies.
- Sec. 26. Administration of the Act.
- Sec. 27. Development and evaluation of test methods.
- Sec. 28. State programs.
- Sec. 29. Authorization for appropriations.
- Sec. 30. Annual report.
- Sec. 31. Effective date.

SEC. 2. FINDINGS, POLICY, AND INTENT.

- (a) FINDINGS.—The Congress finds that—
 - (1) human beings and the environment are being exposed each year to a large number of chemical substances and mixtures;
 - (2) among the many chemical substances and mixtures which are constantly being developed and produced, there are some whose manufacture, processing, distribution in commerce, use, or disposal may present an unreasonable risk of injury to health or the environment; and
 - (3) the effective regulation of interstate commerce in such chemical substances and mixtures also necessitates the regulation of intrastate commerce in such chemical substances and mixtures.
- (b) POLICY.—It is the policy of the United States that—
 - (1) adequate data should be developed with respect to the effect of chemical substances and mixtures on health and the environ-

15 USC 2601.



Section 6: Regulation of Hazardous Chemicals and Mixtures

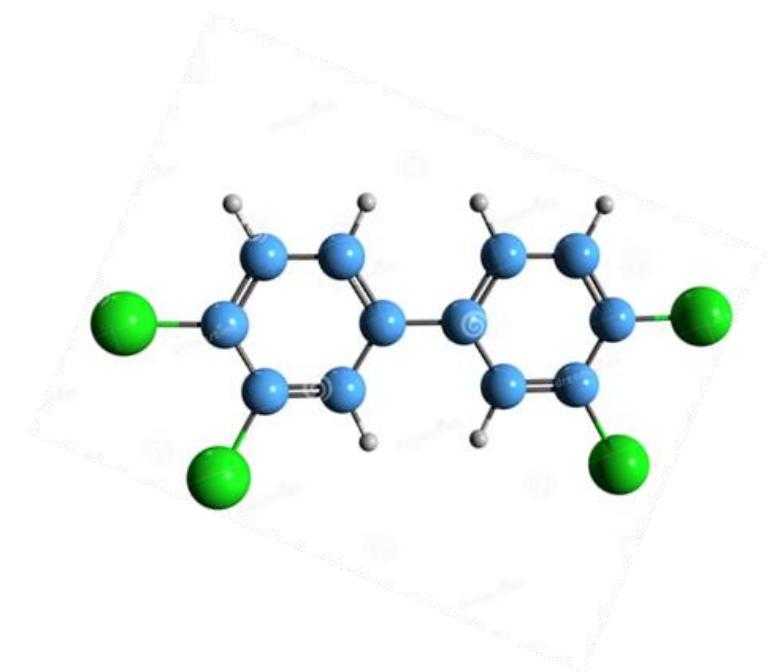
If the Administrator finds that a new chemical or significant new use poses an *unreasonable risk* of injury to health or the environment:

- Prohibit the manufacture, processing, distribution, or use
- Limit the amount of such substance or mixture for:
 - i) Particular new use
 - ii) Use at a concentration over a limit specified by rule
- Require clear and adequate warnings for use and disposal
- Require recordkeeping

Burden is on the EPA



Section 6 (e): Polychlorinated Biphenyls



- Prescribe methods for disposal
- Require clear markings
- Authorize use in “totally enclosed” manner
- From the *Effective Date of this Act*:
 - No person may manufacture PCBs after two years,
 - No person may process or distribute in commerce after 2.5 years.



How effective was the 1976 TSCA?

- The Section 8(b) Inventory listed 62,000 chemicals
- Presently there are about 84,000 chemicals on the Inventory
- EPA required testing for approximately 200 chemicals
- EPA *banned* 5 substances since TSCA was enacted:
 - PCBs ← *Mandated by Section 6(e) in the Act*
 - CFCs
 - Dioxin
 - Asbestos
 - Hexavalent Chromium

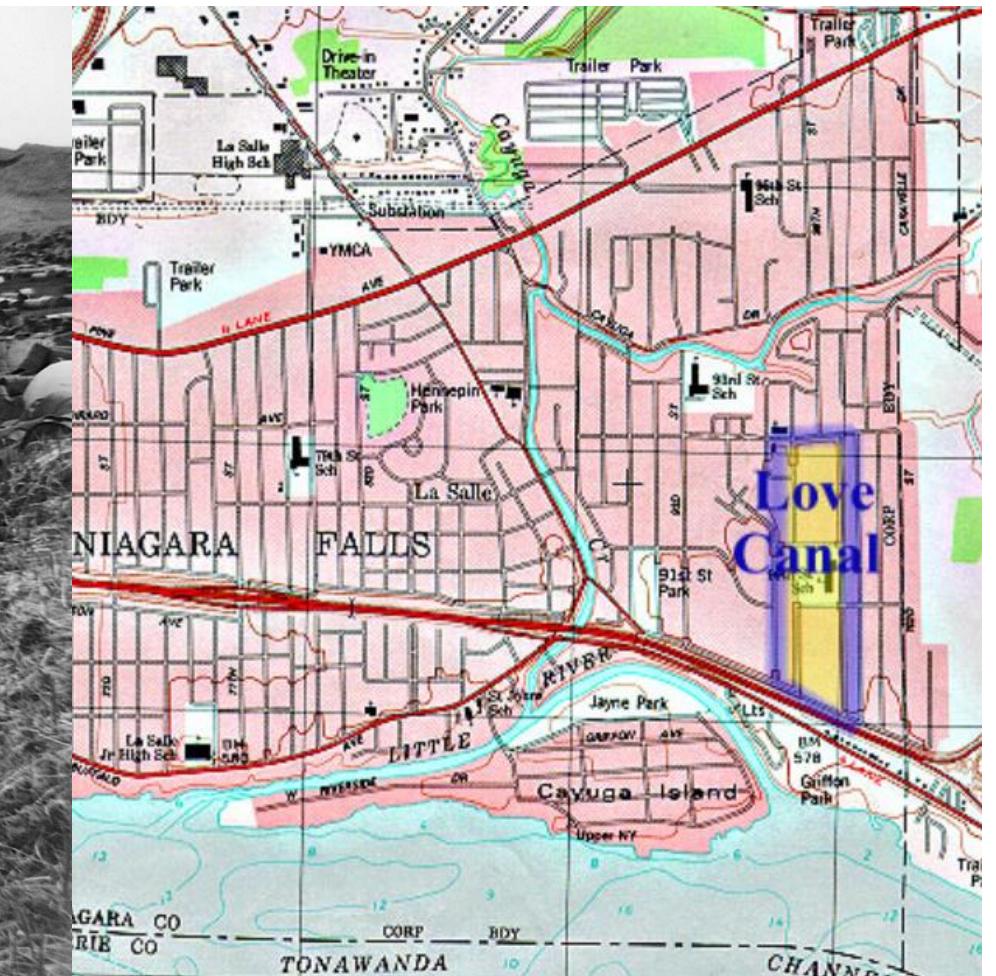
[GAO-06-1032T Chemical Regulation: Actions are Needed to Improve the Effectiveness of EPA's Chemical Review Program](#)



#YPSW-AIHA

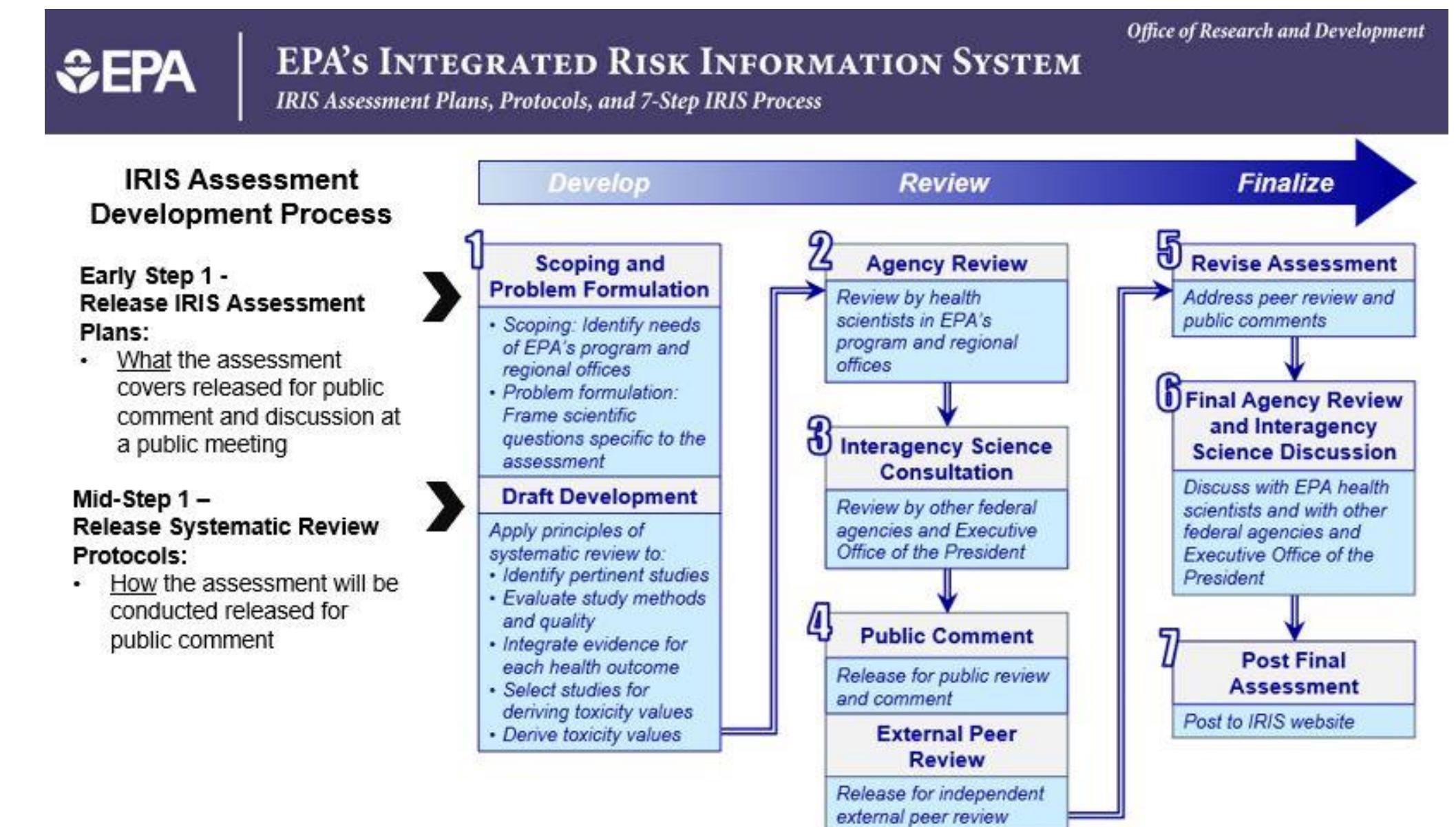
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - 1980

- Established rules for closed and abandoned hazardous waste sites
- Liability of persons responsible
- Trust fund “**Superfund**” to provide for cleanup



Integrated Risk Assessment System (IRIS) - 1985

- EPA's **Office of Research and Development (ORD)**
- IRIS Database for environmental chemicals – consistency across EPA
- Evolved process:
 - Created 1985
 - Publicly available 1987
 - Uploaded to the Internet in 1997
 - Interagency and peer review in 2004
- Recommends
 - Reference Dose, RfD
 - Reference Concentration, RfC
 - Inhalation Unit Risk, IUR



[Integrated Risk Information System | US EPA](#)



#YPSW-AIHA



Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)



European
Union

Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

Enacted 2006, effective June 1, 2007

- Burden of proof on the manufacturers of chemicals
- Companies must identify and manage risks of chemicals they manufacture or market in the EU
- Companies must demonstrate to the European Chemicals Agency (ECHA) how the substance can be used safely
- Must communicate risk management measures to users

Source: [Understanding REACH – ECHA](#)



#YPSW-AIHA

How REACH works

- ECHA receives registrations from companies
 - Companies submit a **dossier** on the chemical or substance
 - Multiple companies can collaborate developing the dossier
- EU Member states can evaluate and request clarifications
- Risk is assessed by ECHA scientific committees
- Based on evaluation, the ECHA may:
 - Permit the use
 - Ban the chemical
 - Restrict use
- Manufacturers outside EU are not bound by REACH, however importers or EU-based representatives must meet the requirements for use within the EU



Current Status

- Approximately 143,000 substances were pre-registered by the 2008 deadline
- Over 21,000 chemicals have since been registered by REACH as of 2025
- There are 250 chemicals listed the category:
“Substances of Very High Concern” (SVHCs)
- There are 235 chemicals on the “Restricted” list:
[Substances restricted under REACH - ECHA](#)



Examples of “Restricted Chemicals”



ANNEX XVII TO REACH – Conditions of restriction

Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Entry 1

Polychlorinated terphenyls (PCTs)

Conditions of restriction

Shall not be placed on the market, or used:

- as substances,
- in mixtures, including waste oils, or in equipment, in concentrations greater than 50 mg/kg (0,005 % by weight).

[ECHA - PDF of Restrictions for PCTs](#)



#YPSW-AIHA

Examples of “Restricted Chemicals”



ANNEX XVII TO REACH – Conditions of restriction

Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Entry 6

Asbestos fibres

Conditions of restriction

1. The manufacture, placing on the market and use of these fibres and of articles and mixtures containing these fibres added intentionally is prohibited.

However, if the use of diaphragms containing chrysotile for electrolysis installations in use on 13 July 2016 had been exempted by a Member State in accordance with the version of this paragraph in force until that date, the first subparagraph shall not apply until 1 July 2025 to the use in those installations of such diaphragms or of chrysotile used exclusively in the maintenance of such diaphragms, provided that such use is carried out in compliance with the conditions of a permit set in accordance with Directive 2010/75/EU of the European

[ECHA - Restriction PDF for Asbestos Fibers](#)



#YPSW-AIHA



2016 TSCA Amendments

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

“The Frank R. Lautenberg Chemical Safety for the 21st Century Act will make it easier for the EPA **to review chemicals that are already on the market** as well as the new chemicals our scientists and businesses design.”

- President Barak Obama

"The Frank R. Lautenberg Chemical Safety for the 21st Century Act is a historic **bipartisan achievement** at a time when such achievements are increasingly rare. It is the first major environmental law passed since 1990. Under it, chemical evaluation and regulation will meet new 21st century standards, **which will improve the lives of American families, support American manufacturing and bolster U.S. economic growth.**

- Cal Dooley
President & CEO,
American Chemistry Council



Frank R. Lautenberg Chemical Safety for the 21st Century Act (TSCA Amendments)

Words added to Section Title

Section 6 –

Prioritization, risk evaluation, and regulation of chemical substances and mixtures:

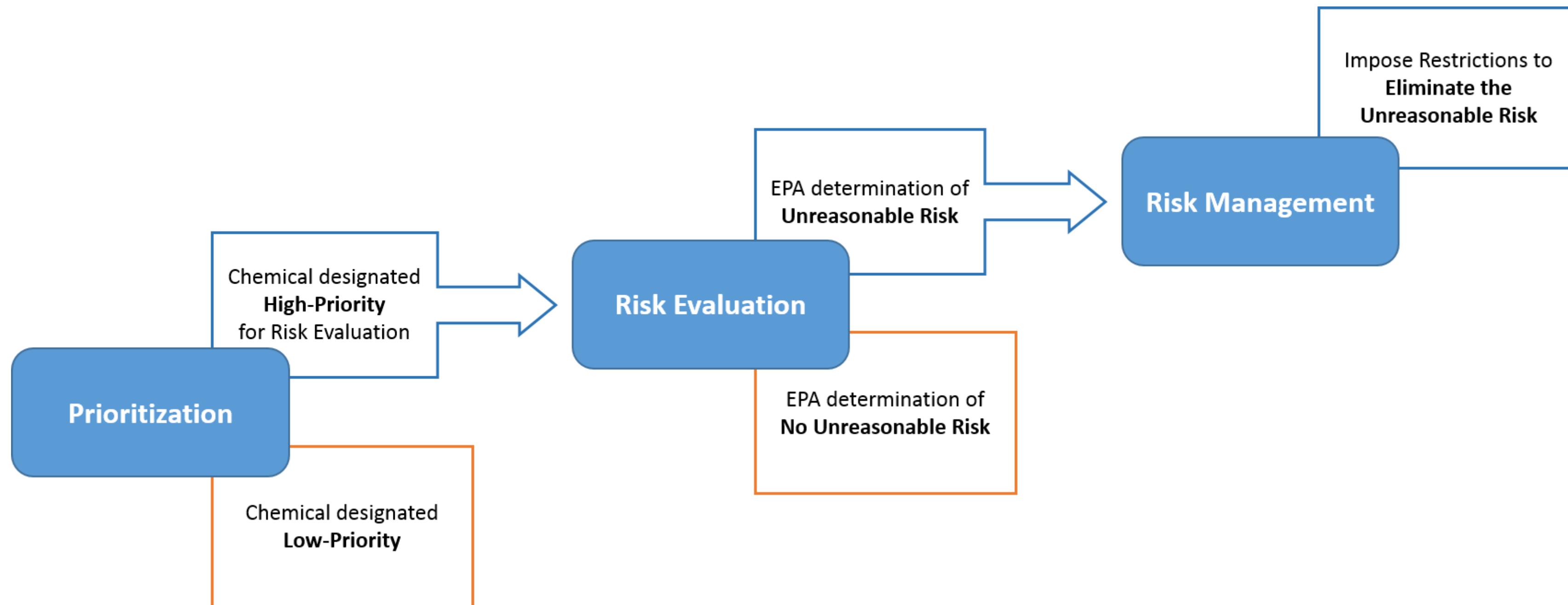
- Prioritization: substances with high or low priority
- Within 3.5 years: EPA must have 20 ongoing risk evaluations
- Must complete risk evaluations not later than 3 years after the date on which the Administrator initiates the risk evaluation.



Section 6 (b)(2)(C)

The Administrator shall continue to designate priority substances and conduct risk evaluations in accordance with this subsection at a pace consistent with the ability of the Administrator to complete risk evaluations in accordance with the deadlines under paragraph (4)(G).





Risk Evaluations for Existing Chemicals under TSCA | US EPA



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

15 U.S. Code § 2602 – Definitions - *inserted text: Sec 3 (12)*

(12) The term “potentially exposed or susceptible subpopulation” means 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.



Risk Evaluation: EPA vs. OSHA

TSCA

- **Presents Unreasonable Risk**
 - Public health
 - Environment
 - Potentially exposed or sensitive subpopulations *including workers*
- **Without consideration of costs or other nonrisk factors**

OSH Act

- **Reasonably Necessary**
 - 1 in 1,000 risk: “significant”
 - 1 in billion risk: “clearly not significant”
 - Quantitative risk assessment
- **Feasibility**
 - Technical feasibility
 - Economic feasibility
 - Cost-benefit not used to set OEL

At the OSHA PEL to the 0.1 f/cc level estimated to pose a lifetime risk of death from asbestos related cancer of **3.4 per 1,000 workers** and a 20-year exposure risk of **2.3 per 1,000 workers**.

Source: [Asbestos Standard Interpretation | OSHA \(1999\)](#)



#YPSW-AIHA

Risk Management: EPA vs. OSHA

TSCA

- **Prohibit, restrict, or regulate:**
 - Manufacture
 - Processing
 - Distribution
- Establish existing chemical exposure limit (ECEL)
- **Can Regulate:**
 - Recordkeeping, monitoring, testing
 - Prohibit or regulate disposal

OSH Act

- **Permissible Exposure Limits (PELs)**
- **Standards can include:**
 - Hazard communication, training
 - Monitoring requirements
 - Recordkeeping
 - PPE
- **Limits not set by cost-benefit**
- **Feasibility analysis required**



What's Next?





FEDERAL REGISTER

The Daily Journal of the United States Government



Rule

Removal of National Environmental Policy Act Implementing Regulations

A Rule by the Council on Environmental Quality on 02/25/2025



⚠ This document was corrected by a document published on 03/05/2025

[VIEW CORRECTION](#)

SUMMARY:

This interim final rule removes the Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA) from the Code of Federal Regulations. In addition, this interim final rule requests comments on this action and related matters to inform CEQ's decision making.

Contents

- Related Documents
- Public Comments
- Regulations.gov Data
- Sharing
- Print
- Document Statistics

Council on Environmental Quality.

ACTION:

Interim final rule; request for comments.

SUMMARY:

This interim final rule removes the Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA) from the Code of Federal Regulations. In addition, this interim final rule requests comments on this action and related matters to inform CEQ's decision making.

DATES:

This interim rule is effective April 11, 2025. Comments are due by March 27, 2025.



#YPSW-AIHA

EPA Announces Reduction in Force, Reorganization Efforts to Save Taxpayers Nearly Three-Quarters of a Billion Dollars

July 18, 2025

Contact Information

EPA Press Office (press@epa.gov)

WASHINGTON – Today, U.S. Environmental Protection Agency (EPA) announced a reduction in force (RIF) as the agency continues its comprehensive restructuring efforts. With organizational improvements, EPA is delivering **\$748.8 million** in savings.

The RIF will impact the Office of Research and Development. EPA previously announced the extensive enhancement of scientific expertise and research efforts within program offices to tackle statutory obligations and mission essential functions. This included the



Integrated Risk Information System

[EPA Announces Reduction in Force, Reorganization Efforts to Save Taxpayers Nearly Three-Quarters of a Billion Dollars | US EPA](#)



#YPSW-AIHA

Administration Initiatives, 2025 and beyond

- Reevaluation of the risk evaluation framework rule
 - 40 CFR Part 702 – Subpart B
- EPA requested the courts to hold cases in abeyance pending administrative review of these risk management rules:
 - **Asbestos** - Texas Chemical Council v. EPA, No. 24-60193 (5th Cir.).
 - **Methylene chloride** - East Fork Enterprises, Inc. v. EPA, No. 24-60227 (5th Cir.)
 - **Perchloroethylene** - FabriClean Supply v. EPA, No. 25-60006 (5th Cir.)
 - **Trichloroethylene** - United Steel Paper and Forestry Rubber Manufacturing Energy Allied Industrial and Service Workers International Union AFL CIO v. EPA, No. 25-1055 (3d Cir.)
 - **Carbon tetrachloride** - Olin Corp. v. EPA, No. 25-1014 (8th Cir.)



What's Next?



Summary

- TSCA enacted in response to concern for chemicals in the environment
- The 1976 Act was intentionally limited to evaluate *new* chemicals
- EU-REACH enacted in 2006 with the burden of proof on manufacturers
- Lautenberg Act expanded TSCA in 2016, covering existing chemicals
- TSCA Risk Management Rules issued *pre-Jan 20, 2025*, are being *administratively reconsidered* by EPA
- The scope and approach to risk evaluation and risk management under TSCA is subject to the Executive's priorities and interpretations



Thanks!

Frank Hearl
Frederick, Maryland USA
fhearl@me.com