

American Society of Safety Engineers

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Session 101E

An Overview of the Environment

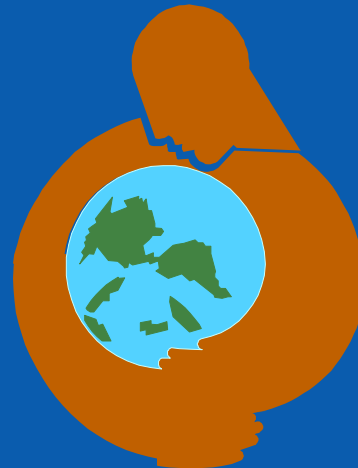
TSCA

RCRA

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NEPA

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CAA

CERCLA

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SARA

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What We Hope to Accomplish



- A Short History of the EPA
- What makes them be the way they are
- Some of the Regulations that the EPA enforces
- What Does this Mean to Me.

Environmental Protection Agency



Created by Presidential Executive Order

- **Richard M. Nixon, 2 December 1970**
 - One of the first times an agency was not created by an “Act”
 - Placed directly in the Executive Branch (i.e. reports to OMB)
 - Assumed activities of the former Environmental Health Service

Environmental Protection Agency



USEPA Regions



Environmental Legislation, Regulations, and Standards:



Regulatory Overview

A Brief Look at Major Environmental Regulations

- National Environmental Policy Act of 1970
- Clean Air Act (and Amendments)
- Clean Water Act
- Resource Conservation and Recovery Act of 1976
- Toxic Substances Control Act of 1976
- Comprehensive Environmental Response, Compensation, and Liabilities Act of 1980 and the Superfund Amendments and Reauthorization Act of 1986

National Environmental Policy Act 1970



NEPA

- **Basic Provisions**

- Applicable to Federal Agencies and their employees
- Establishes National Policy with Obtainable Goals
- Provides means for implementation and enforcement
- Develop methods to evaluate environmental decisions and cost
- Environmental Impact Statements (EIS)
- Develop and prescribe appropriate alternatives to minimize environmental impact

The Clean Air Act



- Clean Air Act of 1967 - Limited in Scope
- Clean Air Act of 1970 - Far More Comprehensive
 - National Ambient Air Quality Standards (NAAQS)
 - State Implementation Plan (SIP)
 - New Source Performance Standards (NSPS)
 - National Emission Standards for Hazardous Air Pollutants (NESHAPS)
- Clean Air Act Amendments of 1990

CAA



- **Clean Air Act Amendments of 1990**
 - The status of “clean air” by 1990
 - There were approximately 100 Non-attainment areas for ozone
 - There are still non-attainment areas with problems including carbon monoxide, particulate matter, and SO₂
 - **CAAA 1990 most extensive piece of legislation in recent history**
 - Thousands of pages containing modifications and changes
 - Focused on Non-attainment problems with many new requirements

CAA



Clean Air Act Amendments of 1990

- Title I: Air Pollution Prevention and Control
- Title II: Emission Standards for Moving Sources
- Title III: Air Toxics
- Title IV: Acid Deposition control
- Title V: Permits
- Title VI: Stratospheric Ozone Protection
- Title VII: Enforcement

CAA



- **Clean Air Act Amendments of 1990**
 - **Title V: Permits**
 - Application Process and Conditions for Permitting
 - Significant Air Emission Sources
 - Permitting Fees
 - **Title VII: Enforcement**
 - Civil penalties up to \$37,500 per day per violation
 - Criminal Enforcement - Felonies, increased fines, longer jail terms
 - EPA can issue Emergency Orders to protect the public welfare

The Clean Water Act



CWA

- 1972 Amendments to the Federal Water Pollution Control Act (FWPCA) of 1947
- Clean Water Act Amendments of 1977
 - Objective: Assurance of swimmable and fishable waters
 - Water Quality now based on Effluent Limitation Standards
 - National Pollution Discharge Elimination System (NPDES)

CWA



- Enforcement of NPDES Permits
 - Class I penalties
 - EPA provides written notice
 - Violator can have informal conference within 30 days
 - Maximum \$11,000 per violation, maximum penalty of \$37,500
 - Class II penalties
 - \$11,000 per day for each day of the violation, maximum of \$177,500
 - Violator must have opportunity to attend formal record hearing
 - Notification to the public and right to attend hearing

CWA



- **Water Quality Control Act of 1987**
 - Changed focus of NPDES
 - Required State Actions
 - Included Regulation of Storm-water and Combined Sewer Overflows
 - Regulated Sewer Sludge Disposal

RCRA



Resource Conservation & Recovery Act of 1976

- Amendments to the Solid Waste Disposal Act of 1965
- Hazardous Waste Determination

Definition: A waste is hazardous if it is a solid waste that is either:

Listed by EPA as hazardous, or

Ignitable, corrosive, reactive, or toxic

RCRA



- **Classification of Generators**
 - **Small Quantity Generator (SQG)**
 - 100 to 1,000 kg/month of hazardous waste or 1 kg/mo of extremely hazardous waste
 - **Large Quantity Generator (LQG)**
 - Over 1,000 kg/month of hazardous waste
 - **Conditionally Exempt Small Quantity Generator (CESQG)**
 - Less than 100 kg/month



Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved, OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number		
5. Generator's Name and Mailing Address				Generator's Site Address (if different than mailing address)			
Generator's Phone:							
6. Transporter 1 Company Name					U.S. EPA ID Number		
7. Transporter 2 Company Name					U.S. EPA ID Number		
8. Designated Facility Name and Site Address					U.S. EPA ID Number		
Facility's Phone:							
9a. HW	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
1.							
2.							
3.							
4.							
14. Special Handling Instructions and Additional Information							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled, identified, and every other requirement is satisfied in accordance with the current applicable federal, state and local government regulations, Executive Orders and Laws of the States.							

GENERATOR

VOID

RCRA



- Emergency Requirements
 - Written Contingency Plan
- Training Requirements
 - Employees must be trained
 - Employers must retain records of training

TSCA



Toxic Substances Control Act of 1976

- Title I: Control of Toxic Substances
- Title II: Asbestos Hazardous Emergency Response

TSCA



Title I: Control of Toxic Substances

- **Basic Requirements**
 - TSCA Chemical Inventory of approximately 75,000 chemicals (updated every six months)
 - Reporting
 - Importing and Exporting
- **Export and Import Notification**
 - Must notify EPA of their intentions
- **Enforcement**
 - Civil Penalties: \$27,500 per day
 - Criminal Penalties: \$37,500 per day plus 1 year in jail

Comprehensive Environmental Response, Compensation, and Liabilities Act of 1980 (Superfund)



CERCLA

- Background
 - One of the results of New York's "Love Canal"
 - Amended in 1986
- Basic Requirements
 - Potentially Responsible Parties (PRP)
 - National Priority List (NPL)
 - Hazardous Substance Response Trust Fund

CERCLA



- **Basic Requirements**
 - **National Contingency Plan (NCP)**
 - **Remedial Investigation/Feasibility Study (RI/FS)**

CERCLA



- Enforcement

- Civil Penalties

- \$37,500 per violation against each PRP
 - \$37,500 per violation against PRP who violates settlement agreement
 - Relief for the “innocent purchaser”
 - Actions to recover costs of removal must be brought within three years
 - Actions to recover costs of remedial action must be brought within six years

EPCRA



Emergency Planning and Community Right to Know Act of 1986

- **SARA Title III - Subtitle A**
 - **Section 302: Substances & Facilities Covered & Notification Requirements**
 - **Section 303: Comprehensive Emergency Response Plans**
 - **Section 304: Emergency Notification Requirements**
 - **Section 311: Material Safety Data Sheets**
 - **Section 312: Emergency and Hazardous Chemical Forms**

EPA



Enforcement of Environmental Policy

- Three Basic Levels of Violation
 - Negligent violations
 - *The violator was openly negligent regarding the law*
 - Knowing violations
 - *Occurred with full knowledge and no attempt to prevent it*
 - Knowing endangerment violations
 - *Violations allowed to occur, with full knowledge, that impose a threat of death or serious bodily injury*

Did We Do What We Set Out To?



- A Short History of the EPA
- What Makes Them the Way They Are
- Some of the Regulations that the EPA Enforces
- What Does this Mean to Me