

American Society of Safety Engineers

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Session 101D

An Overview of the Environment

TSCA

RCRA

?

?

NEPA



CAA

CERCLA

?

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



Organizational Structure

- **Administrator**
 - **Office of the Inspector General**
 - **Office of the General Counsel**
 - **Office of the Chief Financial Officer**
 - **Nine Assistant Administrators**

Environmental Protection Agency



Organizational Structure

- **Nine Operational Offices (headed by Assistant Administrators)**
 - Administration and Resources Management
 - Enforcement
 - Environmental Information
 - Research and Development
 - International Activities
 - Pesticides and Toxic Substances
 - Air and Radiation
 - Solid Waste and Emergency Response
 - Water

Environmental Protection Agency



June 13 - 16, 2010

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)**

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 Stormwater 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

RCRA



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

RCRA



- **Enforcement**
 - **Administrative Order**
 - **Compliance Order**
 - **Civil Actions**
 - **Criminal Suits**

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 301: State Commissions, Planning Districts, and Local Committees
 - Section 302: Substances & Facilities Covered & Notification Requirements
 - Section 303: Comprehensive Emergency Response Plans

EPCRA



EPCRA (SARA TITLE III)

- **SARA Title III - Subtitle A**
 - Section 304: Emergency Notification Requirements
 - Section 311: Material Safety Data Sheets
 - Section 312: Emergency and Hazardous Chemical Forms
 - Section 313: Toxic Chemical Release 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*

Environmental Protection Agency



Enforcement of Environmental Policy

- **Fines and Penalties**
 - Differ, depending on the regulation or Act under violation
 - *Ex: Fines under CWA differ from those under RCRA*
 - Civil fines generally range from a low of \$5500 to \$37,500 per day per violation
 - Maximum fine against individuals can be \$250,000, 15 years in jail
 - *Government can establish criminal liabilities against any employee, regardless of position in company*

Did We Do What We Set Out To?



- 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.