

An Overview of the Superfund Ammendment & Reauthorization Act (SARA) Title III

Emergency Planning and Community Right to Know Act

EPCRA

Oregon State Police
Office of State Fire Marshal
Emergency Planning & Response Section



Overview

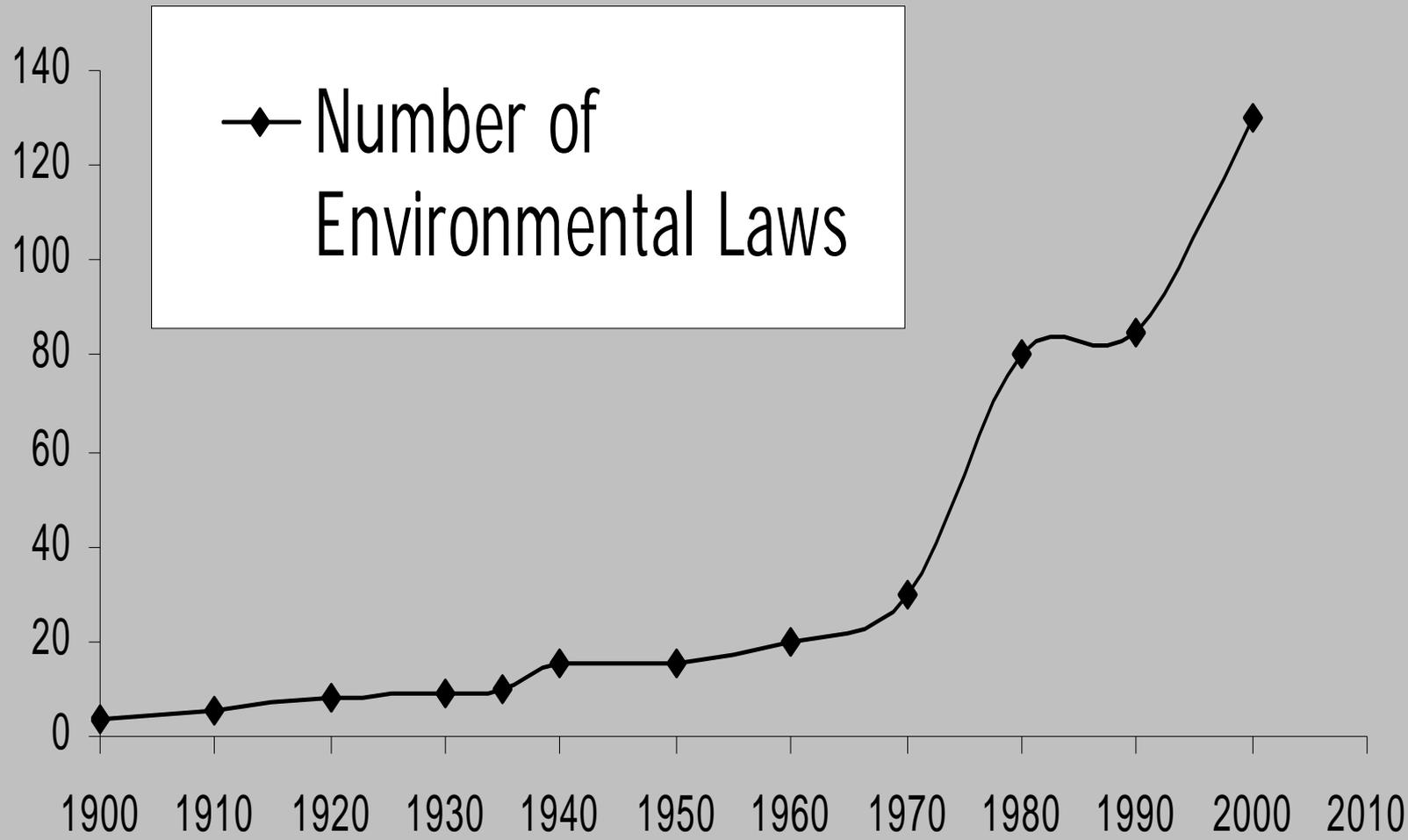
- In 1986, Congress passed the Superfund Amendment and Reauthorization Act (SARA) Title III, otherwise known as the Emergency Planning and Community Right to Know Act (EPCRA)
- EPCRA has two main goals:
 - Encourage and support emergency planning for responding to chemical accidents
 - Provide local governments and the public with information about possible chemical hazards

Presentation Objectives

- Provide a brief history and description of environmental laws in the United States
- Describe the events leading to the creation of EPCRA
- Outline the sections of EPCRA

Environmental laws

- Purpose of environmental laws
 - Protection of:
 - Soil
 - Water
 - Air
 - Humans
 - Wildlife
- Common causes of environmental laws
 - Social events
 - Political events



Environmental Regulation Prior to 1970

- Oversight of the environment was administered through these federal departments or councils:
 - Department of Interior
 - Department of Health, Education, and Welfare
 - Food and Drug Administration
 - Council on Environmental Quality
 - Energy Commission and Federal Radiation Council
 - Department of Agriculture
- This approach tended to be unorganized and difficult to track environmental status and progress

EPA – The Environmental Protection Agency



In 1970 EPA was established to coordinate previous efforts of protecting our air, water and land.

Environmental Laws

- **1970 Clean Air Act (CAA)**
 - Sets limits on how much of a pollutant can be in the air anywhere in the United States
- **1976 Resource Conservation and Recovery Act (RCRA)**
 - Controls hazardous waste including the generation, transportation, treatment, storage, and disposal
 - Sets a framework for the management of non-hazardous wastes
- **1977 Clean Water Act (CWA)**
 - Regulates the protection of our nation's waters

Environmental Laws

- 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) A.k.a.: Superfund
 - Federal response to address threats to human health and the environment posed by releases of hazardous substances from abandoned or uncontrolled sites
- 1983 Hazard Communication Standard
 - Regulates worker safety issues. Chemical right to know and emergency planning for workers.

Hazmat Incidents in the News

- Hazmat incidents in the 1980's drew attention to the need for better emergency planning and awareness
- Bhopal, India 1984
 - Release of methyl isocyanate
 - Thousands killed and injured
- Institute, West Virginia 1985
 - Release of aldicarb oxime
 - Many sickened and hospitalized
 - Fortunately, no deaths



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CEPP Chemical Emergency Preparedness Program

- Initial effort to address hazmat releases
- Voluntary program established by EPA
- Goal was to improve planning and response capabilities at the state & local level
- CEPP did not rely on explicit statutory authority
- EPA had no power to enforce it

CAER Community Awareness & Emergency Response

- An initial effort from industry to address hazmat concerns
- Created by the Chemical Manufacturer's Association (CMA)
- Goal was to build closer working relationships between facilities and surrounding communities
- Local forum for industry, emergency responders, government agencies, and general public to communicate

EPCRA Passed into Law

- Congress passed the Superfund Amendment and Reauthorization Act (SARA) in 1986
- Title III of SARA was named the Emergency Planning and Community Right to Know Act (EPCRA)
- EPCRA provided a chemical emergency response planning infrastructure at state and local levels that had previously been missing in the United States

EPCRA Overview

- Two main goals:
 1. Encourage and support emergency planning for responding to chemical accidents
 2. Provide local governments and the public with information about possible chemical hazards
- Four major provisions:
 - Emergency Planning (Sections 301-303)
 - Emergency Release Notification (Section 304)
 - Hazmat Inventory Reporting (Section 311,312)
 - Toxic Chemical Release Inventory (Section 313)

Sections of EPCRA

- Section 301: State and Local Framework
- Section 302: Facility Planning Notification
- Section 303: Hazmat Emergency Planning
- Section 304: Emergency Release Notification
- Section 311: MSDS or Chemical List Submittal
- Section 312: Chemical Inventory Reporting
- Section 313: Toxic Chemical Release Reporting

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Section 301

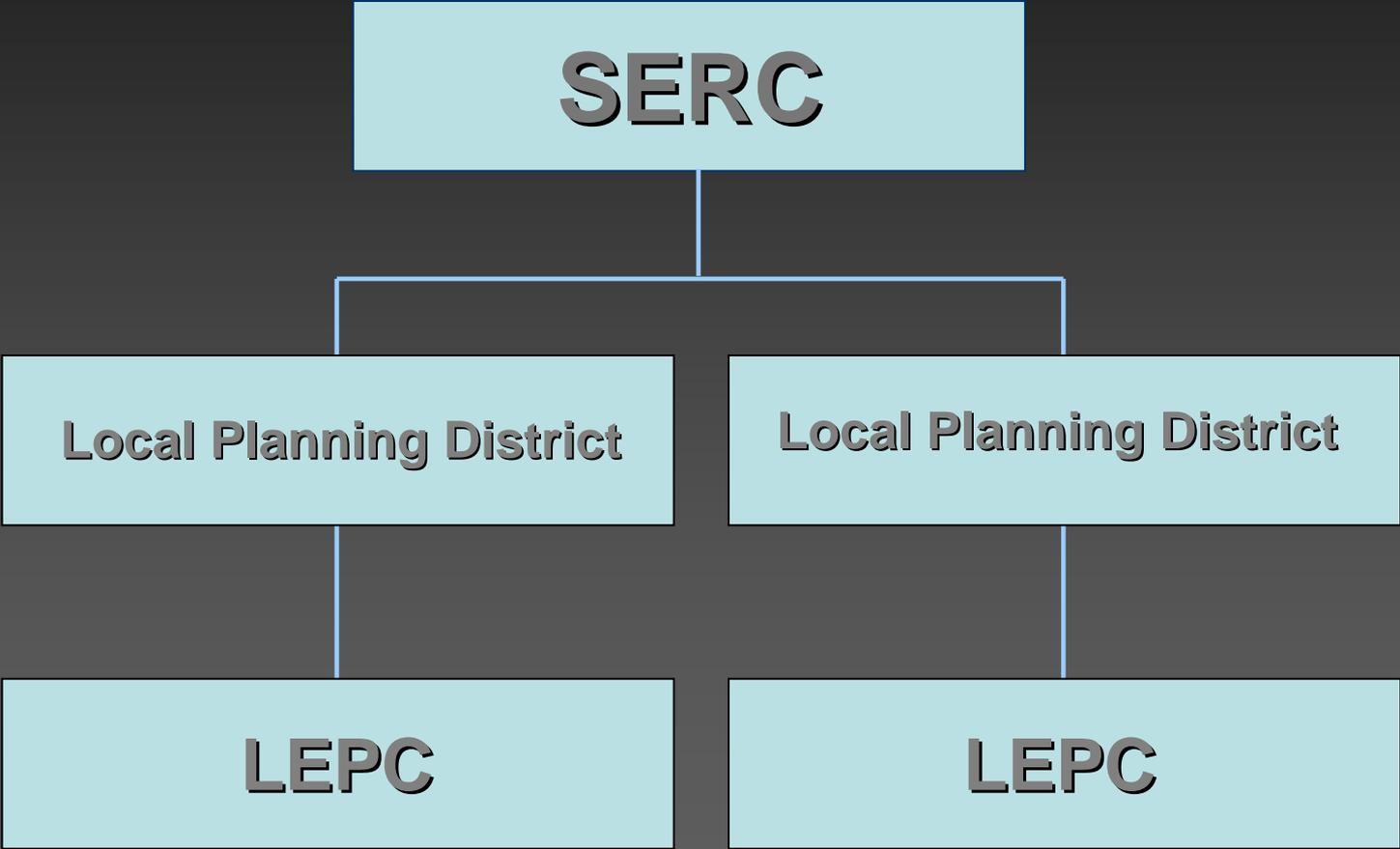
Section 301-The Framework

- Required the governor of each state to establish a State Emergency Response Commission (SERC)
- Allowed SERC duties to be appointed to already existing state-level councils or commissions
- SERC functions include:
 - Designate local emergency planning districts within the state
 - Appoint and approve Local Emergency Planning Committees (LEPCs) for each district
 - Make information collected from facilities under EPCRA, available to the public
 - Review and coordinate emergency plans developed by LEPCs

The Oregon SERC/LEPC Structure

- SERC duties were initially given to the already existing Interagency Hazard Communication Council (IHCC)
- The SERC initially designated the entire state as one planning district and appointed a single, state-wide LEPC
- The IHCC was abolished in 2005 and SERC duties transferred to the State Fire Marshal
- In 2007 the Oregon SERC began a transition away from the single LEPC towards multiple, local-level LEPCs

The State Structure Concept of EPCRA



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Section 302

Section 302 - Facility Planning Notification

- Designates approximately 366 Extremely Hazardous Substances (EHS)
- Establishes threshold planning quantities (TPQs) and reporting quantities (RQs) for each EHS
- Includes notification requirements for covered facilities possessing a TPQ
 - Notify SERC and LEPC within 60 days
 - Identify a facility rep to participate with the LEPC in the planning process

CAS Number	Substance Name	Profiles	First Aid Guides	TPQ (Pounds)	EHS_RQ (Pounds)
100-44-7	BENZYL CHLORIDE	Prof	FA	500	100
10025-73-7	CHROMIC CHLORIDE	Prof	FA	1/10,000	1
10025-87-3	PHOSPHORUS OXYCHLORIDE	Prof	FA	500	1,000
10026-13-8	PHOSPHORUS PENTACHLORIDE	Prof	FA	500	1
10031-59-1	THALLIUM SULFATE	Prof	FA	100/10,000	100
10102-18-8	SODIUM SELENITE	Prof	FA	100/10,000	100
10102-43-9	NITRIC OXIDE	Prof	FA	100	10
10102-44-0	NITROGEN DIOXIDE	Prof	FA	100	10
10124-50-2	POTASSIUM ARSENITE	Prof	FA	500/10,000	1,000
10140-87-1	ETHANOL, 1,2-DICHLORO-, ACETATE	Prof	FA	1,000	1
102-36-3	ISOCYANIC ACID, 3,4-DICHLOROPHENYL ESTER	Prof	FA	500/10,000	1
10210-68-1	COBALT CARBONYL	Prof	FA	10/10,000	1
10265-92-6	METHAMIDOPHOS	Prof	FA	100/10,000	1
10294-34-5	BORON TRICHLORIDE	Prof	FA	500	1
103-85-5	PHENYLTHIOUREA	Prof	FA	100/10,000	100
1031-47-6	TRIAMPHOS	Prof	FA	500/10,000	1
10311-84-9	DIALIFOR	Prof	FA	100/10,000	1
10476-95-6	METHACROLEIN DIACETATE	Prof	FA	1,000	1
106-89-8	EPICHLOROHYDRIN	Prof	FA	1,000	1,000
106-96-7	PROPARGYL BROMIDE	Prof	FA	10	1
1066-45-1	TRIMETHYLTIN CHLORIDE	Prof	FA	500/10,000	1
107-02-8	ACROLEIN	Prof	FA	500	1
107-07-3	CHLOROETHANOL	Prof	FA	500	1
107-11-9	ALLYLAMINE	Prof	FA	500	1
107-12-0	PROPIONITRILE	Prof	FA	500	10
107-13-1	ACRYLONITRILE	Prof	FA	10,000	100
107-15-3	ETHYLENEDIAMINE	Prof	FA	10,000	5,000
107-16-4	FORMALDEHYDE CYANOHYDRIN	Prof	FA	1,000	1
107-18-6	ALLYL ALCOHOL	Prof	FA	1,000	100
107-30-2	CHLOROMETHYL METHYL ETHER	Prof	FA	100	1

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Section 303

Section 303 - Hazmat Emergency Planning

- Requires LEPC's to develop local emergency response plans to address hazmat releases within their district
- LEPC plans must at minimum be reviewed annually in a public meeting
- LEPC plans should include 9 planning elements
- LEPC plans are submitted to the SERC for review and coordination

Section 303- 9 Planning Elements

1. Identify facilities and transport routes of extremely hazardous substances within the planning district
2. Describe onsite and offsite emergency response procedures
3. Designate a community emergency coordinator and a facility coordinator
4. Outline emergency notification procedures

Section 303- 9 Planning Elements

5. Methods for determining the occurrence of a release, and the areas that will be affected
6. Description of local emergency equipment and facilities and the persons responsible for them
7. Evacuation plans
8. A training program for emergency responders
9. Methods and schedules for exercising the emergency plan

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Section 304

Section 304 – Emergency Release Reporting

- Provides that emergency releases at facilities are reported to appropriate entities
- Facilities must notify the SERC and LEPC if there is a release of a reportable quantity (RQ) of a CERCLA or EHS regulated substance
 - Immediate initial notification (within 15 minutes)
 - Written follow-up notification (within 2 weeks)
- Notification to the National Response Center (NRC) also required

Section 304 – Initial Notification

- Initial notification must include:
 - The chemical name
 - Whether or not it was an Extremely Hazardous Substance
 - Approximate quantity released
 - Time and duration of release
 - What medium it was released into (soil, water, air)
 - Acute/Chronic health risks of the substance
 - Proper precautions to be taken (evacuation/shelter-in-place)
 - Name and telephone number of a contact person

Section 304 – Written Follow-up

- Should be accomplished within 2 weeks of the date of the release
- Updates the initial notification information
- In addition, it includes the following:
 - Actions taken to respond to and contain the release
 - Any known or anticipated acute/chronic health risks associated with the release
 - Advice regarding medical attention necessary for exposed individuals

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Section 311

Section 311-MSDS/Chemical List Reporting

- Requires facilities to submit the MSDS for all Extremely Hazardous Substances and OSHA-regulated substances that are present at the site in sufficient quantities
- The covered quantities are:
 - 500 pounds or more, or the threshold quantity for all EHS, whichever is less
 - 10,000 pounds or more for OSHA-regulated substances
- OSHA-regulated substances are those that OSHA requires and MSDS for under the Hazard Communication Standard

Section 311-MSDS/Chemical List Reporting

- In lieu of submitting each MSDS, the facility may choose to submit a list of hazardous chemicals that is grouped by hazard category and includes the chemical name
- This one-time submittal must be made to the appropriate LEPC, the local fire department, and the SERC
 - Information must be re-submitted when updates are necessary due to new chemicals or revised MSDS

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Section 312

Section 312 – Hazmat Inventory Reporting

- Facilities subject to the requirements of Section 311 are required to annually report to the same entities the following:
 - Chemical Name
 - Max Daily Amount at the facility
 - Average Daily amount at the facility
 - Location of the substance
 - Storage Information
- In most states, this information is reported on a Tier Two Report
- In Oregon, facilities comply with EPCRA 311/312 by completing the Oregon Hazardous Substance Information Survey and submitting it to the Office of State Fire Marshal

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Section 313

Section 313-Toxic Release Inventory Reports

- What facilities are covered?
 - Facilities with 10 or more full-time employees, that manufacture, process, or otherwise use a listed toxic chemical
 - Working within a listed Standard Industrial Classification Code (Manufacturing codes 20-39)
- What substances are covered?
 - 650 listed toxic chemicals
 - If quantities exceed 25,000 lbs per year manufactured or processed; 10,000 lbs per year used
- Must submit an annual toxic chemical release report (Form R) by July 1 of each year to:
 - EPA
 - Designated State Agency

Section 313 Form R

- The Form R must be submitted for each reportable toxic chemical and includes:
 - The name and location of facility
 - Info regarding use of the chemical
 - Estimated maximum amounts of the chemical during the preceding year
 - For each waste-stream, the waste treatment or disposal methods employed and the typical treatment efficiency
 - The annual quantity of the chemical entering each waste-stream
 - A certification regarding the accuracy of the report

EPCRA Regulated Substances and Quantities

	Section 302	Section 304	Section 311/312	Section 313
Chemicals Covered	356 EHS	>1,000	>500,000	650 toxic chems and categories
Threshold Quantities	1-10,000 lbs at any one time	1-5,000 lbs released within a 24 hr period	TPQ or 500 lbs for 302 chems, 10,000 lbs one time for other chems	25,000 lbs per year manufactured or processed; 10,000 lbs per year used