



# The Safe Drinking Water Act (SDWA)

# Objectives



## **Terminal Objective**

**Given the Environmental Laws and Regulations course manual as a reference, you will be able to:**

- **Describe the general intent of the Safe Drinking Water Act (SDWA) and how drinking water regulations affect the DOE.**

# Objectives



## Enabling Objectives

- **Explain why the SDWA was enacted**
- **Delineate what contaminants MCL's and MCLG's were established for**
- **Describe EPA's Standard Development Process**

# Overview

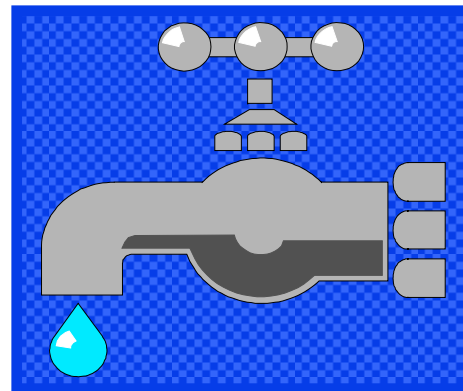
**The Safe Drinking Water Act (SDWA) was enacted in 1974 to:**

- **Manage potential contamination threats to drinking water supplies**
- **Prevent underground injections of contaminated fluids that would endanger drinking water sources**



# Overview

*The SDWA standards apply to drinking water “at the tap” as delivered by public water supply systems. These standards directly affect the DOE and those facilities that meet the SDWA’s definition of a public water supply system.*



# Legislative History

**Section 1447 states that each Federal agency having jurisdiction over a federally owned or maintained public water system must comply with:**

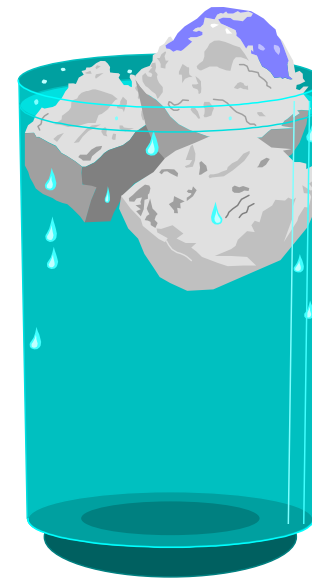
- **All Federal, State, and local requirements**
- **Administrative authorities**
- **Processes and sanctions**



# Legislative History

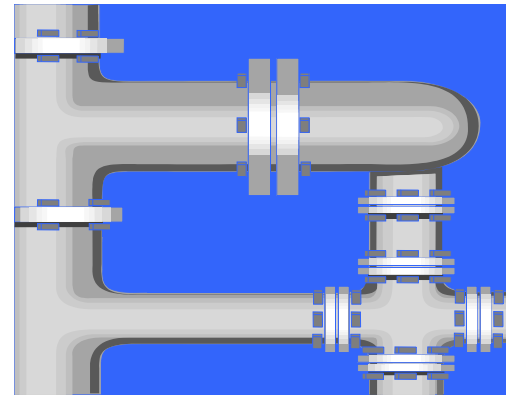
**Sections 1412, 1414, and 1445(a) authorize for public water systems:**

- **Drinking water regulations**
- **Specific operating procedures**



# Legislative History

*40 CFR 141.2 defines public water systems as those systems that provide piped water for human consumption and are equipped with at least 15 connections or regularly serve at least 25 people.*



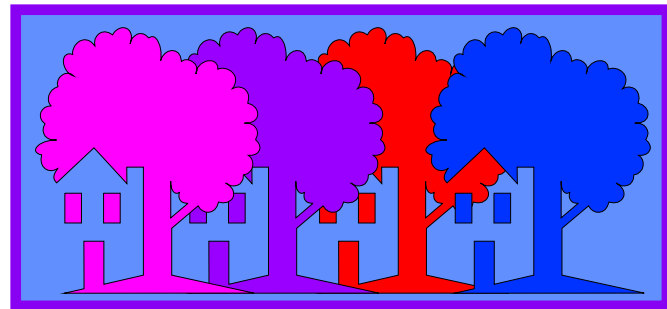
SDWA



# Legislative History

**Public water systems include the following:**

- **Community water systems**
- **Nontransient noncommunity water systems**
- **Noncommunity water systems**



# NPDWR's

*The Environmental Protection Agency (EPA) was required under the SDWA to establish National Primary Drinking Water Regulations (NPDWRs) for contaminants that may cause adverse public health effects.*



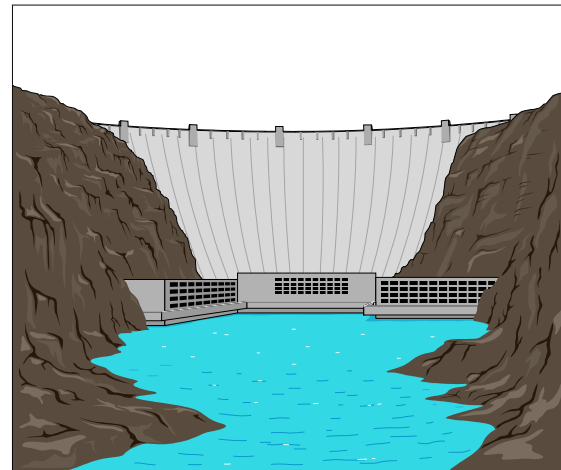
# NPDWR's

## **NPDWRs Maximum Contaminant Levels (MCLs) and Maximum Contaminant Level Goals (MCLGs) were established for:**

- **Lead and copper**
- **Volatile organic compounds**
- **Aldicarb, aldicarb sulfoxide, aldicarb sulfone, pentachlorophenol, and barium**
- **Inorganic and organic compounds**

# NPDWR's

*MCLs can be used to determine whether groundwater “contains” hazardous waste and therefore must be treated as hazardous waste.*

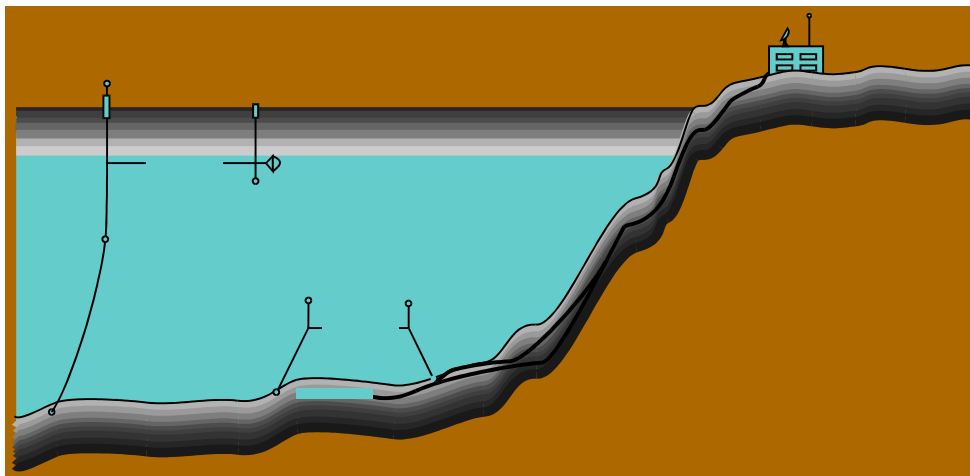


# DOE Applicability

*MCL's and MCLGs are critical to the DOE because they can be used as applicable/ relevant and appropriate requirements under the Comprehensive Environmental Response, Compensation, and Liability Act, as amended by the Superfund Amendments and Reauthorization Act, for National Priorities List cleanups.*

# DOE Applicability

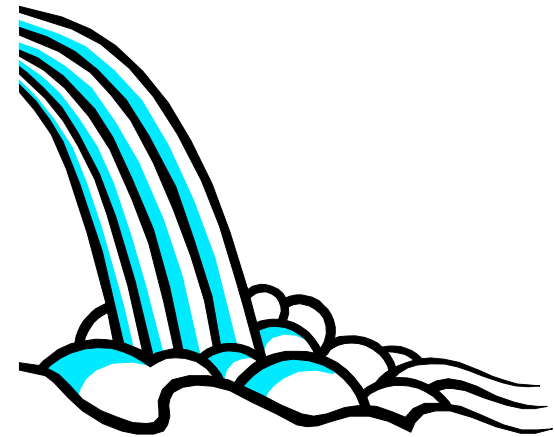
*Equally important to the DOE is that SDWA drinking water standards are used to determine groundwater protection regulations (i.e., the Resource Conservation and Recovery Act).*



# DOE Applicability

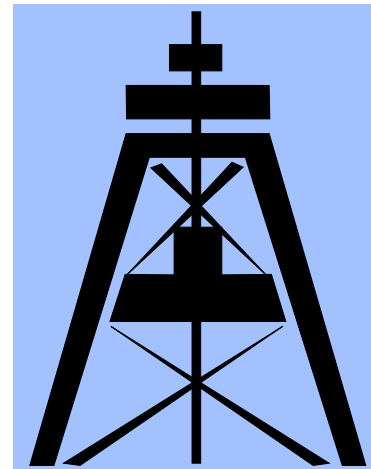
**These groundwater protection regulations apply to:**

- **DOE activities, especially storage and disposal materials containing:**
  - Radionuclides
  - Inorganic and organic chemicals
  - Hazardous wastes
- **Cleanup of contaminated sites**



# Underground Injection Control

*The SDWA also established programs to prevent contamination of underground sources of drinking water by underground injection of contaminated fluids.*





# Underground Injection Control

**A final rule (53 FR 28118) responded to the Hazardous and Solid Waste Amendments Act and: protection regulations apply to:**

- **Mandated regulations on underground injection of contaminated fluids**
- **Amended existing underground injection control (UIC) regulations**

# Underground Injection Control

**A final rule (53 FR 28118) responded to the Hazardous and Solid Waste Amendments Act and: protection regulations apply to: (cont.)**

- **Codified the EPA's regulatory framework for implementing the land disposal restrictions**
- **Codified the EPA's regulatory framework for implementing the land disposal restrictions**

# Underground Injection Control



**The EPA was required to conduct the following:**

- **Publish minimum national requirements for effective State UIC programs**
- **List States that require UIC programs**
- **Make grants to States for developing and implementing UIC programs**

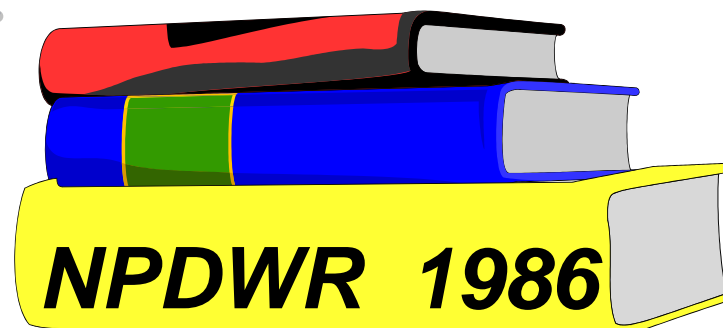
# Underground Injection Control

**The EPA was required to conduct the following (cont.):**

- **Review proposed State programs**
- **Promulgate and enforce UIC programs in listed States if the State chooses not to participate or does not develop and operate an approvable program**

# The 1986 Amendments

*The 1986 SDWA amendments redirected the focus of the NPDWRs by requiring the EPA to apply future NPDWRs to community and nontransient noncommunity water systems when it evaluated and revised current regulations.*



# The 1986 Amendments



**The 1986 amendments included the following provisions:**

- **The EPA was required to issue standards for contaminants**
- **Both regulated and unregulated chemical contaminants were to be monitored in public water systems**

# The 1986 Amendments



- **Public notification was required for all MCL violations**
- **The EPA's authority to enforce standards was increased by raising maximum civil penalties from \$5,000 to \$25,000**
- **States were required to establish "wellhead protection areas"**

# The 1986 Amendments



- **An immediate ban was placed on the future use of lead-containing pipes and solder in drinking water systems**
- **Filtering requirements were established**
- **The EPA was required to survey the problems of Indian reservation waters because Indian reservations were to be treated as States**



# The 1996 Amendments



## **The 1996 amendments focused on:**

- **Prevention programs**
- **Consumer's right to know**
- **EPA's standards development process**
- **Federal funding**

# Prevention Programs



**States must submit to EPA a program delineating source water for all public water and susceptibility of that water to contamination**

# Consumer Right to Know



- **Consumers receive an annual report with information about source water and contaminants in drinking water**
- **Consumers must be given notice within 24 hours of any violation of standards that may cause serious adverse health effects**

# Standards Development Process



- **1996 Amendments relaxed 1986 requirements for EPA to meet numerical quota for drinking water standards**
- **EPA must review five new contaminants every five years**
- **EPA's decision to regulate must be based on risk based criteria**

# Standards Development Process



**EPA must conduct a thorough cost-benefit analysis of each proposed new standard, and adjust MCLs to a level that “maximizes health risk reduction benefits at a cost that is justified by the benefits”**

# SDWA Enforcement

*States have primary SDWA enforcement authority, although the EPA will step in if the law is not properly enforced. The Federal Government provides funds to assist the States with enforcement of the Act.*



# Review Question

**The Safe Drinking Water Act amendments of 1996 require specific actions to notify consumers about the quality of water from their public water system.**

- a. True**
- b. False**