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Principles  
of American  
Democracy  
Standard 12.7.6.



# Making and Implementing Environmental Laws

## **California Education and the Environment Initiative**

Approved by the California State Board of Education, 2010

### **The Education and the Environment Initiative Curriculum is a cooperative endeavor of the following entities:**

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## Key Unit Vocabulary

### Lesson 1

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**Blighted:** Property in a poor condition that harms the physical, social, or economic well-being of a community.

**Brownfields:** Properties that are contaminated with hazardous materials, or thought to be contaminated, and are underutilized due to perceived remediation costs and liability concerns.

**Executive:** A high-level decision maker in a branch of government or business.

**Executive order:** A policy made by a president or governor that has the authority of a law.

**Federalism:** A political system in which power is divided between a central authority and smaller political units, such as states.

**Green chemistry:** The use of chemical products and processes that reduce or eliminate the use and generation of hazardous materials.

**Hazardous substance:** A material, dangerous to human health or the environment because it is flammable, corrosive, reactive, or poisonous.

**Hazardous waste:** Industrial, military, or household byproducts, disposed of but still dangerous to humans or the environment.

**Implementation:** The act of carrying out a plan or policy that has been established.

**Incentive:** A policy, action, or reward that motivates or inspires a person or entity to take a certain action.

**Initiative:** (noun) A program or effort to start and implement a new endeavor. (verb) Starting, creating, or implementing something innovative, such as a new or creative way of dealing with a problem.

**Jurisdiction:** An area or legal field over which a government official or governing body has authority.

**Legal liability:** The legal obligation and responsibility for something, such as harm done to others or to the environment.

**Lobbying:** Attempting to influence policymakers so they will take a desired position on pending decisions.

**Memorandum of agreement (MOA):** A written document between parties committing to agreed-upon actions or tasks.

**Mitigate:** To change something so that it is less damaging or harmful.

**News media:** The part of mass media that presents information and commentary about current events.

**Political agenda:** What an individual or group would like to see happen, often involving political actions.

**Public agenda:** The issues about which many people are concerned; and on which the government is considering action.

**Public policy:** A governmental plan or course of action.

**Regulation:** A specific rule created by a government agency or other legislative authority to implement and enforce laws and policies.

**Stakeholders:** Individuals, groups, or organizations that have an interest in, or concern about, a particular action or decision.

**Toxic:** Poisonous or harmful.

**Tribal government:** A federally recognized governmental body of an American Indian tribe or community.

## Fact Sheet: The Federal Superfund Program

### Lesson 1

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**Instructions:** The federal government developed and implemented the Superfund program. As you read the following information, think about why the federal government has taken on the job of making sure that hazardous waste is cleaned up.

### Superfund's Mission

- To protect public health and the environment from uncontrolled hazardous releases
- To study, design, and construct long-term solutions for the nation's most serious hazardous waste problems
- To make polluters pay for cleaning up the contamination they caused

### Superfund Partnerships

#### State and Local Governments

- When Superfund began in 1980, no federal, state, and local partnerships existed to deal with site identification or cleanup. The 1986 reauthorization of CERCLA broadened the states' role in every phase of the Superfund process. It also extended the federal/state interaction to include Native American Indian tribes.
- California began its own program in 1981 to deal with California sites not on the federal program's list of most-contaminated sites.

#### The Public

- When Superfund began in 1980, U.S. EPA issued information about Superfund activities to people living in affected communities. CERCLA's reauthorization expanded the role of local residents. U.S. EPA now gives Technical Assistance Grants (TAGs) to encourage knowledgeable citizen participation. U.S. EPA also implemented the Emergency Preparedness and Community Right-to-Know Act.

### Funding Superfund

In 1980, Congress established CERCLA and the Superfund Trust Fund to pay for emergency cleanup of hazardous materials.

- Superfund money initially came from taxes on crude oil, commercially used chemicals, and a Corporate Environmental Income Tax.
- The Superfund tax expired in 1995. While Congress has extended CERCLA over the years, the Superfund Trust Fund tax has not been reinstated. The Superfund Trust Fund ran out of money in 2003.
- In 1995, taxpayers funded 18% of the Superfund Trust Fund. Since 2004, taxpayers have funded 100% of the trust fund.

## Acronym Key

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**AEC:** Atomic Energy Commission. Defunct agency that supervised development of nuclear science and technology.

**Cal/EPA:** California Environmental Protection Agency. State agency with the mission to restore, protect, and enhance the environment, and to ensure public health, environmental quality, and economic vitality.

**CERCLA:** Comprehensive Environmental Response, Compensation and Liability Act. 1980 federal law that taxed polluters to pay for cleanup of hazardous waste sites.

**DOD:** Department of Defense. U.S. government agency whose mission includes restoring DOD contaminated property to a condition that is protective of human health and the environment.

**DOE:** Department of Energy. U.S. government agency whose mission includes ensuring “the environmental cleanup of the national nuclear weapons complex.”

**DTSC:** Department of Toxic Substances Control. State agency within the California Environmental Protection Agency that oversees some toxic-waste cleanups. The DTSC is charged with development and oversight of California’s Green Chemistry Initiative.

**LBNC:** Long Beach Naval Complex. A decommissioned shipyard in the City of Long Beach.

**LOI:** Letter of Intent. Document that outlines an agreement between two or more parties before the agreement is finalized.

**MOA:** Memorandum of Agreement. A written document between parties committing to agreed-upon actions or tasks.

**NPL:** National Priorities List. The federal government’s list of the most contaminated hazardous materials sites in the country.

**PA:** Preliminary Assessment or Preliminary Assessment/Site Investigation (PA/SI). First assessment of a site’s environmental condition.

**POCG:** Property Over Contaminated Groundwater. California program that protects people who bought property over contaminated groundwater.

**PPA:** Prospective Purchaser Agreement. California program that protects those who might buy a Brownfield site from legal liability based on contamination that was already there and that they did not participate in creating.

**PRP:** Potentially Responsible Party. An individual or company who may have contributed to contamination at a Superfund site. Under CERCLA, PRPs are expected to conduct or pay for site cleanup.

**PSC:** Partial Site Cleanup. California program that allows parcels of land within a Brownfield site to be designated clean and ready for development, even if the groundwater cleanup has not yet been completed.

**PSMP:** Private Site Management Program. California program in which state authorizes private companies to carry out site assessments and remediation at low-risk Brownfield sites.

**SBMM:** Sulphur Bank Mercury Mine. Formerly active mercury mine, now a contaminated site, near Clear Lake, California.

**TAG:** Technical Assistance Grant. Financial award made by the U.S. EPA to community groups to get technical assistance in interpreting information with regard to a Superfund site.

## Acronym Key

Lesson 1 | page 2 of 2

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**U.S. EPA:** United States Environmental Protection Agency. U.S. government agency that implements federal laws designed to promote public health by protecting air, water, and soil from pollution.

**VCP:** Voluntary Cleanup Program. California program in which property owners agree to clean up a Brownfield site.

## The Responsibilities of Government: An Analysis

Lesson 1 | page 1 of 2

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Name: \_\_\_\_\_

**Instructions:** Read and write a response to each question. (5 points each)

1. What federal agency has the responsibility for overseeing cleanup of hazardous and toxic waste?

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2. List three tasks the U.S. EPA does regarding hazardous waste sites.

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3. With whom does the federal government partner in dealing with hazardous waste?

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4. Why do you think the federal government created partnerships to deal with hazardous waste?

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## The Responsibilities of Government: An Analysis

Lesson 1 | page 2 of 2

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Name: \_\_\_\_\_

5. Think about Superfund's mission and about the U.S. Constitution. Why did the federal government take on the task of identifying hazardous waste sites and mitigating the pollution there?

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6. Now, think about the California Constitution. What does it say that might account for the state government participating in Superfund cleanup?

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7. The tax that stocked the Superfund Trust Fund expired. Congress renewed the rest of CERCLA, but not the tax. Remember the goal of the Superfund law. If the Superfund loses its funding, can the government's law be carried out? What responsibility, if any, does the government have to provide the money needed to implement the laws it passes?

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**Note-taking Template**

Name: \_\_\_\_\_

**Instructions:** Take notes on the following while viewing the **Superfund and Military Base Closures** presentation.

1. What law or laws apply to hazardous materials found at former military sites?

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2. Who is the Potentially Responsible Party (PRP) when hazardous materials are found at former military sites?

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3. Where is the former Long Beach Naval Complex?

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4. What did the Navy do with its property at the former Long Beach Naval Complex?

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5. Who is responsible for cleaning up hazardous substances at the former LBNC? Is the responsible party part of the federal, state, or local government?

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# Primary Source Analysis Chart

## Lesson 2

Name: \_\_\_\_\_

**Instructions:** Complete the following chart using information in the **Primary Source Packet** (Student Edition, pages 11–18).

Document:	Date:	Parties involved: (federal, state, city)	Document says:
Primary Source #1: DSMOA			
Primary Source #2: Navy Record of Decision			
Primary Source #3: Cal/EPA News Release			
Primary Source #4: Land Use Covenant			

## Site Jurisdiction Analysis

Lesson 2 | page 1 of 2

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Name: \_\_\_\_\_

**Instructions:** You have learned about the roles of and relationships among federal, state, and local governments in deciding how to carry out the legally mandated cleanup of the former Long Beach Naval Complex (LBNC). Answer the following questions about the roles of each level of government in remediating hazardous waste at the former LBNC. (10 points each)

1. What federal government agency or agencies have been involved in the cleanup of the former Long Beach Naval Complex? What has each done?

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2. What state government agency or agencies have been involved in the cleanup of the former Long Beach Naval Complex? What has each done?

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## Site Jurisdiction Analysis

Lesson 2 | page 2 of 2

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Name: \_\_\_\_\_

3. What local government agency or agencies have been involved in the cleanup of the former Long Beach Naval Complex? What has each done?

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4. How would you describe the interrelationships among federal, state, and local governments regarding the former Long Beach Naval Complex, and cleanup of hazardous substances there?

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## Synthesizing the Ideas

Lesson 3 | page 1 of 2

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Name: \_\_\_\_\_

**Instructions:** Use information from today's lesson to answer the following questions. (5 points each)

### Attitudes about the Natural Environment

1. What attitudes about the natural environment can you infer from the mining at the Sulphur Bank Mercury Mine and the lack of cleanup there when the mine closed in 1957?

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2. By the 1980s, a change in attitudes had moved environmental issues onto the public agenda. Enactment of the federal Superfund law in 1980 showed that change. How did that change in attitude become evident at Sulphur Bank in the 1980s? What evidence shows the change?

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### Implementing Public Policy and Enforcing Laws

3. What role did a local residents' action group play in getting the federal government to enforce its Superfund law at Sulphur Bank?

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## Synthesizing the Ideas

Lesson 3 | page 2 of 2

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Name: \_\_\_\_\_

4. Government agencies played a major role in ensuring that government regulations for mitigating environmental pollution were enforced. Describe two actions that the U.S. Environmental Protection Agency (U.S. EPA) took in the Sulphur Bank cleanup.

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**Instructions:** Think about the timing at the SBMM and answer the following questions.

### Time

5. When did the SBMM close? (2 points)

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6. When did the U.S. EPA designate SBMM a Superfund site? (2 points)

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7. When did cleanup at the Elem Indian Colony begin? (2 points)

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8. What does the length of time that passed between these three events tell you about the implementation of public policy? (5 points)

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## Comparing Components of the Brownfields Program

Lesson 4 | page 1 of 2

Name: \_\_\_\_\_

### Part 1

**Instructions:** Read the information on California’s Brownfields Program, **Brownfields Information** (Student Edition, pages 20–21), with your group, then complete the chart below. The items in the first column of the chart are characteristics of the programs you will read about. Look carefully at the characteristics before beginning to read.

### Program Characteristics

	VCP	PPA	PSMP	POCG	PSC
Seeks to speed up cleanup, restoration of brownfields					
Provides liability protection for innocent landowners/buyers					
Clarifies which agency oversees brownfields cleanup					
Property owners agree to state oversight of cleanup					
Property owners agree to meet state standards for cleanup					
Protects someone whose groundwater is contaminated by a neighboring brownfields site					
Protects someone who buys land and finds that groundwater under it is contaminated					
Protects someone who wants to buy brownfields land					
Enables private contractor to oversee brownfields cleanup					
Gets government approval that site cleanup is finished except for groundwater					
Provides cleaner environment for California					
Hastens redevelopment’s economic benefits					



Name: \_\_\_\_\_

# California's Green Chemistry Initiative

Green chemistry is an innovative approach to dealing with hazardous chemicals. Most environmental policies have addressed containing or cleaning up the toxic wastes that are byproducts of industry. Green chemistry, however, focuses on a different phase of the industrial process: production. The idea is simple. If you do not make or use dangerous chemicals in the first place, you do not have to clean them up later. Green chemistry promotes creating and working with fewer hazardous chemicals.

California has been working on its Green Chemistry Initiative since 2007, when the secretary of the state's Environmental Protection Agency (Cal/EPA), under the leadership of California Governor Arnold Schwarzenegger, requested that the Department of Toxic Substances Control develop a comprehensive approach for assessing potential hazards from

chemicals in consumer products. The department collaborated with other state agencies and departments to gather information from experts and stakeholders worldwide. During this initiative, tens of thousands of comments and hundreds of options were received. The department distilled the worldwide input into six policy recommendations for Cal/EPA.

## California Green Chemistry Initiative's Six Policy Recommendations

1. **Expand Pollution Prevention** and product stewardship programs to more business sectors to refocus additional resources on prevention rather than cleanup.
2. **Develop Green Chemistry Workforce Education and Training, Research and Development, and Technology Transfer** through new and existing educational programs and partnerships.
3. **Create an Online Product Ingredient Network** to disclose chemical ingredients for products sold in California, while protecting trade secrets.
4. **Create an Online Toxics Clearinghouse**, an online database of chemical toxicity and hazards populated with the guidance of a Green Ribbon Science Panel to help prioritize chemicals of concern and data needs.
5. **Accelerate the Quest for Safer Products**, creating a systematic, science-based process to evaluate chemicals of concern and alternatives to ensure product safety and reduce or eliminate the need for chemical-by-chemical bans.
6. **Move Toward a Cradle-to-Cradle Economy** to leverage market forces to produce products that are "benign-by-design" in part by establishing a California Green Products Registry to develop green metrics and tools (for example, environmental footprint calculators, sustainability indices) for a range of consumer products and encourage their use by businesses.











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## California Education and the Environment Initiative

