



High School Science Virtual Learning

**Environmental Science**

**Environmental Legislation (Pt 2)**

**May 20, 2020**



# High School Environmental Science

## Lesson: May 20, 2020

### **Objective/Learning Target:**

Students will identify the key purpose of specific legislation and how they affect environments in the long run.

1. Why is it important to drink clean water at home?
2. What are some unintended consequences of pumping air contaminants further into the atmosphere?



1. Unclean water can contain contaminants that can cause cancers and deadly illnesses like cholera.
2. Not only does this increase the damage to the ozone layer, but also increases acid rain in areas.



# Lesson Activity:

**Directions:** You will be reading three articles as they all cover Clean Air Act, Clean Water Act, and Safe Drinking Water Act. You will want to take notes as you explore to organize your thoughts. Here is an example of how:

Legislation	When was it enacted?	Causes for it to be made?	Controversy?	Explanation of law	Impacts since enacted?
Clean Air Act					
Clean Water Act					
Safe Drinking Water Act					

**Link(s):** [Clean Air Act](#)

[Clean Water Act](#)

[Safe Drinking Water Act](#)



# Practice

You will use the notes and CAA article from the activity on slide 5 to answer the following questions.



# Practice Questions

1. When was the Clean Air Act first established?
2. What events lead up to the need to establish air quality?
3. Why was there any revisions?
4. What are the six common criteria pollutants?
5. What are other air pollution problems targeted by Congress?



# Answer Key

Once you have completed the practice questions check with the work.

1. 1970, and revised in 1977 and 1990
2. Dense, visible smog in many of the nation's cities and industrial centers helped prompt passage.
3. As they fixed one problem they had to improve the effectiveness to target new problems like acid rain and damage to the ozone layer.
4. Particulate matter, ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead.
5. Hazardous or toxic air pollutants, acid rain, ozone depleting materials, and regional haze.





# More Practice

You will use the notes and CWA article from the activity on slide 5 to answer the following questions.



# More Practice Questions

1. When was the Clean Water Act first enacted and what was the original name?
2. What are three things the Act establishes?
3. What kind of waste can legally go into the ocean waters?
4. What are regulated wastes from existing point source dischargers?
5. How long do general and individual NPDES permits last for?



# Answer Key

Once you have completed the practice questions check with the work.

1. It originally started as the Federal Water Pollution Control Act Amendments of 1972
2. Conditions for discharges of pollutants into the waters of the US, gives EPA authority to implement pollution control programs. It also made it unlawful for any person to discharge any pollutant from a point source into waters unless they have a permit.
3. The EPA may not issue a permit for any waste to be discharged into ocean waters unless the discharge complies with Section 403.
4. Drilling fluids and cuttings, produced water, sanitary wastes, and deck drainage among others.
5. The permits last for five-year periods, but can be renewed for other five-year periods.



# Last Practice

You will use the notes and SDWA article from the activity on slide 5 to answer the following questions.



# Last Practice Questions

1. When was the Safe Drinking Water Act originally passed?
2. What is not protected under the law?
3. What is primacy?
4. What are the three steps to setting primary drinking water standards?
5. How do local areas afford to make improvements and maintenance?



# Answer Key

Once you have completed the practice questions check with the work.

1. 1974, with amendments in 1986 and 1996
2. Private wells which serve fewer than 25 individuals
3. The authority to implement SDWA within their jurisdictions if they can show that they will adopt standards at least as stringent as the EPA's and make sure water systems meet the standard.
4. First the EPA identifies contaminants, then they determine a maximum contaminant level healthy goal, then they specify a maximum contaminant level that is enforced.
5. The US EPA provides grants to help assist public water systems, called the drinking water state revolving fund.



# Additional Practice

If you would like to explore what has improved through these three pieces of legislation you can check out these resources:

[Safe Drinking Water Act 40th Anniversary](#)

[Clean Water Act Video](#)

[Clean Air Act of 1970](#)