

AP Environmental Science

Events Commonly Referred to in AP Environmental Science



Event	Date	Summary
1. Amoco Cadiz	1978	The name of an oil tanker that ran adrift off the coast of Brittany, France and spilled approximately 68 million gallons of crude oil into the English channel. One of the largest oil spills on record.
2. Bhopal	1984	A city in India which was the site of the most deadly industrial accident of all time. The Union Carbide pesticide plant outside the city experienced a failure which led to the accidental release of a cloud of deadly gas killing an estimated 15,000 people.
3. Chernobyl	1986	The name of a nuclear power plant near Pripyat, Ukraine that was the site of the worst industrial nuclear power accident. The explosion and subsequent fire caused many deaths and spread high-level radioactivity across much of Europe. Death toll estimate range from less than 50 to over 200. Pripyat remains uninhabitable.
4. George's Bank	1994	An area of elevated seafloor off the coast of New England and Nova Scotia that was one of the world's most productive fisheries. It was largely closed to commercial fishing in 1994 due to concern over the impact of decades of overfishing.
5. Colorado River Damming & Diversion	n.a.	The Colorado River is one of the most extensively dammed and diverted rivers in the world providing water for hydroelectric production, recreation, agriculture and municipal water supplies. It scarcely flows into the Gulf of California.
6. Cuyahoga River	1969	A river which flows through Northern Ohio past Cleveland that was so heavily polluted that its surface caught on fire in June of 1969. The event and its images helped to propel the U.S. environmental movement in the 1960s and early 1970s. It was neither the first nor the only river to do so.
7. Donora, PA	1948	The name of Pennsylvania town outside Pittsburg, PA that was the site of the worst industrial air pollution event in U.S. history. The event occurred as the result of a thermal inversion and high levels of air pollutants from the Donora Zinc Works and steel plants. The event was linked to 20 deaths and hundreds of illnesses.
8. Dust Bowl	1930-36	A period of intense dust storms and erosion in America's high plains (short grass prairie) from 1930 to the late 1930s caused by severe drought, overgrazing, intensive agriculture and improper soil conservation practices.
9. Exxon Valdez	1989	The name of an oil tanker that struck a reef in Prince William Sound outside Valdez, AK and spilled over 10 million gallons of petroleum. Significant ecological damage ensued and is now considered to be one of the most expensive oil spills on record.
10. Impact of DDT upon birds	1950-80	The widespread use of DDT as a pesticide in the United States from the late 1940s to the early 1970s had significant negative impacts upon the populations of birds. The populations of large carnivorous birds such as the Eagle, Peregrine falcon and Brown pelican were significantly harmed. DDT exposure is frequently indicated by egg shell thinning.
11. Love Canal	1974-80	A neighborhood in Niagara Falls, NY which was the site of the worst human exposure to industrial waste. Over the course of several years the Hooker chemical company dumped its toxic waste into the canal. It was subsequently capped and then sold. A school and low-income community were subsequently built on top of and beside the capped waste. Multiple cases of hazardous human exposure were documented. Both Love Canal and Times Beach helped to push CERCLA through Congress.
12. Pleistocene Megafauna Extinction	≈12,000 – 10,000 years ago	A mass extinction event of large land animals at the end of the last ice age approximately 10,000 years ago. This event is believed to have been caused by a combination of climate change and overhunting by humans. The precise causes and timing is the subject of much scientific debate.

13. Minamata	1956	A city in Southern Japan which is the site of the worst case of human exposure to mercury contamination. This occurred as the result of mercury pollution from a chemical company that incorporated itself into the ecosystem in Minamata bay. Through the processes of bioaccumulation and biomagnification some citizens in Minamata received very high doses of mercury. The resulting disease syndrome is now called Minamata disease after the victims of this event.
14. Ozone Depletion	Mid 1980s	By the middle 1980s a large body of scientific evidence came to support the theory that the stratospheric ozone layer was being thinned by the presence of chlorofluorocarbons in the stratosphere. This thinning, consequently, was allowing a greater percentage of dangerous ultraviolet light to strike the Earth's surface.
15. Santa Barbara	1969	The location of the third largest oil spill in U.S. history after the Gulf Oil Spill of 2010 and the Exxon Valdez spill of 1989. Occurred as the result of a blowout on an oil drilling rig outside Santa Barbara, CA which leaked 80,000 to 100,000 barrels of crude oil into the ocean. The oil fouled beaches and killed a wide variety of sea animals including seals, dolphin and birds. This and other events helped to push the environmental movement in the 1970s.
16. The Great Smog (aka: "The Great Smoke")	1952	A severe smog event that occurred in December, 1952 in London that lead to the deaths of 4,000 to 12,000 people and sickened over 100,000. The event was caused by emissions from coal furnaces and stoves in London combined with a thermal inversion and an anticyclone. This combination essentially prevented air pollutants from dissipating over the city for several days. The worst smog event on record in terms of its health effects on humans.
17. Three Mile Island (TMI)	1979	The location of the worst commercial nuclear accident in U.S. history. One of the reactors at the Three Mile Island facility south of Harrisburg, PA endured a partial meltdown as a result of partial coolant water loss. Although no lives were reported to have been lost, small amounts of radioactivity were released from the facility.
18. Times Beach	1983	A community outside St. Louis, MO that was the site of one of the worst human exposures to dioxin. Over a period of several years waste products containing dioxin were spread on the roads in the Times Beach community to control dust. The treatment was not known to contain dioxin. The town was subsequently evacuated in 1983 out of concern for its citizens. Following the evacuation the soils were treated, houses were dismantled and the town was unincorporated. The area is now a state park.

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