



In 2014, the Dan River Steam Station spilled 39,000 tons of coal ash waste into the Dan River in Eden, North Carolina.

Accidents Waiting to Happen

Coal Ash Pits

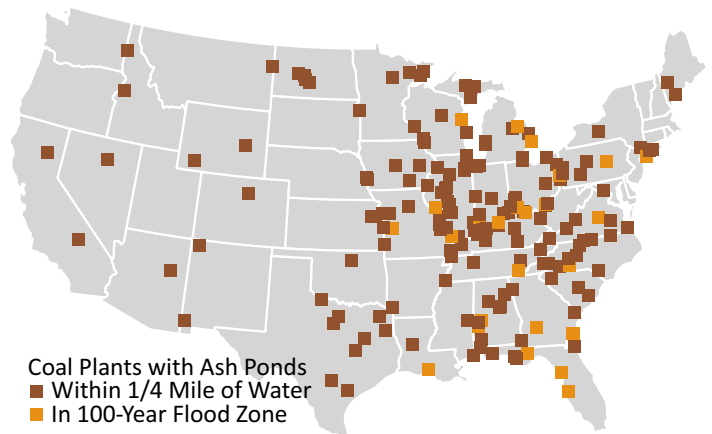
Hundreds of coal ash pits sit near the banks of American waterways, threatening toxic spills that can cause long-term damage to the environment and public health.

Millions of Tons of Toxic Coal Ash Are Stored at U.S. Coal Plants

When coal is burned at any of America's more than 350 coal-fired power plants, it leaves behind waste called coal combustion residuals, commonly referred to as ash. In 2016, coal plants produced 107 million tons of ash, of which nearly half was left over as waste. Coal ash is often mixed with water and stored on site in an ash pit. When it spills, this liquid coal ash slurry can smother landscapes and contaminate waterways with toxic chemicals such as arsenic, mercury and selenium.

Coal Ash Pits Put Water at Risk

Many coal ash pits are located on water's edge, sometimes separated from waterbodies by just a narrow embankment. During floods or heavy rains, uncovered coal ash pits can overflow and spill into nearby waterways. Ash pit embankments can also deteriorate and collapse, leading to massive ash releases. When the U.S. Environmental Protection Agency conducted a study of ash pond conditions, one in five assessed ash pits were found to be in poor condition.



In the U.S., 181 coal plants with coal ash pits are within a quarter mile of water



Pipes entering a coal ash pit at the J.M. Stuart Station, located in an Ohio River flood zone.

Coal Ash Spills Are Common

Coal ash pits frequently leak and spill. In December 2018, Earthjustice found evidence of harmful groundwater contamination at 67 coal plants in 22 states. Contaminants included arsenic, chromium, lead and selenium. Past major spills have destroyed ecosystems and landscapes.

- In December 2008, a coal ash pit at the Kingston Fossil Plant in Harriman, Tennessee, collapsed, leading 5.4 million cubic yards of ash to spill into the Emory and Clinch rivers. The spill also destroyed homes and covered 300 acres of land. Ten years later, more than 30 people who worked to clean up the site had died of illness.
- In February 2014, 39,000 tons of coal ash and 27 million gallons of coal ash pit water spilled into the Dan River in Eden, North Carolina, after a pipe burst at Duke Energy's Dan River Steam Station. In the wake of the spill, dead turtles were found onshore, and indications of coal ash contamination were detected in nearby wells.

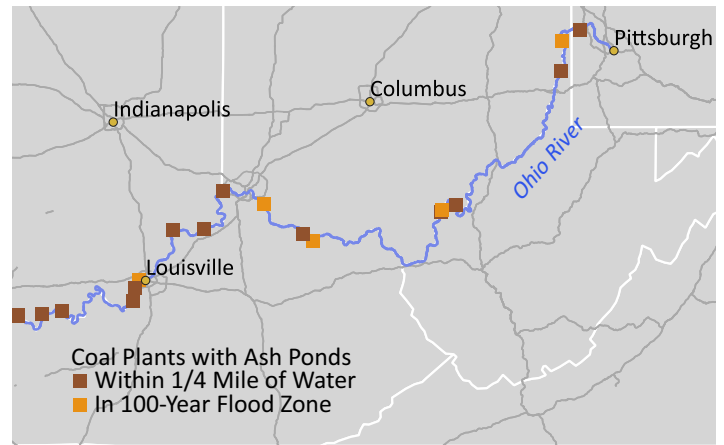
Protect American Waterways from Damaging Spills

Coal ash pits put America's streams and rivers at risk, but it doesn't have to be that way. Policymakers have a number of options to protect our waterways from all types of catastrophic accidents including:

Limit or end operations that pose severe threats to water. The best way to prevent toxic spills is to limit activities that create the potential for spills in the first place, for example by transitioning away from coal to an electricity system powered by clean, renewable energy.

Keep risky facilities away from water. As long as high-risk, waste-generating operations remain, policymakers should ensure that they are kept far enough from waterways to eliminate the risk of contamination.

Set and enforce strict standards for existing risky facilities that operate near waterways. Strict standards should apply to any facilities that store or transport hazardous material near water.



The Ohio River hosts more than 20 coal plants on its shores, which use the river's water for cooling – and to fill coal ash pits.

Threat Spotlight: Coal Ash Pits on the Ohio River

Across the country, 181 coal plants with on-site coal ash pits lie within a quarter mile of freshwater or coastline, and 26 coal plants with ash pits lie in FEMA 100-year flood zones. The 181 plants within a quarter mile of water generate at least 50 million tons of coal ash each year. They are also home to at least 326 coal ash pits, including 22 that were found to be in poor condition according to a 2014 U.S. Environmental Protection Agency assessment.

Many of these plants sit along the Ohio River. As of September 2018, there were 27 operable coal plants with onsite ash pits that used the Ohio River as a water source, including five in flood zones. The Ohio River supplies drinking water for more than 3 million people, and sustains hundreds of animal species.



For more information and the full report,
please visit

www.environmentamericacenter.org

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