



Coal Ash in Kentucky

| Coal Ash Is... | Also Known As... | Storage Methods |
|---|--|---|
| What's left over after coal is burned. It comes from the smokestacks and the coal furnaces. Coal ash contains concentrated amounts of many toxic heavy metals. Coal-fired power plants in the United States produce about 130 million tons of coal ash per year. <i>(Source: Energy Information Agency)</i> | Fly ash, bottom ash, coal combustion waste, coal combustion residue. | Landfills (dry storage) or impoundment ponds (wet storage). |

Kentucky's coal-burning power plants generate 8.6 million tons of coal combustion waste each year – as much as 215,000 semi-trucks! This waste contains nearly 4800 tons of toxic metals. Approximately 7.7 million tons of coal waste is stored on-site at power plants in Kentucky, while a small portion is recycled for other uses. *(Source: Energy Information Agency, Natural Resources Defense Council (NRDC))*

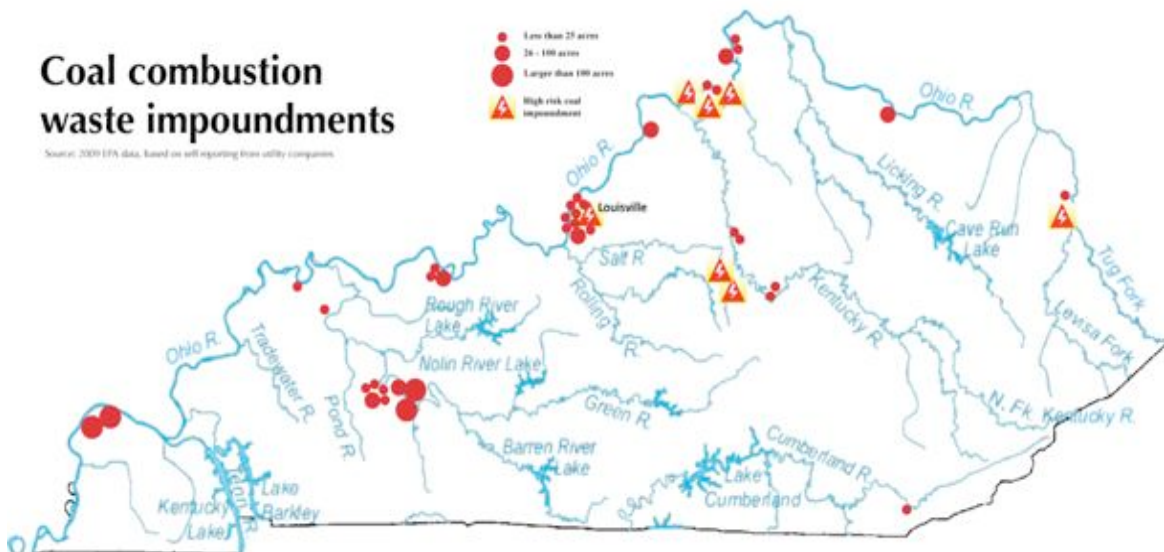
Kentucky's Coal Ash Impoundments *Source: EPA*

| City | Power Plant | Impoundment Hazard |
|--------------|----------------------|------------------------------------|
| Bedford | Trimble County | Significant |
| Central City | Green River (5) | None (3), Low (2) |
| Drakesboro | Paradise (3 ponds) | Low |
| Ghent | Ghent (5 ponds) | None (2), High (3) |
| Harrodsburg | EW Brown (2 ponds) | High |
| Hawesville | Coleman (3 ponds) | None (1), Low (1), Significant (1) |
| Henderson | RD Green | None |
| Louisa | Big Sandy (2 ponds) | Low (1), High (1) |
| Louisville | Cane Run (5 ponds) | None (4), High (1) |
| Louisville | Mill Creek (5 ponds) | None (4), Significant (1) |
| Maysville | HL Spurlock | Low |
| Pineville | Pineville Station | Low |
| Rabbit Hash | East Bend (3 ponds) | None |
| Robards | Reid/Green/HMP&L | Significant |
| Versailles | Tyrone (2 ponds) | None (1), Low (1) |
| West Paducah | Shawnee (2 ponds) | None (1), Significant (1) |
| Winchester | Dale (2 ponds) | None (1), Low (1) |

Seven of Kentucky's 44 coal ash impoundments are considered "high hazard," meaning that a dam break is likely to cause significant damage – including loss of life.

Coal combustion waste impoundments

Source: 2009 EPA data, based on self-reporting from utility companies.



Why Should We Be Concerned?

Coal Ash Harms Our Health. Coal ash can cause a host of health problems, from skin rashes to cancer to death. The hazardous Mill Creek coal impoundment in Louisville sits within 1000 feet of an elementary school, putting children’s health and lives at risk. (Source: *Louisville Courier-Journal*)

A 2007 EPA report found that those living near coal ash dumps have a 1 in 50 chance of getting cancer.

Coal Ash is Unregulated.

There are no federal regulations for coal ash storage. It’s cheaper and easier for utilities to store their ash on-site rather than properly dispose of it. Many coal ash impoundments are unlined and built with no consultation from engineers. As a result, toxic chemicals leach into our groundwater and drinking water. Uncovered dry ash impoundments spread toxic

| Health Effects of Some Coal Ash Toxins (source: CDC) | |
|--|---|
| Antimony | Animal studies show rashes, weight loss, diarrhea, liver damage, anemia |
| Arsenic | Nausea, vomiting, fatigue, abnormal heart rhythm, impaired nerve function, death |
| Cadmium | Fragile bones, vomiting, diarrhea, kidney damage, death |
| Chromium | Anemia, ulcers, stomach cancer, male reproductive system damage |
| Cobalt | Animal studies show heart, liver, and kidney damage; behavioral problems |
| Copper | Nausea, vomiting, stomach cramps, diarrhea |
| Lead | Nervous system, brain & kidney damage; weakness; anemia; developmental delays |
| Mercury | Ulcers, brain damage, kidney damage |
| Selenium | Brittle hair and nails, numbness in arms and legs, rashes |
| Thallium | Hair loss, vomiting, nervous system, lung, heart, liver, and kidney damage, death |
| Vanadium | Nausea, vomiting, stomach cramps; possible carcinogen |

dust over nearby communities. Impoundment dams can break, spilling millions of gallons of toxic sludge into waterways. The EPA is considering rules that would regulate coal ash, but they are weak and full of loopholes.

Because it’s unregulated, there are many coal ash dumps that even the EPA doesn’t know about. See an interactive map and report ash dumps in your community at <http://theclean.org/mapping>.

Coal Ash Reuses are Untested. Some coal ash is recycled into building materials like concrete, drywall and roof shingles, or is used to fill in construction sites. It is also used as agricultural fertilizer, in playground construction, and in products like bowling balls. However, little is known about how exposure to this so-called “beneficial reuse” affects our health. A town in Virginia had its drinking water poisoned when toxins leached from a golf course built with millions of tons of coal ash. (Source: *The Virginian-Pilot*, 8/27/09)

More Dumps are Proposed. East Kentucky Power Cooperative’s proposed coal-burning plant, Smith 1, would produce 520,000 tons of coal ash each year. That is more than a ton of ash per customer in the entire EKPC service area. And, despite already having ten coal ash impoundments – two which are “high hazard” – Louisville may have yet another coal ash dump in its city limits. The ash landfill at the Cane Run power plant would cover 60 acres near the Ohio River and could eventually be as tall as a 14-story building. Other ash dumps would come along with proposed coal-fired power plants in Trimble and Mason counties, generating an additional 323,000 tons of coal ash and 390 tons of toxic metals. (Source: NRDC)



Aerial view of a Cane Run ash dump in Louisville.

There are solutions! Investing in clean energy and efficiency will eliminate the need for more coal ash dumps in Kentucky. For more information or to get involved, contact Kevin at Kevin@kftc.org or 606-335-0764.

