

TOXIC COAL ASH IN ALABAMA

Addressing Coal Plants' Hazardous Legacy

For decades, utilities disposed of coal ash – the hazardous substance left after burning coal for energy – by dumping it in unlined ponds and landfills.

Alabama has 32 coal ash dumpsites. Coal ash contains hazardous pollutants including arsenic, boron, cobalt, chromium, lead, lithium, mercury, molybdenum, radium, selenium, and other heavy metals, which have been linked to cancer, heart and thyroid disease, reproductive failure, and neurological harm. Industry's own data indicate that across the country 91% of coal plants are currently polluting groundwater above federal health standards with toxic pollutants.¹

Coal ash remains one of our nation's largest toxic industrial waste streams. U.S. coal plants continue to produce approximately 70 million tons every year.²

Despite EPA's 2015 Coal Ash Rule, which created the first-ever safeguards for coal ash disposal, many coal ash dumps remain unregulated due to sweeping exemptions for legacy coal ash ponds and inactive landfills. The exempted coal ash dumps are sited disproportionately in low-income communities and communities of color. The EPA will issue a proposed rule to address these exemptions in May 2023.

Alabama is one of the nation's top coal ash-generating states, ranking ninth in ash production in 2005.³ Alabama utilities operate **16 federally regulated coal ash ponds and landfills** at eight plants that contain more than 118 million cubic yards of toxic waste (Table 1). Coal ash has caused significant groundwater contamination at all of Alabama's regulated dumpsites. In fact, five of the state's eight power plants rank among the top

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25% of the most contaminated coal ash sites. Alabama utilities, however, have failed to initiate any plant-wide cleanups to restore water resources despite the legal requirement to do so. In addition, Alabama Power is planning to close in place unlined coal ash impoundments

with ash in contact with groundwater, which is prohibited by the federal rule and which would ensure continued contamination at those sites.

In addition, Alabama hosts **16 unregulated inactive coal ash landfills and legacy ponds** at three active and retired coal plants (Table 2). The exact number remains unknown because utilities are not required to report these sites. These dumps are almost certainly contaminating water and threatening health and the environment; however, monitoring data are not currently available for most unregulated sites. As we anticipate EPA's proposed rule on legacy ponds and unregulated landfills in May 2023, a concern remains that the agency will not address coal ash that was dumped off site or used as fill.

Action Needed

The magnitude of harm from recklessly dumped toxic coal ash requires decisive action from federal and state regulators. Utilities must be required to comply with the law and immediately clean up their pollution.⁴ EPA and states must make enforcement a priority and act quickly to ensure that utilities leave communities with sites that benefit rather than harm their health, environment, and economic status. EPA must swiftly strengthen the Coal Ash Rule to address the many legacy ponds and inactive landfills that are unregulated, and to prohibit coal ash used

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as fill unless protective measures are put in place, to ensure all Alabama communities are protected from coal ash pollution.

Table 1: 16 Regulated Coal Ash Disposal Sites in Alabama

Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines ⁵
Charles Lowman	Leroy	Power South Energy Coop	3 unlined ponds	Arsenic (x14), Beryllium (x1), Boron (x6), Cobalt (x156), Lithium (x4), Molybdenum (x5), Sulfate (x2)
Colbert	Tuscumbia	Tennessee Valley Authority	1 unlined pond	Arsenic (x4), Boron (x2), Cobalt (x4)
EC Gaston	Wilsonville	Alabama Power	1 unlined pond, 1 lined pond	Arsenic (x2), Boron (x2), Cobalt (x1), Lithium (x14), Molybdenum (x54), Radium 226+228 (x3), Sulfate (x1)
James Miller	Quinton	Alabama Power	1 unlined ponds	Arsenic (x1), Boron (x2), Cobalt (x12), Lithium (x6), Molybdenum (x3), Sulfate (x3)
James Barry	Bucks	Alabama Power	1 unlined pond, 1 lined pond	Arsenic (x7), Boron (x1), Cobalt (x5)
Plant Gadsden	Gadsden	Alabama Power	1 unlined pond	Arsenic (x82), Cobalt (x9), Lithium (x2), Sulfate (x1)
Plant Greene	Demopolis	Alabama Power	1 unlined pond	Arsenic (x40), Boron (x1), Cobalt (x12), Lithium (x16), Molybdenum (x3), Sulfate (x2)
William Gorgas	Parrish	Alabama Power	2 unlined ponds, 3 landfills	Arsenic (x20), Boron (x7), Cobalt (x72), Lithium (x11), Molybdenum (x4), Sulfate (x6)

For more information on regulated coal ash sites in Alabama and throughout the U.S., see earthjustice.org/coalash/map.

Table 2: 16 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in Alabama (ash dumps exempted from the 2015 Coal Ash Rule)⁶

Coal Plant	City	Probable Owner	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination ⁷
Charles Lowman	Leroy	Power South Energy Coop	0	1	Yes – Industry data
Colbert	Tuscumbia	Tennessee Valley Authority	0	2	Yes – Industry data and EPA damage case
Widows Creek	Stevenson	Tennessee Valley Authority	12	1	Yes – EPA damage case

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Endnotes

- ¹ Earthjustice and Environmental Integrity Project, “Poisonous Coverup, The Widespread Failure of the Power Industry to Clean Up Coal Ash Dumps,” available at <https://earthjustice.org/document/poisonous-coverup>.
- ² American Coal Ash Association, 2020 CCP Production and Use Survey Report, <https://aca-usa.org/wp-content/uploads/2021/12/News-Release-Coal-Ash-Production-and-Use-2020.pdf>.
- ³ Coal Data Browser, Total Consumption, EIA, <https://www.eia.gov/coal/data/browser/>.
- ⁴ See endnote 1, *supra*, for more information re widespread utility non-compliance with the 2015 Coal Ash Rule.
- ⁵ All data derived from the utilities’ publicly accessible [CCR Compliance Data and Information websites](#), and exceedances were calculated by Environmental Integrity Project.
- ⁶ These data were developed by using EPA datasets relied upon in their 2007 and 2014 CCR risk assessments (Human and Ecological Risk Assessment of Coal Combustion Residuals) and comparing those datasets to the universe of regulated units.
- ⁷ “EPA damage case” denotes a site where US EPA has found documented groundwater contamination from coal ash. See <https://www.regulations.gov/document/EPA-HQ-RCRA-2009-0640-12123>.

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