EARTHJUSTICE

TOXIC COAL ASH IN TEXAS

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. **Texas has 79 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 contaminating groundwater above federal health standards with toxic pollutants.[1]

Coal ash is leaching unsafe levels of toxic pollutants into groundwater at 91% of coal plants in the United States.

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.

Texas is the nation's top coal ash-generating state, ranking first in ash production in 2020.[3] Texas also had the third highest number of operational coal plant units in 2022. Texas utilities operate **51 federally regulated coal ash ponds and landfills** containing more than 156 million cubic yards of toxic waste at 17 coal plants (Table 1). Texas is home to the most contaminated coal ash site in the U.S. Groundwater is contaminated above federal safe standards at all Texas plants where data are available.[4] Despite the serious and widespread water contamination, no Texas plant, to date, has selected a final plan to adequately clean up groundwater, as required by state law.

In addition, Texas hosts at least **28 unregulated inactive coal ash landfills and legacy ponds** that escape federal regulation (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.[5] 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 as fill unless protective measures are put in place, to ensure all Texas communities are protected from coal ash pollution.

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Table 1: 51 Federally Regulated Coal Ash Disposal Sites in Texas

Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines[6]
Big Brown	Fairfield	Luminant	2 unlined ponds, 1 landfill	Boron (x2), Cobalt (x2), Selenium (x3)
Calaveras	San Antonio	CPS Energy	5 unlined ponds, 1 landfill	Beryllium (x4), Boron (x3), Cadmium (x2), Cobalt (x24), Lead (x1), Lithium (x2), Radium 226+228 (x1), Selenium (x4), Thallium (x1)
Coleto Creek	Fannin	Luminant	2 unlined ponds	Boron (x4), Molybdenum (x3)
Fayette Power Project*	La Grange	Lower Colorado River Authority	1 landfill	Lithium (x3), Sulfate (x3)
Gibbons Creek	Anderson	Texas Municipal Power Agency	2 unlined ponds, 1 landfill	Antimony (x3), Arsenic (x1), Beryllium (x29), Boron (x5), Cadmium (x18), Cobalt (x97), Lead (x2), Lithium (x19), Mercury (x1), Radium 226+228 (x2), Sulfate (x6), Thallium (x4)
HW Pirkey	Hallsville	AEP	2 unlined ponds, 2 landfills	Arsenic (x1), Beryllium (x2), Boron (x1), Cadmium (x1), Cobalt (x47), Lithium (x4), Mercury (x4), Radium 226+228 (x2), Sulfate (x2)
J Robert Welsh	Pittsburg	AEP	2 unlined ponds, 1 landfill	Arsenic (x2), Beryllium (x3), Boron (x1), Cobalt (x133), Lead (x1), Lithium (x49), Radium 226+228 (x3), Sulfate (x10)
Limestone	Jewett	NRG	1 unlined pond, 1 landfill	Boron (x3), Sulfate (x2)
Martin Lake	Tatum	Luminant	4 unlined ponds, 1 landfill	Arsenic (x1), Beryllium (x3), Boron (x11), Cobalt (x31), Lithium (x4), Mercury (x12), Sulfate (x4)
Monticello	Mt Pleasant	Luminant	3 unlined ponds	Arsenic (x3), Beryllium (x8), Boron (x4), Cadmium (x4), Cobalt (x55), Lithium (x1), Selenium x2
Oak Grove	Franklin	Luminant	1 unlined pond, 2 lined ponds, 1 landfill	Chromium (x2), Cobalt (x4), Lithium (x3)
Oklaunion	Oklaunion	Oklaunion Industrial Park	5 unlined ponds	Not evaluated
San Miguel	Christine	San Miguel Electric Co	2 unlined ponds, 1 landfill	Arsenic (x8), Beryllium (x127), Boron (x41), Cadmium (x114), Cobalt (x488), Fluoride (x2), Lithium (x90), Mercury (x3), Radium 226+228 (x6), Selenium (x8), Sulfate (x20), Thallium (x4)

(Table continues on the next page)

* This plant operates inactive coal ash ponds at the facility but has not reported the ponds on its CCR Rule Compliance Data and Information website nor has the owner complied with the CCR rule's requirements that apply to these ponds, including groundwater monitoring, closure, and corrective action.

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Table 1, continued: 51 Federally Regulated Coal Ash Disposal Sites in Texas

Coal Plant	City	Owner	Coal Ash Dumps (total coal ash in million cubic yards)	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines[6]
Sandow	Rockdale	Luminant	1 landfill	Chromium (x2), Lithium (x13)
Sandy Creek	Reisel	Sandy Crk Energy A	1 landfill	Arsenic (x2), Cobalt (x2), Lead (x2), Lithium (x19), Selenium (x3), Sulfate (x6)
Twin Oaks	Bremond	Major Oak Power	1 landfill	Unsafe levels of radium, cobalt, arsenic, sulfate, lithium and thallium[a]
WA Parish	Thompsons	NRG	2 ponds, 1 landfill	Antimony (x2), Arsenic (x3), Lithium (x2), Sulfate (x3), Thallium (x1)

[a] Based on industry monitoring data. *See* Ashtracker.org.

For more information on regulated coal ash dumpsites in Texas, *see* earthjustice.org/coalash/map.

Table 2: 28 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in Texas (ash dumps exempted from the 2015 Coal Ash Rule)[7]

Coal Plant or Landfill	City	Probable Owner / Source	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination[8]
Big Brown	Fairfield	Luminant	0	3	Yes – Industry data[a]
Coleto Creek	Fannin	Coleto Creek Power LP	0	1	Yes – EPA damage case
Gibbons Creek	Anderson	Texas Municipal Power Agency	0	1	Yes – Industry data[a]
Harrington	Amarillo	Southwestern Public Service Co	2	2	Unknown
JT Deely	San Antonio	City of San Antonio	0	1	Unknown
Martin Lake	Martin Lake	Luminant	0	5	Yes – EPA damage case
Monticello	Mt Pleasant	Luminant	0	3	Yes – Industry data[a]

(Table continues on the next page)

[a] All data derived from the utilities' publicly accessible CCR Compliance Data and Information websites, and exceedances were calculated by Environmental Integrity Project

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Coal Plant or Landfill	City	Probable Owner / Source	# of Unregulated Ponds	# of Unregulated Landfills	Evidence of Site Contamination[8]
Oak Grove	Franklin	Luminant	0	2	Yes – Industry data[a]
Oklaunion	Oklaunion	West Texas Utilities	0	1	Unknown
San Miguel	Christine	San Miguel Electric Coop	0	1	Yes – Industry data[a]
Sandow No 4	Rockdale	Luminant	0	5	Yes – Industry data[a]
Tolk	Muleshoe	Southwestern Public Service Co	0	1	Unknown

[a] All data derived from the utilities' publicly accessible CCR Compliance Data and Information websites, and exceedances were calculated by Environmental Integrity Project

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://acaa-usa.org/wp-content/uploads/2021/12/News-Release-Coal-Ash-Production-and-Use-2020.pdf.

[3] Leading states by primary energy consumption from coal in the United States in 2020, https://www.statista.com/statistics/189862/leading-us-states-in-energy-consumption-from-coal/.

[4] *See* endnote 1, "Poisonous Coverup," *supra*, at Table A4, Summary of Contamination by Site.

[5] *See* endnote 1, *supra*, for more information re widespread utility non-compliance with the 2015 Coal Ash Rule.

[6] All data derived from the utilities' publicly accessible CCR Compliance Data and Information websites, and exceedances were calculated by Environmental Integrity Project.

[7] 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.

[8] "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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