



TOXIC COAL ASH IN ARIZONA

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.

There are a dozen coal ash dumpsites in Arizona. 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.

Arizona utilities operate 10 federally regulated landfills containing more than 90 million cubic yards of toxic waste at five power plants (Table 1). Coal ash has caused groundwater contamination at all of Arizona's regulated dumpsites. One of these dumps is contaminating water at more than 20 times the levels permitted for certain pollutants. Despite the

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

serious and widespread water contamination, no Arizona company to date has initiated a plant-wide cleanup to restore groundwater, despite the legal requirement to do so.

In addition, Arizona hosts at least **two** *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.³ 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 Arizona communities are protected from coal ash pollution.

Table 1: 10 Regulated Coal Ash Disposal Sites in Arizona

Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines ⁴
Apache	Cochise	Arizona Electric Power Cooperative	1 lined pond	Unsafe levels of lithium ^a
Cholla	Joseph City	Arizona Public Service Electric Co.	3 unlined ponds, 1 landfill	Arsenic (x2), Boron (x25), Cobalt (x13), Fluoride (x1), Lithium (x18), Molybdenum (x9), Radium 226+228 (x2), Selenium (x3), Sulfate (x23)
Coronado	St Johns	SRP	2 unlined ponds, 1 landfill	Lithium (x14), Radium 226+228 (x1)
Navajo	Page	SRP	1 landfill	Unsafe levels of cobalt ^a
Springerville	Springerville	Tucson Electric Power	1 landfill	Lithium (x26), Sulfate (x3), Thallium (x1)

^a Based on industry monitoring data. See Ashtracker.org.

For more information on regulated coal ash sites in Arizona, see earthjustice.org/coalash/map.

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

Coal Plant or	City	Probable Owner /	# of Unregulated	# of Unregulated	Evidence of Site
Landfill		Source	Ponds	Landfills	Contamination
Coronado	St Johns	SRP	0	2	Yes – Industry data ^a

^a All data derived from the utilities' publicly accessible <u>CCR Compliance Data and Information websites</u>, 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 See endnote 1, supra, for more information re widespread utility non-compliance with the 2015 Coal Ash Rule.
- ⁴ All data derived from the utilities' publicly accessible <u>CCR Compliance Data and Information</u> <u>websites</u>, and exceedances were calculated by Environmental Integrity Project.