

TOXIC COAL ASH IN COLORADO

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.

Colorado has 38 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.

Colorado utilities operate **19 federally regulated coal ash ponds and landfills** containing more than 26 million cubic yards of toxic waste at eight power plants (Table 1). At every Colorado coal ash dumpsite that has been evaluated, coal ash has caused significant groundwater contamination. Some of these dumps are contaminating water at more than 20-30 times the permitted levels of certain pollutants, and one of them – Comanche Generating

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

Station – has been required to pay EPA penalties for improper disposal of coal ash waste.³

Three Colorado plants are in the top 50 most-contaminated ash sites in the nation.⁴ Despite the serious and widespread water contamination, no Colorado

company to date has initiated a plant-wide cleanup to restore groundwater, despite the legal requirement to do so.

In addition, Colorado hosts at least **19 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

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that are unregulated, and to prohibit coal ash used as fill unless protective measures are put in place, to ensure all Colorado communities are protected from coal ash pollution.

Table 1: 19 Regulated Coal Ash Disposal Sites in Colorado

Coal Plant	City	Owner	Coal Ash Dumps	Groundwater Contamination from Coal Ash Magnitude of exceedance above federal health-based guidelines ⁶
Cherokee	Denver	Xcel Energy	4 unlined ponds	Boron (x2), Lithium (x3), Molybdenum (x1), Sulfate (x3)
Clear Spring Ranch	Fountain	Colorado Springs Utilities	1 landfill	Boron (x2), Selenium (x4)
Comanche	Pueblo	Xcel Energy	1 unlined pond, 1 landfill	Not evaluated
Hayden	Hayden	Xcel Energy	1 landfill	Boron (x27), Cobalt (x1), Molybdenum (x34), Sulfate (x27)
Nucla	Nucla	Tri-State Generation and Transmission Assoc.	1 landfill	Arsenic (x3), Fluoride (x1), Lithium (x83), Molybdenum (x1), Sulfate (x4)
Pawnee	Brush	Xcel Energy	2 lined ponds, 1 landfill	Lithium (x4), Sulfate (x10)
Rawhide	Wellington	Platte River Power Authority	2 unlined ponds, 1 landfill	Boron (x1), Cobalt (x2), Lithium (x14), Molybdenum (x1), Selenium (x2), Sulfate (x8), Thallium (x1)
Valmont	Boulder	Xcel Energy	3 unlined ponds, 1 landfill	Arsenic (x2), Boron (x9), Cobalt (x4), Lead (x1), Lithium (x6), Mercury (x13), Molybdenum (x6), Selenium (x58), Sulfate (x11), Thallium (x2)

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

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Table 2: 19 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in Colorado (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
Arapahoe	Denver	Public Service Co. of Colorado	6	0	Unknown
Cameo	Palisade	Xcel Energy	2	0	Unknown
Craig	Craig	Alaska Power and Telephone Co.	2	1	Unknown
Hayden	Hayden	Xcel Energy	0	1	Yes – Industry data ^a
Martin Drake	Colorado Springs	City of Colorado Springs	4	1	Unknown
Rawhide	Wellington	Platte River Power Authority	0	1	Yes – Industry data ^a
Valmont	Boulder	Xcel Energy	0	1	Yes – Industry data ^a

^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 CPR, “Xcel Energy will pay \$925,000 to settle EPA claims it improperly disposed coal waste,” May 23, 2022, <https://www.cpr.org/2022/05/23/xcel-energy-coal-waste-settlement/>.

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.

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