EARTHJUSTICE

# TOXIC COAL ASH IN WEST VIRGINIA

## Addressing Coal Plants' Hazardous Legacy

**48 coal ash dumpsites in West Virginia.**

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

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

West Virginia is one of the nation's top coal ash-generating states, ranking fifth in ash production in 2020.[3] West Virginia utilities operate **14 regulated coal ash ponds and landfills** at seven plants that contain more than **163 million cubic yards of toxic waste** (Table 1). Coal ash has caused significant groundwater contamination at all of West Virginia's regulated dumpsites. In addition, West Virginia coal ash dumps are some of the largest in the U.S.; six of the state's 14 dumpsites contain over 10 million cubic yards of toxic ash. Despite the threat and harm caused to groundwater, West Virginia utilities have failed to initiate any effective site-wide cleanups to restore water resources despite the legal requirement to do so.

In addition, West Virginia hosts at least **34 *unregulated* inactive coal ash landfills and legacy ponds** that escape federal regulation (Table 2). Utilities created at least 34 unregulated inactive coal ash landfills and legacy ponds at 10 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 as fill unless protective measures are put in place, to ensure all West Virginia communities are protected from coal ash pollution.

**FOR ADDITIONAL INFORMATION**

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## Table 1: 14 Federally Regulated Coal Ash Disposal Sites in West Virginia

| Coal Plant | City | Owner | Coal Ash Dumps | Groundwater Contamination from Coal Ash<br>Magnitude of exceedance above federal health-based guidelines[5] |
|---|---|---|---|---|
| **Fort Martin** | Maidsville | Monongahela Power | 1 landfill | Arsenic (x1), Boron (x2), Lithium (x1), Molybdenum (x1), Sulfate (x2) |
| **Harrison** | Haywood | Monongahela Power | 1 landfill | Arsenic (x2), Mercury (x1), Molybdenum (x4), Sulfate (x3) |
| **John Amos** | St. Albans | AEP | 2 unlined ponds, 1 landfill | Cobalt (x4), Molybdenum (x3) |
| **Mitchell** | Captina | AEP | 1 unlined pond, 1 landfill | Arsenic (x1), Boron (x6), Molybdenum (x2) |
| **Mount Storm** | Mount Storm | Dominion | 1 unlined pond, 2 landfills | Beryllium (x1), Cobalt (x8), Fluoride (x1), Molybdenum (x2) |
| **Mountaineer** | New Haven | AEP | 1 unlined pond, 1 landfill | Boron (x5), Lithium (x3), Molybdenum (x2), Sulfate (x2) |
| **Pleasants Power** | Willow Island | Allegheny Energy | 1 unlined pond, 1 landfill | Barium (x4), Lithium (x2), Radium 226+228 (x9) |

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

## Table 2: 34 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in West Virginia (ash dumps exempted from the 2015 Coal Ash Rule)[6]

| Coal Plant or Landfill | City | Probable Owner / Source | # of Unregulated Ponds | # of Unregulated Landfills | Evidence of Site Contamination[6] |
|---|---|---|---|---|---|
| **Albright** | Albright | Monongahela Power | 2 | 2 | Yes – Industry data[a] |
| **Fort Martin** | Maidsville | Monongahela Power | 0 | 2 | Yes – Industry data[b] |
| **Rivesville** | Rivesville | Monongahela Power | 4 | 2 | Unknown – no data |
| **Willow Island** | Willow Island | Monongahela Power | 1 | 1 | Unknown – no data |
| **Grant Town** | Grant Town | American Bituminous Power | 5 | 3 | Unknown – no data |

*(Table continues on the next page)*

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**Table 2, continued: 34 Unregulated Coal Ash Legacy Ponds and Inactive Landfills in West Virginia (ash dumps exempted from the 2015 Coal Ash Rule)**[6]

| Coal Plant or Landfill | City | Probable Owner / Source | # of Unregulated Ponds | # of Unregulated Landfills | Evidence of Site Contamination[6] |
|---|---|---|---|---|---|
| **John E Amos** | St. Albans | AEP | 0 | 1 | Yes – EPA damage case[c] |
| **Kammer** | Moundsville | Ohio Power Co | 1 | 0 | Unknown – no data |
| **Kanawha River** | Glasgow | Appalachian Power Co | 4 | 0 | Unknown – no data |
| **Mount Storm** | Mount Storm | Dominion | 0 | 2 | Yes – Industry data[b] |
| **Phillip Sporn** | Graham Station | Appalachian Power Co | 3 | 1 | Unknown – no data |

[a] Historical industry monitoring data are the basis of the finding of contamination. See Ashtracker.org.

[b] Data derived from the utilities' publicly accessible CCR Compliance Data and Information websites.

[c] "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.

## 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* footnote 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.

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