

PROTECTION FROM TOXIC COAL ASH

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WHY IT MATTERS

Coal ash, or coal combustion residuals (CCRs), poses significant health risks to humans and the environment. As a byproduct of burning coal at power plants, coal ash contains toxic substances such as mercury, cadmium, and arsenic.¹ Short-term exposure can result in irritation of the eyes, nose, and throat, dizziness, nausea, vomiting, diarrhea, and shortness of breath. Long-term exposure, however, is far more severe, potentially leading to liver and kidney damage, cardiac arrhythmia, cancer, asthma, wheezing, lung cancer, intestinal ulcers, anemia, and stomach cancer. Legacy coal ash impoundments often lack modern engineering controls and are prone to leaks and structural failures, potentially contaminating soil and water sources in surrounding communities. Ensuring compliance with coal ash regulations is crucial to protect ecosystems and communities from hazardous pollutants. Effective implementation will prevent contamination of drinking water, safeguard aquatic life, and reduce health risks for residents living near these sites. Workers at coal-fired power plants and residents living near coal ash disposal sites are particularly vulnerable to these health risks.

CURRENT LANDSCAPE

Bipartisan legislation enacted in Virginia in 2019 and 2020 required the removal of the more than 28 million tons of Dominion's coal ash that was in unlined ponds, leaking into surface and groundwater. Additionally, legislation passed in 2020 required the testing of drinking water wells, and in 2023 the replacement of drinking water wells located one mile from Dominion's coal ash ponds where contaminants were detected. Much of this work still has not been accomplished. The Virginia Department of Environmental Quality (DEQ) oversees the management of coal ash impoundments in the state and currently lacks sufficient staff to thoroughly oversee the full scope of the extensive remediation needed.

The EPA finalized Legacy Coal Combustion Residuals (CCR) rules on April 25, 2024, which aim to regulate previously unregulated coal ash sites. Identifying and cleaning up all legacy CCR impoundments and coal ash sites (including Appalachian Power sites) presents significant challenges. DEQ's limited staffing and resources hinder comprehensive oversight and enforcement of the new EPA rules. Existing funding primarily covers active impoundments only, leaving a gap in addressing legacy sites. Other challenges include the need for specialized technical expertise,

increased inspection frequency, and community engagement to ensure transparency and compliance. Addressing these issues requires a strategic approach to secure additional funding and personnel.

OPPORTUNITIES

Virginia has the opportunity to greatly reduce toxic metal contamination throughout the Commonwealth by evaluating the information required under EPA's Legacy CCR rules effectively and continuing the state's leadership in requiring clean and responsible closure of coal-fired power plants and the wastes associated with them. Key steps include:

VERIFYING INDUSTRY REPORTING

EPA's Legacy CCR Rules require utilities to identify stockpiles of legacy ash and CCR materials and report all CCR disposal sites to EPA. These rules are effective as of November 2024, and the reports are required by May 2025, with a few opportunities for extensions. While these reports are filed directly with the EPA, DEQ personnel will be largely responsible for verifying the information.

SECURING ADDITIONAL PERSONNEL

Additional state budget allocations and federal grants will be needed to support the increased workload. Investment in additional staff will enhance DEQ's capacity for monitoring and enforcement with and ensure sufficient technical expertise in relevant areas such as environmental engineering, hydrogeology, and toxicology for assessing contamination risks and implementing corrective actions.

FACILITATING COMMUNITY ENGAGEMENT

Using existing websites and notification lists, DEQ can provide public notice of industry self-disclosures covered by the EPA legacy rules. Additionally, DEQ should provide for public information sessions in key impacted communities to ensure that residents are informed about the risks and remediation efforts.

TOP TAKEAWAYS

Legacy coal ash impoundments pose significant environmental and public health risks.

The 2024 EPA CCR rules require robust oversight, implementation, and enforcement to protect Virginians.

Additional personnel and funding for the DEQ will be needed to ensure compliance and effective management of legacy CCR sites.