Environment, Social Governance

E•S•G

Permitting Requirements

### LEGISLATION JANUARY 2025

EDUCATION, ENERGY, AND THE ENVIRONMENT COMMITTEE

DARK MONEY FUNDED NONPROFIT ADVOCACY GROUPS AND MD LEGISLATURES

EQUALITY IN INFRASTRUCTURE

elector

PERMITTING AND EVOLVING STATE APPROACHES TO ENVIRONMENTAL JUSTIC

# COAL COMBUSTION

# RESIDUALS

By-Products and Effects on Human Health



### **Report Author**

2Bridge CDX / Brandywine TB Southern Region Neighborhood Coalition



### HB0902|SB0425 COAL ASH POLICY EDUCATION, ENERGY, AND THE ENVIRONMENT

### **11 FEBRUARY 2025**

TO: MARYLAND GENERAL ASSEMBLY

FOR: Delegate Mary Lehman, Maryland District 21 Report Submitted December 2024

FROM: Brandywine TB Southern Region Neighborhood Coalition (BTB Coalition)

**POSITION:** FAVORABLE

Thank you for the opportunity to offer to submit this analysis concerning coal ash 2024 Legislation HB1193/SB1122 and 2025 current bills HB0902/SB0425.

Having sponsored membered organizations our community development nonprofit organization, being a neighborhood coalition representing constituents' having the lived experience. This report is to be used as an education tool for those at the local, the state, and federal level governmental agencies.

Our mission is to improve the lives of working families in Maryland. In conclusion, as a community practitioner we're looking forward to assisting with tailor specific sections, such as the funding mechanisms or community advisory structures, to better fit Maryland's legislative in the health and protection of the health and welfare of our effected community landscape.

In conclusion, as community practitioner we're looking forward to assisting with tailor specific sections, such as the funding mechanisms or community advisory structures, to better fit Maryland's legislative and community landscape. If you have questions or concerns, you can refer this matter to ECCB– Neighborhood Leadership Council (NLC) by email.

Thank you for your considerable time and attention.

Branduwine/TB. Southern Region BTB Coalition, President

ECCB

Policy & Legislative Consultant

2Bridge CDX, Founde

Kamita Gray

Respectfully submitted 7) In solidarity, Brandywire / B Southern Region Neighborhood Coalition; and the Executive Community Citizen's Board (ECCB) neighborhood Leadership Council

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# COAL ASH MANAGEMENT FEDERAL

### **DISPOSAL OF COAL COMBUSTION**

Coal Ash Is More Radioactive Than Nuclear Waste By burning away all the pesky carbon and other impurities, coal power plants produce heaps of radiation.

Power plants dispose of coal ash in surface impoundments or in landfills. Others may discharge it into a nearby waterway under the plant's water discharge permit. Coal ash may also be recycled into products like concrete or wallboard.

### **Residuals from Electric Utilities Rulemaking**

After years of litigation and grassroots activism, on Apr. 25, 2024, the EPA issued a new rule that will force power plants to finally clean up their toxic coal ash. The EPA extended federal monitoring and cleanup requirements to hundreds of previously excluded older coal ash landfills and ponds that have been leaking toxic pollution into groundwater. https://www.epa.gov/newsreleases/biden-harris-administration-finalizes-suite-standards-reduce-pollution-fossil-fuel https://www.epa.gov/coalash/coal-ash-rule

### Southern States Split in Response to EPA's Coal Ash Rule Rollbacks

https://stateline.org/2019/12/02/southern-states-split-in-response-to-epas-coal-ash-rule-rollbacks/

# STATE

### MANAGEMENT OF COAL COMBUSTION

### Toxic Coal Ash in Tennessee: Addressing Coal Plants' Hazardous Legacy

Tennessee and Virginia both have state coal ash laws on the books that include relatively strong safeguards on coal ash reuse. Regulators in these states argued that their laws would be undermined by putting more requirements on users of coal ash Aug 31, 2022.

### Toxic Coal Ash in Virginia: Addressing Coal Plants' Hazardous Legacy

### Virginia (ADD HERE)

1. Legislation

# LOCAL BRANDYWINE

### AIR

### PSEG release of PM10 air pollutants on Brandywine (MDE)

Citizen's for thirty pieces of silver... a reality of "Judas"! MDE fails "Brandywine" residents again! Environmental Justice Implementation is a farce and MDE makes it clear they did not take the EPA Civil Rights Title VI Administrative complaint serious in protection of overburden communities of color. https://engage.voiceyouropinion.info/btbcoalition/epasep

### Earthworks certified FLIR camera shows hidden hazard pollutant plume Released plant Gases Detected and Minimum Detected leak rate (MDLR)

The air quality pollutants from 2016 has not improved for the better. Methane is 25 times more damaging to the environment than carbon dioxide. FLIR G20 camera is used to film oil and gas emissions specifically. https://engage.voiceyouropinion.info/btbcoalition/panda

### WATER



### Leachate into Brandywine water for the past 50 years from Coal Ash

https://www.eenews.net/articles/epas-coal-ash-crackdown-comes-with-a-major-caveat/

**BRANDYWINE, Maryland** — Just beyond the boundaries of this town's sole public park is a 140-acre coal ash pit slowly leaking heavy metals into groundwater.

For 50 years, energy companies hauled in coal ash from two nearby power plants and dumped it in this quiet community in Prince George's County. Today, the ash pond spans the equivalent of 180 footballs fields, mostly hidden by grass and weeds.

### **Brandywine TB Southern Region Neighborhood Coalition**

https://engage.voiceyouropinion.info/btbcoalition

### **MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE)**

GenOn MDE Letter



Wes Moore, Governor Aruna Miller, Lt. Governor

Serena McIlwain, Secretary Suzanne E. Dorsey, Deputy Secretary

JUN 18 2024

### **CERTIFIED MAIL / ELECTRONIC MAIL**

Jay Spence, Superintendent GenOn MD Ash Management, LLC 25100 Chalk Point Road Aquasco, Maryland 20608

Re: GenOn Brandywine Ash Management Facility, AI# 22933 Consent Decree CJ-13-1926 Corrective Measures Plan

Dear Mr. Spence:

The Maryland Department of the Environment (Department) recently reviewed the 2024 First Semi-Annual Monitoring Report (Monitoring Report), dated April 2024, and the Phase 2A Bottom Ash Beneficial Use Plan, dated February 12, 2024, for the Brandywine Ash Management Facility (Facility) in Brandywine, Maryland. This Facility contains 139 acres of coal combustion byproducts (CCBs) located in cells known as Phase I, Phase II, and Historical Areas 1 and 2. Under Consent Decree CJ-13-1926 (Consent Decree), GenOn MD Ash Management, LLC (GenOn) was required to submit a Corrective Measures Plan (CMP) that detailed alternative remedial measures to resolve surface and groundwater contamination resulting from the CCBs. The latest revision of the CMP for this Facility was submitted in June 2018 and is pending approval from the Department.

The Department notes in the *Monitoring Report* that groundwater concentrations of CCB indicator contaminants in certain monitoring wells have remained elevated or increased since the CMP was submitted. For example, groundwater concentrations of boron have increased in recent years in monitoring well B28 and remain elevated above 10,000 micrograms per liter ( $\mu$ g/L) in monitoring wells B16 and B38. Groundwater concentrations of selenium have remained above the maximum contaminant level (MCL) of 50  $\mu$ g/L in monitoring wells B18S, B27, and B29, and aluminum concentrations in B16 have sharply increased to levels as high as 27,000 to 37,000  $\mu$ g/L in the past two years.

In July 2023, the Department approved GenOn's proposal to complete direct push soil borings in the vicinity of B16 and B27 and to conduct additional whole effluent toxicity (WET) testing and embryo larval teratogenicity testing at surface water monitoring stations SW-04 and SW-05, which are located downgradient of Phase II. The Department also understands that GenOn will remove a portion of the CCB material from Phase II for beneficial reuse, with additional material planned for removal pending approvals and agreements with multiple entities.

Based on the aforementioned findings, the Department requests an updated CMP no later than 90 days upon receipt of this letter. The updated CMP should include the result of the investigations

1800 Washington Boulevard | Baltimore. MD 21230 | 1-800-633-6101 | 410-537-3000 | TTY Users 1-800-735-2258 www.mde.marvland.gov Mr. Jay Spence, AI# 22933

approved last year and source removal of CCBs as a recommended corrective measure. However, please ensure the revised CMP also describes all potential corrective measures that could be used to achieve the Remedial Action Objectives (RAOs) of the Consent Decree, including a comparison of cost, time needed to achieve the RAOs, and implementation schedule. Finally, please also include a proposed contingency measure should the recommended corrective measure fail to achieve the RAOs.

If you have additional questions, please contact Mr. Andrew Gosden, Program Manager, Compliance Program at (410) 537-3510 or by email at *andrew.gosden@maryland.gov*.

Sincerely,

D. Lee Currey, Director Water and Science Administration

DLC:ldr

cc: Stephen Frank, GenOn MD Ash Management, LLC Mark Bauer, Geosyntec Consultants, Inc.

# LEGISLATION ON TITLE VI DISPARATE IMPACTS WITH EJ

### TITLE VI

**Title VI** of the **Civil Rights Act of 1964** prohibits discrimination on the basis of race, color, or national origin in any program or activity receiving federal financial assistance. Title VI is an essential tool for advancing **environmental justice (EJ)**, particularly in addressing the disproportionate environmental burdens faced by communities of color and low-income populations.

**Environmental Justice (EJ)** is a subjective movement that is not law which seeks to address the unequal environmental burdens experienced by marginalized communities. These communities often face higher exposure to pollutants, poorer health outcomes, and lack of access to environmental benefits like clean air, water, and green spaces.

### **Environmental Justice**

Under Title VI, federal agencies, including the **Environmental Protection Agency (EPA)**, are required to ensure that federally funded programs do not have discriminatory effects. Communities can file complaints under Title VI if they believe a project receiving federal funding is discriminating against them by causing disproportionate environmental harms.

For example, when a new industrial facility is sited in a predominantly minority or low-income area, residents may use Title VI to challenge the project if they believe it will lead to increased pollution, health risks, or loss of natural resources. Federal agencies are obligated to investigate these claims and address any discriminatory effects.

### **Disproportionate Impacts**

One of the critical concepts in environmental justice shall be based federal law upon which **disproportionate impacts are a consideration**. This refers to the combined environmental and health effects of multiple pollution sources on a community over time. Traditionally, environmental regulations have focused on assessing the impacts of individual projects or facilities in isolation, often overlooking the cumulative burdens that certain communities face from multiple sources of pollution.

To better address EJ concerns, advocates have pushed for regulatory frameworks that consider cumulative impacts in decision-making. This can involve:

- Health risk assessments (\*MD Health in all Policies) that account for long-term exposure to multiple pollutants.
- Consideration of the historical pollution burden in areas where new industrial projects or permits are being proposed. This need to be full "environmental assessments" not useless "Rapid" Assessments)
- Policies to prevent further concentration of polluting industries in vulnerable communities.

### **Recent Developments and Legislation**

Recent legislative efforts and policy initiatives aim to strengthen the connection between Title VI, environmental justice, and cumulative impacts:

**Executive Order 14008** (2021): President Biden's order on "Tackling the Climate Crisis at Home and Abroad" emphasizes addressing environmental injustices and calls for government-wide action to deliver at least 40% of the overall benefits of relevant federal investments to disadvantaged communities. It directs federal agencies to focus on cumulative impacts when making environmental decisions.

**Environmental Justice for All Act** (introduced in 2021): This bill seeks to improve protections for vulnerable communities by requiring federal agencies to assess cumulative impacts before issuing permits for industrial facilities. It also strengthens community participation in decision-making processes and allows communities to seek legal remedies for environmental harms caused by discriminatory practices.

**The EPA's 2022 Cumulative Impacts Addendum:** The EPA has been working on guidance to incorporate cumulative impacts into regulatory processes. This involves using environmental justice screening tools, such as **EJScreen**, to map communities that face disproportionate environmental burdens and target regulatory and enforcement efforts accordingly.

By linking Title VI protections to a more robust consideration of cumulative impacts, agencies can better safeguard communities that have historically been overburdened by pollution and under-resourced in environmental protection.

### More information surrounding the area of coal ash specific cases or policies regarding cumulative impacts?

Coal ash, also known as coal combustion residuals (CCR), is a byproduct of burning coal in power plants, and it contains contaminants such as mercury, cadmium, arsenic, and lead. These toxic materials can pose serious environmental and health risks if not properly managed. The regulation of coal ash disposal has been a significant concern due to the potential contamination of water, soil, and air.

### Major Legislation and Regulatory Framework on Coal Ash:

### 1. Resource Conservation and Recovery Act (RCRA) – 1976

The **RCRA** is the foundational federal law governing the disposal of solid and hazardous waste in the U.S. While coal ash was historically considered a "non-hazardous" waste under RCRA, its regulation fell under **Subtitle D**, which focuses on solid (non-hazardous) waste disposal. This designation limited the federal oversight and left much of the regulation up to the states, leading to a patchwork of protections across the country. Therefore, this is seen as no more than solid waste classification in turn seen as standard household trash.

### 2. 2008 Kingston Coal Ash Spill

The need for stronger regulations became evident after the **2008 Kingston Fossil Plant coal ash spill** in Tennessee, where over a billion gallons of coal ash slurry were released into the environment, contaminating water bodies and causing widespread damage. This disaster accelerated the call for federal regulation of coal ash storage and disposal.

### 3. EPA's Coal Ash Rule (2015)

In response to years of advocacy and incidents like the Kingston spill, the Environmental Protection Agency (EPA) issued its first federal coal ash regulations under the Coal Combustion Residuals (CCR) Rule in 2015. This rule established national standards for the safe disposal and management of coal ash, including:

- **Groundwater Monitoring**: Power plants must monitor groundwater around coal ash disposal sites to detect contamination.
- Liner Requirements: New coal ash ponds must be lined to prevent leaks into groundwater. Unlined coal ash ponds that are contaminating groundwater must close.
- **Closure Requirements**: Utilities must close coal ash ponds that are inactive or causing environmental harm.
- **Public Transparency:** Utilities must post groundwater monitoring data and reports on their websites, allowing public access to this information.

This rule, however, was issued under **RCRA Subtitle D**, meaning it did not grant the EPA direct enforcement authority. Instead, states were given the responsibility to implement the rule, and citizen lawsuits were the primary enforcement mechanism.

### 4. Water Infrastructure Improvements for the Nation (WIIN) Act – 2016

The WIIN Act amended RCRA to allow the EPA to enforce its coal ash rule, providing more oversight of state programs and granting the agency the ability to act in states that do not have approved coal ash management programs. The act also authorized states to develop their own CCR programs, which must be at least as stringent as the federal standards.

This legislation was seen as a critical step in strengthening federal oversight over coal ash disposal and ensuring that states adhered to national standards.

### 5. Trump Administration (2018-2020)

During the Trump administration, the EPA weakened some provisions of the 2015 coal ash rule:

- **Extended Deadlines:** The administration extended the deadlines for closing coal ash ponds that were contaminating groundwater.
- **Flexibility for Liner Requirements:** Some exemptions were provided for unlined or poorly lined ponds, allowing utilities more leeway in managing these sites.
- Weakened Groundwater Protections: The revised rule allowed for increased flexibility in how groundwater contamination was addressed and delayed timelines for certain corrective actions.

These adjustments were criticized more so, by advocacy environmental groups leading the charge. Our communities living near coal ash ponds, objected to the potentially delayed necessary protections for health and the environment.

### 6. Biden Administration Actions

The **Biden administration** has sought to restore and strengthen coal ash regulations, reversing many of the rollbacks implemented by the previous administration. Some actions include:

- **Restoring Deadlines**: Reinstituting stricter deadlines for the closure of unlined coal ash ponds.
- Increasing Public Participation: Expanding opportunities for public involvement in permitting processes related to coal ash disposal.
- **Strengthening Groundwater Protections**: Ensuring stricter requirements for monitoring and remediating groundwater contamination from coal ash ponds.
- In 2022, the EPA began taking more aggressive enforcement actions, including:
- Enforcement Orders: Issuing enforcement orders to utilities operating unlined coal ash ponds in violation of the CCR rule.
- **Closure Mandates**: Ordering the closure of several unlined ponds that were contaminating groundwater.

### 7. Legislative Proposals and Advocacy

### There have been ongoing efforts by environmental justice groups and lawmakers to further strengthen coal ash regulations. Some of the key proposals and actions include:

- Environmental Justice for All Act (2021): This proposed legislation would require federal agencies to evaluate and address cumulative impacts of pollution on vulnerable communities, including those affected by coal ash.
- Stronger Enforcement Mechanisms: Advocates continue to push for more stringent federal enforcement mechanisms and penalties for violations, ensuring that polluting facilities are held accountable for coal ash contamination.
- Safe Coal Ash Disposal Act: Introduced in some sessions of Congress to establish more stringent requirements for coal ash disposal and address gaps in the current regulatory framework.

### **Cumulative Impact Considerations and Environmental Justice (EJ)**

Coal ash facilities are often located in low-income communities and communities of color, which already face disproportionate exposure to environmental pollutants. The cumulative health impacts from living near coal ash ponds, combined with other environmental stressors, make these populations particularly vulnerable.

Coal ash regulation is increasingly framed within the **environmental justice** context, especially in states and regions that have historically faced less stringent environmental oversight. Addressing the cumulative impacts of coal ash on these communities is a critical aspect of ongoing regulatory reform efforts.

### CONCLUSION

Coal ash regulation has evolved significantly, particularly following major environmental disasters and increased awareness of the public health risks. While significant progress has been made in regulating coal ash disposal under federal law, ongoing legislative and policy debates continue to shape the future of coal ash management in the U.S., particularly with respect to environmental justice and cumulative impacts.

# WOULD YOU LIKE TO EXPLORE A SPECIFIC ASPECT OF COAL ASH REGULATION IN MORE DETAIL?

Which specific aspect of coal ash regulation would you like to explore further? Here are a few areas you might consider:

- Health and Environmental Impacts of Coal Ash: Understanding the toxic elements in coal ash and their effects on communities and ecosystems.
- **Recent EPA Actions and Enforcement:** How the current administration is addressing coal ash pond closures, cleanup, and stricter oversight.
- Environmental Justice Implications: How coal ash disproportionately affects low-income communities and communities of color, and what policies are addressing this.
- **State vs. Federal Regulation**: The role of states in regulating coal ash under the WIIN Act and how this interacts with federal regulations.
- High-Profile Cases or Legal Battles: Major lawsuits or enforcement actions related to coal ash spills or contamination.

# LET'S DIVE INTO BOTH THE HEALTH AND ENVIRONMENTAL IMPACTS OF COAL ASH

# AND THE ROLE OF STATE REGULATION IN MANAGING COAL ASH DISPOSAL.

### Health and Environmental Impacts of Coal Ash

Coal ash contains harmful heavy metals and toxic substances such as arsenic, lead, mercury, cadmium, chromium, and selenium. These substances are known to cause a range of health problems and environmental degradation when they leach into the air, water, and soil.

### **HEALTH IMPACTS**

Communities living near coal ash ponds or disposal sites face increased risks of serious health conditions, especially from groundwater and air contamination.

**Groundwater Contamination:** Many coal ash disposal sites are near rivers, lakes, or groundwater supplies. If coal ash ponds are unlined (or improperly lined), toxic substances can leach into local groundwater. Long-term exposure to contaminated drinking water is linked to severe health problems:

- **Arsenic**: Long-term exposure can cause skin lesions, cardiovascular disease, and increased cancer risk (skin, bladder, kidney, and lung cancer).
- Lead: Lead exposure is particularly dangerous for children, leading to developmental delays, cognitive impairments, and behavioral issues. In adults, lead exposure can cause high blood pressure, kidney damage, and reproductive issues.
- **Mercury**: Can impair neurological development in fetuses and young children, and cause tremors, cognitive dysfunction, and kidney damage in adults.

Air Pollution: When coal ash is stored in dry, unprotected landfills or when ponds dry out, ash particles can become airborne. Inhaling coal ash dust can lead to respiratory problems (asthma, lung disease, and chronic bronchitis), and long-term exposure can increase the risk of lung cancer.

**Reproductive and Developmental Effects:** Exposure to the heavy metals found in coal ash can affect reproductive health, causing issues like fertility problems and increased risk of birth defects.

### **ENVIRONMENTAL IMPACTS**

Coal ash contamination can harm ecosystems and wildlife in several ways:

Water Contamination: The leaching of heavy metals from coal ash disposal sites into waterways can harm aquatic ecosystems. Toxic substances can kill or deform fish and aquatic life. Arsenic and selenium in waterways can disrupt reproductive processes in fish and birds, leading to population declines.

**Soil Degradation:** Coal ash pollutants that seep into the soil can decrease soil fertility and harm plant life, making land less productive for agriculture or natural habitats.

**Biodiversity Loss:** Contaminants from coal ash can damage the health of plants, animals, and microorganisms in the environment. Polluted ecosystems often experience reduced biodiversity, as many species cannot tolerate the elevated levels of toxins.

### **High-Profile Examples:**

- **Duke Energy Coal Ash Spill (2014)**: A pipe rupture at Duke Energy's Dan River power plant in North Carolina released about **39,000 tons** of coal ash and contaminated water into the Dan River, affecting over 70 miles of the river system.
- **Kingston Coal Ash Spill (2008)**: The collapse of a coal ash containment wall at the Tennessee Valley Authority's Kingston Fossil Plant released more than **1 billion gallons** of toxic sludge into the surrounding land and waterways. This disaster contaminated soil and water with arsenic, lead, and mercury, and led to extensive environmental damage.

### **STATE REGULATION OF COAL ASH**

**State regulation** plays a critical role in coal ash management, especially since the **Resource Conservation and Recovery Act (RCRA)** gave states the ability to implement their own programs for coal ash disposal, provided they meet or exceed federal standards.

### 1. State Oversight under the WIIN Act

The Water Infrastructure Improvements for the Nation (WIIN) Act of 2016 allows states to develop their own coal ash management programs, which must be approved by the EPA. To receive EPA approval, a state's program must meet the minimum standards set by the federal Coal Combustion Residuals (CCR) Rule (2015). These include:

- Groundwater monitoring requirements.
- Criteria for the design and construction of coal ash landfills and ponds.
- Closure requirements for leaking or non-compliant coal ash ponds.

Once a state program is approved, it takes over the enforcement of coal ash disposal regulations within its jurisdiction, although the EPA retains oversight authority.

### 2. Differences in State Approaches

States vary significantly in how they regulate coal ash, leading to discrepancies in protection across the U.S. Some states have enacted strong programs, while others have lagged behind in enforcement and protective measures.

- North Carolina: Following the 2014 Duke Energy spill, North Carolina passed one of the most stringent coal ash laws in the U.S., the Coal Ash Management Act (CAMA). CAMA required the closure of all coal ash ponds in the state, along with cleanup, monitoring, and enhanced public involvement in decision-making.
- **Virginia**: Virginia passed a law in 2019 that required utilities to remove coal ash from unlined ponds and either recycle it for beneficial use or place it in lined landfills.
- **Georgia**: Georgia has been criticized for weaker oversight. The state's coal ash disposal standards allow coal ash to be left in unlined ponds, even if they are contaminating groundwater, provided they meet certain conditions.

### 3. Challenges with State Regulation

There are several challenges in the state regulation of coal ash:

- **Inconsistent Enforcement**: While some states have implemented strong protections, others have been slow to act, leading to gaps in the protection of communities and ecosystems.
- **Industry Influence**: In some states, utilities and industries have successfully lobbied for weaker regulations, arguing that stricter rules would be too costly. This can delay necessary closures and cleanup efforts.

• **Citizen Lawsuits**: In states with weaker enforcement, communities often rely on **citizen lawsuits** to push for the cleanup of coal ash ponds and enforcement of the CCR rule. These lawsuits have been critical in holding utilities accountable for groundwater contamination and public health risks.

### 4. State vs. Federal Enforcement

The balance between state and federal enforcement of coal ash regulations has been a point of contention:

- States with EPA-approved programs have primary enforcement authority. However, if a state fails to enforce its program, the EPA can intervene under the WIIN Act.
- Environmental groups have called for stronger federal oversight, particularly in states with weaker enforcement. Advocates argue that more uniform national standards are necessary to ensure that all communities are equally protected from coal ash contamination.

### **Recent Developments:**

- In **2021**, the **Biden administration** began reviewing state coal ash programs to ensure compliance with federal standards and strengthen oversight of coal ash management, especially in states with weaker regulations.
- The EPA has issued **enforcement orders** to utilities in several states, requiring them to close non-compliant coal ash ponds and remediate groundwater contamination.

### CONCLUSION

The health and environmental impacts of coal ash are significant, especially for communities living near disposal sites. The role of state regulation in managing coal ash has been mixed, with some states taking proactive measures while others have faced criticism for weaker enforcement. The **WIIN Act** allows for a blend of state and federal oversight, but gaps in protection remain in areas with inconsistent state-level enforcement.

Would you like more information on specific state regulations or a deeper dive into how federal and state enforcement works together?

# FOR MARYLAND, WHERE COAL ASH HAS HISTORICALLY POSED ENVIRONMENTAL CHALLENGES

### **STRONG LEGISLATION TO ENSURE** HEALTH WELFARE AND ENVIRONMENTAL PROTECTIONS **SHOULD INCORPORATE THE FOLLOWING KEY ELEMENTS:**

### 1. Strict Groundwater and Surface Water Protections

- **Mandatory Liner Requirements:** Require all existing and new coal ash ponds and landfills to be lined with impermeable materials to prevent toxic leaching into groundwater and surface water.
- **Comprehensive Groundwater Monitoring**: Enforce consistent, state-wide groundwater monitoring at all coal ash disposal sites, with publicly accessible data. Monitoring should include frequent testing for heavy metals like arsenic, lead, and mercury.
- **Surface Water Protection Standards**: Regulate coal ash facilities near rivers and lakes (such as those bordering the Chesapeake Bay watershed) to prevent runoff and leakage into nearby waterways, which are vital for the state's fishing and tourism industries.

### 2. Closure and Cleanup of Legacy Coal Ash Ponds

- Mandatory Closure of Unlined Coal Ash Ponds: Legislation should require the closure and cleanup of any unlined or leaking coal ash ponds. This includes removal of the ash to dry, lined, and monitored landfills or beneficial reuse in construction materials (such as concrete or wallboard) if feasible.
- **Prohibition on "Cap-in-Place" Closures:** Ban the practice of leaving coal ash in unlined ponds, covered with soil. Full excavation should be required to ensure contaminants do not continue to seep into groundwater.

### 3. Environmental Justice Provisions

- **Cumulative Impact Assessments**: Maryland should require that cumulative health impact assessments be conducted in communities already burdened by environmental hazards. These assessments would evaluate the combined effects of coal ash contamination and other industrial pollution, particularly in low-income and minority communities.
- **Increased Public Participation**: Provide enhanced public participation in decision-making around coal ash disposal sites. Communities should have a formal role in commenting on and challenging coal ash permits and proposed disposal methods.

### 4. Stronger Enforcement and Penalties

- **Statewide Enforcement Authority**: Strengthen the Maryland Department of the Environment's (MDE) authority to enforce coal ash regulations, particularly in holding utility companies accountable for pollution.
- **Heavy Fines for Non-Compliance**: Legislation should impose significant fines on utilities and companies that fail to comply with coal ash management standards, including groundwater contamination or delayed pond closures.
- **State Legal Action for Damages:** Allow the state to pursue legal action against utilities for damages caused by coal ash spills or contamination, with funds allocated for public health initiatives and environmental restoration.

### 5. Funding for Remediation and Transition

- Coal Ash Remediation Fund: Create a dedicated state fund for coal ash cleanup efforts, funded by polluting utilities. These funds would be used for the safe excavation, transportation, and disposal of coal ash, as well as the restoration of impacted ecosystems.
- Support for Affected Communities: Provide healthcare and compensation funds for communities impacted by coal ash pollution, including funding for health monitoring programs to track long-term effects of coal ash exposure.

### 6. Promoting Beneficial Reuse

• **Encouragement of Coal Ash Recycling:** Incentivize the safe, beneficial reuse of coal ash in construction materials, where it can be used in place of raw materials like sand and gravel. Legislation should ensure that reused coal ash meets safety standards to prevent airborne or waterborne contamination.

### 7. Proactive Climate and Energy Transition Planning

• **Phasing Out Coal Ash Production**: Maryland should pair coal ash legislation with a broader strategy to phase out coalfired power plants as part of its renewable energy transition plan. This can include support for alternative energy infrastructure and job training programs for workers transitioning out of coal-dependent jobs.

### Case Study: Virginia's Coal Ash Cleanup Law (2019)

Maryland can take inspiration from **Virginia's 2019 coal ash law**, which required Dominion Energy to excavate and recycle or safely dispose of 27 million cubic yards of coal ash from unlined ponds in four sites, while banning "cap-in-place" practices. Virginia also mandated community involvement in the planning process, ensuring local voices were heard in decisions about coal ash cleanup.

By implementing a comprehensive approach that addresses the environmental, health, and economic impacts of coal ash, Maryland could create stronger protections for both vulnerable communities and its natural resources. These provisions would provide a framework for sustainable coal ash management, benefiting public health and safeguarding the environment from future contamination.

# **MORE DETAILS**

### HOW COULD MARYLAND IMPLEMENT OR FUND SUCH LEGISLATION?

To implement effective coal ash legislation in Maryland, several mechanisms could ensure robust enforcement and sustainable funding for coal ash remediation, public health protection, and environmental restoration. Here's how Maryland could implement and fund these provisions:

### 1. Coal Ash Remediation Fund

- **Establish a Dedicated Fund:** Maryland could create a **state-administered coal ash remediation fund**, designed to finance the cleanup and monitoring of coal ash ponds, contaminated groundwater, and soil.
- Utility Fees and Penalties: The fund could be supported by fees imposed on utilities and companies operating coalfired plants or coal ash disposal sites. These could include:
- Annual Fees: Utilities could pay an annual fee based on the volume of coal ash generated or stored.
- **Non-Compliance Penalties:** Significant fines for non-compliance with environmental standards, including failures in groundwater monitoring, delayed pond closures, or other violations.
- Federal Matching Grants: Maryland could seek federal grants under programs like the EPA's Superfund or the Infrastructure Investment and Jobs Act, which allocates federal funding for hazardous waste cleanup, including coal ash.

### 2. Public Health Monitoring and Community Support

- **Community Health Programs**: The state could allocate a portion of the remediation fund to establish long-term health monitoring programs for communities affected by coal ash. This could include regular testing for diseases linked to coal ash contaminants (e.g., arsenic-related cancers, respiratory illnesses).
- **Community Compensation Programs**: Maryland could develop compensation programs for individuals and communities suffering from coal ash exposure, similar to those created after large-scale contamination events (e.g., lead poisoning cases). Compensation could cover medical expenses, relocation assistance, or other financial impacts related to health issues caused by coal ash.

### 3. Stronger Enforcement by the Maryland Department of the Environment (MDE)

- **Empowering the MDE**: Legislation could empower the **Maryland Department of the Environment (MDE)** to take a stronger role in enforcing coal ash regulations. This could include:
- **Enforcement Teams**: Form dedicated coal ash enforcement teams within MDE to conduct regular site inspections and ensure compliance with groundwater monitoring, pond closure deadlines, and remediation standards.
- **Public Transparency**: Require the MDE to publicly disclose all groundwater monitoring data, site inspections, and enforcement actions through an accessible online platform. This would provide transparency and accountability while enabling the public to track progress on coal ash cleanup.
- **Increased State Penalties**: Legislation could impose stricter state penalties for violations, such as groundwater contamination or failure to comply with pond closure deadlines. Penalties should increase for repeated violations, creating financial disincentives for utilities to delay remediation.

### 4. Beneficial Reuse and Safe Recycling Initiatives

- Incentivizing Safe Coal Ash Recycling: To reduce the burden of storing coal ash, Maryland could offer tax incentives or subsidies for industries that use recycled coal ash in construction materials like concrete, bricks, and roadbeds.
- **Safety Standards:** Set strict safety standards for the reuse of coal ash to ensure it does not pose additional environmental or health risks during handling and processing.
- **Partnerships with Universities and Industry**: Maryland could fund research programs in partnership with local universities and construction industries to develop safe, innovative uses for coal ash, helping to reduce waste and create economic opportunities.

### 5. Phase-Out of Coal Ash Production

• **Transition from Coal to Clean Energy**: Maryland could pass legislation to phase out coal-fired power plants over a defined period, aligning with its broader renewable energy goals. The transition could be supported by:

- **Renewable Energy Investments:** Allocate state funds to support renewable energy projects like wind and solar, which could replace coal-generated electricity.
- **Job Transition Programs**: Provide job training and placement services for workers in the coal industry, ensuring they can transition into growing sectors like renewable energy or environmental cleanup.

### 6. Involving Affected Communities and Addressing Environmental Justice

- Environmental Justice Committees: Form local environmental justice advisory committees composed of residents, environmental advocates, and public health experts. These committees would provide input on coal ash management plans and ensure that vulnerable communities have a say in decision-making processes.
- **Cumulative Impact Assessments**: Maryland legislation could require cumulative environmental and health impact assessments to evaluate the long-term and combined effects of coal ash and other industrial pollution in historically burdened communities (similar to Title VI civil rights provisions).
- **Public Hearings and Community Engagement:** Ensure that proposed coal ash management plans include public hearings in affected communities. Utilities would be required to hold **community engagement sessions** to explain remediation strategies and timelines.

### 7. Leverage of Federal Resources

- **EPA Involvement:** Seek collaboration with the **Environmental Protection Agency (EPA)**, especially for areas where state enforcement is challenging. Maryland could leverage EPA resources through cooperative agreements for coal ash remediation projects.
- **Federal Infrastructure Funding**: Apply for federal funding under new infrastructure programs, which have designated funds for environmental cleanup, including coal ash. This could help offset the cost of remediation and reduce the financial burden on state budgets.

### Case Study: North Carolina's Coal Ash Management Act (CAMA)

- North Carolina's **CAMA (2014)**, passed after the Duke Energy coal ash spill, could serve as a model for Maryland:
- **CAMA required the closure and cleanup of all coal ash ponds in the state** and mandated that utilities remove ash from unlined ponds. Duke Energy was required to excavate and move coal ash to lined landfills or recycle it. Maryland could adopt similar standards.
- North Carolina created **community oversight committees** to monitor progress, providing transparency and ensuring that local residents were kept informed.

### 8. Incorporating Regional Solutions

- **Chesapeake Bay Watershed Protection**: Coal ash legislation in Maryland should consider taking into account the proximity of coal ash sites to the **Chesapeake Bay** and its tributaries. Strict surface water protection and spill prevention requirements would be crucial in safeguarding one of the state's most vital ecosystems.
- Interstate Collaboration: Given that coal ash can affect multiple states through water systems (e.g., the Potomac River or Chesapeake Bay), Maryland could partner with neighboring states (e.g., Virginia, Pennsylvania) to create consistent regional coal ash management policies.

### CONCLUSION

For Maryland, a comprehensive coal ash management law should prioritize **groundwater and surface water protections, community health monitoring, strong enforcement mechanisms,** and **environmental justice**. To fund these initiatives, Maryland can establish a coal ash remediation fund supported by utility fees and federal grants, while transitioning towards cleaner energy alternatives and promoting safe recycling of coal ash.

# MD HAS TAKEN SOME STEPS TOWARD MANAGING COAL ASH

### HOW THESE EFFORTS CAN BE EXPANDED UPON TO CREATE STRONGER HEALTH AND ENVIRONMENTAL PROTECTIONS.

### Below are key aspects of existing Maryland legislation and areas for improvement that could be integrated into a more comprehensive coal ash regulation framework:

### 1. Current Maryland Coal Ash Regulations

Maryland follows both federal and state-level regulations for managing coal ash, but there are gaps that could be addressed to better protect public health and the environment.

**Maryland Department of the Environment (MDE):** MDE is the primary agency responsible for regulating coal ash disposal and enforcing environmental laws related to hazardous waste management in the state. Under current rules:

- Coal ash landfills must be permitted and monitored for leachate to prevent groundwater contamination.
- Facilities are required to monitor groundwater for contamination, and corrective actions must be taken if pollution exceeds safety limits.
- Maryland law already prohibits open burning of coal ash and imposes fines for pollution incidents.

**Coal Combustion By-Product (CCB) Regulations:** Maryland has regulations governing the disposal of **coal combustion by-products** (CCBs), which include coal ash. These rules require utilities to obtain permits for coal ash landfills and implement groundwater monitoring plans. However, **older**, **unlined coal ash ponds** remain a major concern, especially with regard to the risks of groundwater contamination.

**Beneficial Use of Coal Ash:** Maryland allows for the **beneficial reuse** of coal ash in construction materials, which reduces the amount of waste stored in landfills. However, more specific safety standards and incentives could promote this practice while ensuring it's done responsibly.

### 2. Recent Efforts and Areas for Improvement

**Groundwater Contamination Lawsuits:** Maryland has experienced legal challenges regarding coal ash contamination. For instance, in the past, environmental groups sued utilities like **GenOn** (which operates coal-fired power plants) for coal ash contamination in Prince George's County. These lawsuits highlight ongoing concerns over groundwater pollution and the need for stricter regulations.

**Closure and Cleanup of Coal Ash Ponds:** While some efforts have been made to close coal ash ponds in Maryland, the process is often slow, and many sites remain unlined or inadequately monitored. Legislation could mandate the **speedier closure of unlined coal ash ponds**, along with strict requirements for safe excavation and disposal.

### 3. Building on Maryland's Legislative Framework

Maryland can build on existing regulations to create a more comprehensive approach to coal ash management, aligning with its broader goals for environmental justice and public health protection. Here's how:

### A. Enhanced Groundwater and Surface Water Protection

- **Expansion of Groundwater Monitoring**: Maryland can update its groundwater monitoring rules by requiring continuous, real-time monitoring of contaminants at coal ash disposal sites. Monitoring data should be made available to the public and local governments.
- Zero-Tolerance for Contamination: Strengthen existing rules to enforce zero groundwater contamination from coal ash disposal sites. If contamination is detected, the utility should be required to implement immediate corrective actions, including groundwater cleanup and providing affected communities with alternative water sources.

### **B. Mandatory Closure of Unlined Ponds**

- **Ban Unlined Ponds**: Introduce legislation requiring the closure and excavation of all **unlined coal ash ponds**. The state should set strict deadlines for pond closure, and utilities should be required to submit closure plans within a set time frame (e.g., 2 years).
- **Excavation and Removal:** Legislation should mandate that coal ash be fully excavated from closed ponds and moved to **lined, monitored landfills** or recycled for beneficial use. This will prevent future leaching of toxic substances into groundwater.

### C. Public Health and Environmental Justice Focus

- **Disproportionate Impact Analysis:** Maryland could pass laws requiring a **environmental impact analysis** before any new coal ash disposal site is approved or an existing site is expanded. This analysis would evaluate the combined health impacts of coal ash pollution with other environmental hazards, especially in low-income or minority communities.
- **Community Health Monitoring**: Introduce legislation requiring utilities to fund **health monitoring** programs for communities near coal ash sites, particularly in regions already impacted by industrial pollution. The state should also provide grants to public health organizations to conduct long-term health studies on coal ash exposure.

### **D. Stronger Enforcement and Penalties**

- Increased State Authority: Maryland's MDE should be granted stronger enforcement powers to issue fines, revoke permits, and take legal action against utilities that violate coal ash regulations. The state could increase penalties for non-compliance, including hefty fines and potential criminal charges for severe violations.
- Public Involvement in Permit Processes: Legislation could mandate public hearings for any new or renewed coal ash disposal permits, ensuring that residents in affected communities have a chance to voice concerns. Utilities should be required to provide clear, detailed information about how they plan to prevent environmental harm.

### E. Funding Coal Ash Cleanup and Renewable Energy Transition

- Coal Ash Remediation Fund: Establish a Maryland Coal Ash Remediation Fund that would support the closure, excavation, and long-term monitoring of coal ash disposal sites. This fund could be financed through:
- Fees on coal-fired utilities based on the amount of coal ash they generate.
- Fines and penalties collected from non-compliant facilities.
- Federal grants, including those available through the EPA's Superfund program or infrastructure funding initiatives.
- Renewable Energy Transition: Tie coal ash regulation to Maryland's clean energy goals by requiring utilities to submit plans to phase out coal-fired plants and transition to renewable energy sources. Funds from the remediation program could also be used to support displaced workers in the coal industry through job training and placement programs.

### 4. Key Components for Proposed Legislation

To summarize, a strong coal ash regulation in Maryland should include:

- Mandatory groundwater and surface water monitoring, with data transparency.
- Closure of all unlined coal ash ponds and removal of coal ash to lined landfills.
- Environmental justice provisions, including cumulative impact assessments and community health programs.
- Stronger enforcement authority for MDE, including hefty fines and legal action against violators.
- **Funding mechanisms** through utility fees and penalties to support long-term coal ash cleanup.
- Public involvement in coal ash disposal decisions and permit renewals.

By integrating these elements into Maryland's legal framework, the state can significantly enhance its ability to protect communities and the environment from coal ash contamination while aligning with its broader climate and environmental justice goals.

Would you like more details on specific existing Maryland regulations that could be expanded, or examples from other states that could inform Maryland's approach?

To build a strong legislative framework for coal ash management in Maryland, let's look at existing Maryland regulations and successful examples from other states that Maryland can expand upon. This will help to establish stricter environmental and public health protections and tackle environmental justice concerns.

### 1. Existing Maryland Regulations on Coal Ash

Maryland's current regulations are mainly focused on the **permitting** and **monitoring** of coal ash disposal sites, with an emphasis on groundwater protection. Here's a summary of the key components of existing rules:

### A. Coal Combustion By-Product (CCB) Management Regulations

- **MDE Oversight**: The **Maryland Department of the Environment (MDE)** regulates the disposal of coal combustion byproducts (CCBs), including coal ash, primarily through permits. Utilities must apply for permits to operate coal ash disposal facilities, such as landfills or surface impoundments (ponds).
- **Groundwater Monitoring**: Utilities are required to conduct groundwater monitoring at coal ash disposal sites. Monitoring wells must be installed around disposal areas, and utilities must regularly test for contaminants like arsenic, mercury, and lead.
- **Corrective Actions**: If groundwater contamination is detected, MDE requires corrective actions, which could include cleaning up the contaminated groundwater or modifying disposal practices.

### **B.** Public Health and Environmental Justice

• While Maryland has regulations in place to protect water quality, there is **no explicit law** addressing the **cumulative health impacts** on vulnerable communities disproportionately affected by coal ash pollution. This gap could be addressed by introducing a cumulative impact assessment provision, which would require an analysis of the total environmental burden on these communities before approving new or expanded coal ash sites.

### C. Renewable Energy Transition Plans

• Maryland has committed to transitioning to **renewable energy** under the **Maryland Clean Energy Jobs Act** (2019), which sets a goal for the state to obtain 50% of its electricity from renewable sources by 2030. This plan indirectly reduces future coal ash production by phasing out coal-fired plants, but a more direct focus on coal ash cleanup could enhance this transition.

### 2. Areas for Improvement in Maryland's Current Approach

### While Maryland has regulations for permitting and monitoring coal ash, some key areas could be strengthened:

- **Closure of Unlined Coal Ash Ponds**: Maryland lacks a specific requirement to close or excavate unlined coal ash ponds, which can leach contaminants into groundwater. Virginia and North Carolina, for example, have passed laws requiring the closure of all unlined coal ash ponds, which Maryland could adopt.
- **Beneficial Use Standards**: While Maryland allows for the beneficial reuse of coal ash in construction materials, more specific standards could ensure that reuse is safe and that materials are free of harmful contaminants.
- **Environmental Justice and Public Health**: Maryland could integrate stronger environmental justice provisions, ensuring that coal ash management doesn't disproportionately impact low-income or minority communities. This includes requiring cumulative impact assessments and public health monitoring programs.

### 3. Examples from Other States

### A. Virginia's Coal Ash Cleanup Law (2019)

Virginia's legislation, passed in 2019, provides a **model framework** for Maryland to follow in closing coal ash ponds and cleaning up contamination:

- Ban on Cap-in-Place Closures: Virginia prohibited utilities from leaving coal ash in unlined ponds and merely covering it with soil ("cap-in-place"). Instead, the law requires that coal ash be excavated and moved to lined landfills or recycled for safe reuse.
- **Groundwater Protection**: Virginia's law requires strict groundwater monitoring and mandates that any contamination be cleaned up. This was a response to widespread coal ash contamination in the state's groundwater.

• **Public Involvement:** Virginia's law includes provisions for community involvement, requiring public hearings and transparency in coal ash cleanup plans. Affected communities had a say in the remediation strategies, ensuring that their concerns were addressed.

### SB 1533 Coal combustion residuals; Chesapeake Bay watershed, closure

Coal combustion residuals; Chesapeake Bay watershed; closure. Requires the owner or operator of any coal combustion residuals (CCR) unit, defined in the bill to include a coal ash pond or landfill, that is located in the Chesapeake Bay watershed to close such CCR unit by removing all of the CCR for (i) recycling, known as encapsulated beneficial use, or (ii) deposition in a permitted and lined landfill that meets certain federal standards.

### B. North Carolina's Coal Ash Management Act (CAMA) (2014)

### After a major coal ash spill in 2014, North Carolina passed CAMA, which set strict coal ash management rules:

- **Mandatory Excavation**: CAMA required the full excavation of coal ash from all unlined coal ash ponds. Utilities were mandated to move coal ash to safer, lined landfills or recycle it.
- Water Supply Protections: North Carolina passed laws to ensure that communities near coal ash sites, especially those whose water wells were contaminated, received alternative water supplies.
- **Public Transparency**: Utilities were required to make groundwater monitoring data publicly available, and communities were given a formal role in overseeing coal ash cleanup efforts.

### C. Georgia's Groundwater Monitoring Rules

Georgia strengthened its rules for coal ash disposal by enforcing **continuous groundwater monitoring** for all coal ash ponds and landfills. Utilities must monitor groundwater for contaminants even after the closure of disposal sites, with ongoing obligations to report contamination levels to the public.

### C. Tennessee Coal Ash Waste Material Rules

### HB 1672 SB 2178

Hazardous Materials - As introduced, adds coal ash and related coal combustion residuals to the definition of hazardous waste. - Amends TCA Title 68. On February 21, 2022 HB 1672 – SB 2178 SUMMARY OF BILL: Expands the definition of "hazardous waste" to include coal ash, fly ash, bottom ash, boiler sag, and other by-products from burning coal, thereby making it a violation of the Tennessee Hazardous Waste Management Act of 1977 to do the following with

the aforementioned, newly-defined types of hazardous waste: <u>https://www.capitol.tn.gov//Bills/112/Fiscal/HB1672.pdf</u>

### STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION IN THE MATTER OF:

TENNESSEE VALLEY AUTHORITY ) ORDER NUMBER: OGC15-0177 RESPONDENT: https://www.tn.gov/content/dam/tn/environment/documents/TVA\_Order\_8-6-15.pdf

### TDEC Issues Administrative Order Against TVA

Friday, August 07, 2015 | 09:43am

NASHVILLE, Tenn. – The Tennessee Department of Environment and Conservation (TDEC) issued a Commissioner's Order today to the Tennessee Valley Authority (TVA) directing the investigation, assessment and remediation of all coal ash disposal sites across Tennessee. This Order follows the federal coal combustion residual (CCR) rule, and not only ensures the state is kept abreast of TVA's progress in complying with the federal rule, but also goes beyond what the federal rule requires.

### 4. Proposed Areas of Improvement for Maryland Coal Ash Legislation

Based on the examples from other states and Maryland's current regulatory framework, here's a summary of how Maryland could expand its coal ash legislation:

### A. Closure and Excavation of Unlined Coal Ash Ponds

• **Ban on Cap-in-Place**: Require utilities to close all unlined coal ash ponds by fully excavating and moving coal ash to lined landfills or recycling facilities. Like Virginia and North Carolina, Maryland should prohibit cap-in-place closures.

• **Strict Deadlines**: Set clear deadlines for the closure and excavation of coal ash ponds, ensuring that utilities follow a strict timeline to prevent further groundwater contamination.

### **B. Environmental Justice and Public Health Protections**

- **Cumulative Impact Assessments**: Before approving any new coal ash disposal sites, Maryland should require utilities to conduct a **cumulative impact assessment**. This would evaluate the combined effects of coal ash pollution with other industrial activities on local communities, particularly in low-income or minority areas.
- **Health Monitoring Programs**: Require utilities to fund health monitoring programs for communities near coal ash disposal sites, especially where there is a history of contamination. These programs could track long-term health impacts related to coal ash exposure, such as cancer rates, respiratory illnesses, and neurological disorders.
- Ensure all of Maryland's toxic coal ash waste is stored in dry, lined, and capped facilities.
- Aggressively monitor coal ash storage facilities for leaks.
- Require public notification when coal ash waste threatens communities.
- Require producers of coal ash to provide drinking water when coal ash contamination is discovered in private drinking water wells.
- Keep coal ash landfills away from wetlands and fragile ecosystems.

### C. Stronger Groundwater Protection Standards

- **Continuous Groundwater Monitoring**: Mandate continuous groundwater monitoring for all coal ash ponds and landfills, including after-site closure. The data should be publicly accessible and submitted to MDE for review.
- Immediate Corrective Actions: If contamination is detected, utilities should be required to take immediate corrective actions, including groundwater cleanup and providing alternative water supplies to affected communities.

### **D.** Increased Penalties and Enforcement

- Heavier Fines for Non-Compliance: Maryland should impose significant fines on utilities that fail to comply with coal ash management rules. Repeat violations should result in progressively larger fines, ensuring financial accountability.
- **Stronger MDE Authority**: Empower the Maryland Department of the Environment to revoke permits or take legal action against non-compliant utilities. This could include suing utilities for damages caused by coal ash contamination, with the funds used to support cleanup and public health programs.

### E. Coal Ash Remediation Fund

- **Utility-Funded Cleanup**: Establish a state-administered **Coal Ash Remediation Fund** supported by fees on coal-fired power plants. These funds would be dedicated to coal ash cleanup projects, long-term monitoring, and health protection programs for impacted communities.
- **Federal Grants and Assistance**: Maryland should pursue federal grants available through the EPA or infrastructure legislation to help fund large-scale coal ash cleanup projects.

### CONCLUSION

Maryland can significantly strengthen its coal ash regulations by looking to successful models in states like Virginia, North Carolina, and Georgia. By closing unlined coal ash ponds, implementing stronger groundwater protections, and addressing environmental justice concerns, Maryland could enhance its ability to safeguard public health and the environment. A combination of stronger enforcement, public involvement, and funding mechanisms will be key to the success of future legislation.

Would you like to explore more details on how these ideas can be tailored to Maryland's specific context, or would you like help drafting specific legislative provisions based on this framework?

### MARYLAND SPECIFIC AND DRAFTING LEGISLATION

To help draft **Maryland-specific coal ash legislation** for health, environmental protection, and community welfare, I will outline key provisions based on the state's existing context, as well as successful frameworks from other states like Virginia and North Carolina. Below is a draft structure with possible sections and language that can serve as the foundation for a bill.

### DRAFT LEGISLATION: Maryland Coal Ash Management and Environmental Justice Act

### **SECTION 1: Purpose and Intent**

The purpose of such Act is to:

- Protect the health and welfare of Maryland residents by mitigating the risks of coal ash contamination.
- Ensure proper closure, excavation, and remediation of coal ash ponds and landfills.
- Provide for cumulative impact assessments in environmentally burdened communities.
- Strengthen enforcement mechanisms to ensure compliance by utilities and responsible parties.
- Transition Maryland toward renewable energy while addressing the legacy impacts of coal ash disposal.

### **SECTION 2: Definitions**

### For the purposes of such Act:

- 1. **Coal Combustion By-Products (CCBs):** Includes fly ash, bottom ash, boiler slag, and flue gas desulfurization materials resulting from coal combustion.
- 2. Coal Ash Pond: An impoundment or landfill that is used for the storage or disposal of coal combustion residuals.
- 3. **Unlined Coal Ash Pond:** A coal ash disposal pond without a protective liner that prevents coal ash leachate from contaminating surrounding soil and groundwater.
- 4. **Excavation**: The removal of coal ash from a coal ash pond or landfill to a lined landfill or facility designated for safe disposal or recycling.
- 5. **Environmental Justice Community:** A community in which the cumulative impacts of environmental pollution disproportionately affect low-income populations or communities of color.
- 6. **Cumulative Impact Assessment:** An evaluation of the combined health, environmental, and socio-economic impacts on a community, considering existing industrial activities, pollution, and coal ash disposal.

### **SECTION 3: Closure and Excavation of Unlined Coal Ash Ponds**

- 1. **Mandatory Closure of Unlined Ponds:** All unlined coal ash ponds located within the state must be closed and fully excavated no later than December 31, 2026.
- 2. **Closure Plans:** Operators of coal ash ponds must submit a closure plan to the Maryland Department of the Environment (MDE) within six months of this Act's passage. The plan must include:
  - A timeline for excavation.
  - Specifications for the safe transportation of coal ash to lined, monitored landfills or recycling facilities.
  - Groundwater monitoring and corrective actions for any contamination.
- 3. **Public Participation**: The closure plan shall be subject to public hearings in the communities most impacted by the coal ash pond.
- 4. **Prohibition of Cap-in-Place:** The closure of unlined coal ash ponds through capping in place (covering the ash with soil without removal) is prohibited. All ash must be excavated.

### SECTION 4: Beneficial Use and Recycling of Coal Ash

- 1. **Safe Recycling Standards**: Coal ash may be recycled for beneficial uses such as construction materials (concrete, roadbeds, etc.) only under strict safety standards set by the MDE.
  - The MDE shall establish guidelines to ensure that materials incorporating coal ash do not pose additional environmental or health risks.
  - Entities engaging in the beneficial reuse of coal ash shall be subject to regular inspections and monitoring.
- 2. **Incentives for Safe Recycling**: The state shall offer tax incentives or grants to promote safe coal ash recycling in industries like construction, as long as it complies with MDE safety standards.

### **SECTION 5: Groundwater and Surface Water Protection**

- 1. **Continuous Groundwater Monitoring**: All coal ash ponds and landfills, whether active or closed, must undergo continuous groundwater monitoring to detect contaminants such as arsenic, mercury, and lead. Monitoring data must be:
  - Collected at least quarterly and submitted to the MDE.
  - Made publicly available on a state-maintained online platform.
  - Retained and monitored for a minimum of 30 years after site closure.
- 2. Corrective Actions for Contamination: If contamination is detected at any coal ash site:
  - The operator must take immediate corrective action to stop the spread of contaminants, including the provision of alternative drinking water supplies to affected communities.
  - Utilities shall bear all costs associated with cleanup and corrective actions.

### **SECTION 6: Environmental Justice and Public Health Protections**

- 1. **Cumulative Impact Assessments**: Prior to issuing any new or renewed permits for coal ash disposal or beneficial use, the MDE shall conduct a cumulative impact assessment of the surrounding communities.
  - Assessments shall evaluate the combined environmental, public health, and socio-economic impacts of coal ash pollution alongside other industrial activities.
  - Special consideration shall be given to environmental justice communities that have been historically burdened by pollution.
- 2. **Public Health Monitoring:** The MDE shall establish long-term public health monitoring programs for residents living near coal ash disposal sites.
  - Utilities must fund the health monitoring programs for diseases linked to coal ash exposure, such as respiratory illnesses, cancers, and developmental disorders.
  - Affected communities shall have access to regular health screenings and medical services, paid for by the responsible utilities.

### **SECTION 7: Enforcement and Penalties**

1. **Increased Penalties for Non-Compliance**: Any operator found to be in violation of coal ash management laws, including failure to comply with closure or groundwater monitoring requirements, shall be subject to fines of up to \$100,000 per violation per day.

- Repeated or severe violations may result in permit revocation and legal action brought by the MDE or the Attorney General.
- 2. **Citizen Enforcement**: Residents living in proximity to coal ash ponds or landfills shall have the right to file lawsuits against utilities or operators for violations of this Act. The courts may award damages to affected individuals for health impacts and environmental damage.

### **SECTION 8: Coal Ash Remediation Fund**

- 2. **Creation of the Coal Ash Remediation Fund**: The state shall establish a Coal Ash Remediation Fund, financed through:
  - Annual fees levied on coal-fired power plants based on the volume of coal ash generated.
  - Fines collected from violations of this Act.
  - Federal grants, including EPA Superfund support, for coal ash cleanup.
- 3. Use of Funds: The Coal Ash Remediation Fund shall be used to:
  - Support the closure, excavation, and long-term monitoring of coal ash disposal sites.
  - Provide financial support for affected communities, including water supply replacement, health monitoring, and community engagement efforts.
  - Assist in the transition of workers displaced by coal plant closures into renewable energy industries through job training and education programs.

### **SECTION 9: Renewable Energy Transition**

- 1. **Transition Away from Coal:** Utilities operating coal-fired power plants shall submit plans to the Public Service Commission and MDE outlining their transition to renewable energy sources by 2035.
  - Transition plans must include measures for the decommissioning of coal-fired plants and a timeline for the cessation of coal ash production.
- 2. **Job Transition Support:** The state shall offer financial and training support to workers affected by the phase-out of coal plants, enabling them to transition into clean energy sectors like wind, solar, and environmental remediation.

### SECTION 10: Reporting and Transparency

- 3. Annual Reporting to the General Assembly: The MDE shall submit an annual report to the Maryland General Assembly outlining:
  - The status of coal ash pond closures and excavations.
  - Groundwater monitoring results and contamination incidents.
  - Public health outcomes in affected communities.
  - Recommendations for further regulatory action, if necessary.
- 4. **Public Access to Data**: All coal ash management data, including groundwater testing, health monitoring, and closure progress, shall be made available to the public via an online platform maintained by the MDE.

### **SECTION 11: Effective Date**

This Act shall take effect **immediately** upon passage, with all regulations to be fully implemented in June 1, 2025.

### legislative policy consultant

https://www.ziprecruiter.com/c/ACLU-of-Washington/Job/Legislative-Advocate/-in-Seattle,WA?jid=34608c9eee3d378c&lvk=upZeo7YJX3lqLgiowjBoKQ.--NXGYG9zhZ

# **2BRIDGE CDX**

### **NEXT STEPS**

Our Environmental Remediation Community Advisory Programs such as ERMP's provide a comprehensive framework that addresses harms that include coal ash disposal, environmental justice, and public health in Maryland.

### **COAL REMEDIATION AND COMMUNITY ENGAGEMENT PROGRAM**

To address **coal ash remediation** and ensure robust **community engagement**, it's crucial through our programs we develop a comprehensive community program that focuses on cleanup efforts, health monitoring, particularly in vulnerable and disproportionately affected communities.

### PROGRMMING: Coal Ash Remediation Community Program (CARCP)

### SECTION 1: Purpose and Intent

#### The purpose of the Coal Ash Remediation Program (CARP) is to:

- Facilitate the safe and effective cleanup of coal ash disposal sites across Maryland.
- Ensure that affected communities, particularly environmental justice communities, are actively engaged in the decision-making process.
- Monitor and address public health impacts related to coal ash contamination.
- Provide long-term oversight and support for communities impacted by coal ash exposure.

### SECTION 2: Establishment of the 2Bridge CDX Coal Ash Remediation and Community Engagement Program

- 1. **Program Administration**: The **Maryland Department of the Environment (MDE)** shall establish the Coal Ash Remediation, that works specifically with Locality Neighborhood Community CDC Programs to oversee:
  - The closure, excavation, and remediation of coal ash disposal sites.
  - Public health and environmental monitoring in impacted areas.
  - A formal process for engaging with affected communities, ensuring that their concerns are integrated into the remediation plans.
  - Providing resources and support to communities disproportionately affected by coal ash contamination.
- 2. **Community Advisory Committees (CACs)**: Our CARCEP shall **work** in regions where coal ash disposal sites are located. These committees will:
  - Be composed of residents, local leaders, public health experts, environmental advocates, and representatives from affected communities.
  - Meet regularly to review coal ash site cleanup progress, groundwater monitoring data, and public health outcomes.
  - Provide recommendations to the MDE on local community needs related to health, environmental monitoring, and remediation strategies.

# 2BRIDGE CDX COMMUNITY ADVISORY FRAMEWORK FOR CARCEP

### **NEXT STEPS**

Our Coal Ash Remediation and Community Engagement Program provides a **comprehensive framework** that addresses coal ash disposal, environmental justice, and public health in Maryland. It strengthens existing regulations while incorporating best practices from other states.

More information in refining specific sections or addressing any particular stakeholders (e.g., utilities, public health officials, environmental advocates)?

### **COAL REMEDIATION AND COMMUNITY ENGAGEMENT PROGRAM**

To address **coal ash remediation** and ensure robust **community engagement**, it's crucial to develop a comprehensive program that focuses on cleanup efforts, health monitoring, and meaningful community involvement, particularly in vulnerable and disproportionately affected communities. Below is a draft of provisions specifically aimed at establishing a **Coal Ash Remediation and Community Engagement Program** within Maryland's legislation.

### **SECTION 1: Remediation Standards and Procedures**

- 1. **Remediation Requirements**: The CARCEP shall oversee all coal ash pond closures, excavations, and site remediation activities in accordance with stringent environmental standards, including:
  - **Full Excavation:** The removal of all coal ash from unlined ponds and disposal into lined, monitored landfills or recycling facilities.
  - **Safe Disposal and Reuse**: Ensure that any coal ash recycled for beneficial uses (e.g., construction) complies with safety standards set by MDE.
  - **Long-Term Groundwater Monitoring:** Ensure that continuous groundwater monitoring is conducted for at least 30 years post-remediation, with immediate corrective actions for contamination.
- 2. **Emergency Response for Contamination**: If groundwater contamination is detected during remediation:
  - CARCEP must initiate an emergency response that includes stopping further contamination, providing alternative drinking water supplies, and communicating risks to the affected community.
  - Utilities shall bear the financial responsibility for any corrective actions, alternative water supplies, and health monitoring.

### SECTION 2: Community Engagement and Transparency

- 3. Public Information and Involvement:
  - **Public Hearings:** CARCEP shall hold public hearings in each affected community prior to the approval of any coal ash pond closure or remediation plan. Communities must be informed of the potential health risks, cleanup timelines, and outcomes.
  - Access to Data: All groundwater monitoring data, public health assessments, and remediation progress reports shall be publicly accessible online. CARCEP must provide regular updates to local residents via town halls, mailers, and digital platforms.
- 4. Community Impact Reports: CARCEP shall produce Community Impact Reports that:
  - Detail how the coal ash contamination has impacted the health and environment of nearby communities.
  - Provide projections of future risks and any ongoing remediation efforts.
  - Offer solutions for community concerns such as job displacement from coal plant closures or long-term health impacts.

- 5. **Right to Participate**: Residents and community groups living within 5 miles of a coal ash site shall have the right to:
  - Submit comments, feedback, and alternative proposals regarding the cleanup efforts.
  - Nominate members to the Community Advisory Committees (CACs).
  - Request additional health screenings, independent groundwater monitoring, and alternative remediation approaches if they believe current plans are insufficient.

### SECTION 3: Public Health Monitoring and Support

- 1. **Health Monitoring Program**: CARCEP shall establish a long-term **Public Health Monitoring Program** funded by utilities and administered by the MDE in partnership with state health agencies. The program will:
  - Conduct regular health screenings for respiratory illnesses, cancers, neurological disorders, and other conditions linked to coal ash exposure in affected communities.
  - Maintain a **Health Registry** for residents living near coal ash sites, tracking health outcomes over time to detect long-term effects of exposure.
  - Provide residents with free access to medical testing, health services, and treatment options if they are affected by coal ash-related illnesses.
- 2. **Medical Assistance Grants**: CARCEP shall offer **Medical Assistance Grants** to residents impacted by coal ash exposure. These grants can be used to cover the costs of healthcare, medical treatments, and relocation if coal ash contamination has severely impacted a resident's health or living conditions.

### **SECTION 4: Education and Job Transition Support**

- 1. **Public** Education **Campaigns**: CARCEP shall partner with community organizations and public health agencies to run education campaigns that:
  - Inform residents about the risks of coal ash contamination and the importance of groundwater testing.
  - Provide information about available health services, legal rights, and financial support related to coal ash remediation.
- 2. **Job Transition Assistance**: In communities where coal plants are being decommissioned as part of Maryland's renewable energy transition, CARCEP shall work with local workforce agencies to:
  - Provide job training and education programs to transition displaced workers into the renewable energy sector, environmental remediation work, or other emerging industries.
  - Offer financial assistance for re-skilling or relocation as needed.

### SECTION 5: Enforcement Mechanisms and Funding

- 1. Utility Responsibility: The utilities responsible for coal ash ponds shall fund the majority of CARCEP's activities, including:
  - Groundwater monitoring, public health screenings, and community engagement efforts.
  - Full costs of excavation, safe disposal, and remediation.
  - Penalties for non-compliance or delayed remediation shall be applied directly to fund the program.
- 2. Funding through the Coal Ash Remediation Fund: Additional funding for CARCEP will come from the Coal Ash Remediation Fund, financed through:
  - Fines levied on utilities for non-compliance with remediation timelines and groundwater contamination.
  - State and federal grants aimed at supporting coal ash cleanup and environmental justice.

### **SECTION 6: Reporting and Accountability**

- 1. Annual Reports: CARCEP shall submit annual reports to the Maryland General Assembly and the Governor, detailing:
  - The progress of coal ash site remediation.
  - Health outcomes from affected communities.
  - Groundwater monitoring data and any incidents of contamination.
  - Community feedback and participation through the CACs.
- 2. Independent **Audits**: Every three years, CARCEP shall undergo an independent audit to assess the effectiveness of the remediation efforts and ensure that the program is meeting its public health, environmental, and community engagement goals.

### **CONCLUSION:**

This **Coal Ash Remediation and Community Engagement Program** ensures that Maryland not only addresses the environmental risks of coal ash contamination but also actively involves and supports the communities most impacted. The program focuses on transparency, long-term health monitoring, and transitioning toward clean energy, while providing concrete financial and health protections for residents.

Would you like help tailoring specific sections, such as the funding mechanisms or community advisory structures, to better fit Maryland's legislative and community landscape?

# **2BRIDGE CDX SPECIFIC ELEMENT'S STRUCTURE FOCUS ON PARTICULAR ENGAGEMENT STRATEGIES**

### **REFINE HOW TO SET UP COMMUNITY ADVISORY STRUCTURE**

With a nonprofit CDC Integrating a **Community Development Corporation (CDC)** into the **Community Advisory Structure** for coal ash remediation can enhance the program's effectiveness by leveraging the CDC's expertise in community engagement, resource mobilization, and sustainable development. Below is a refined approach to setting up this structure, highlighting the role of the CDC and ensuring meaningful community participation.

### **Refined Community Advisory Structure with Non-Profit CDC Integration**

### **SECTION 1: Purpose and Objectives**

The purpose of integrating a 2Bridge CDX Community Development Corporation (CDC) into the Community Advisory Structure is to:

- Enhance community engagement and participation in coal ash remediation efforts.
- Utilize the CDC's resources and expertise to build community capacity and resilience.
- Ensure that the voices of impacted residents are represented and heard in decision-making processes.

### SECTION 2: Establishment of Community Advisory Committees (CACs)

- 1. **Formation of CACs**: The **Maryland Department of the Environment (MDE)**, in collaboration with a selected local CDC, shall establish **Community Advisory Committees (CACs)** in areas affected by coal ash disposal sites.
- **CDC Role**: The CDC will assist in forming the CACs, recruiting members, and facilitating meetings.
- **Composition**: Each CAC shall include:
  - Local residents (at least 50% representation).
  - CDC staff and community organizers.
  - Representatives from local health agencies, environmental groups, and relevant local government officials.
- **Membership Selection**: The CDC will lead community outreach efforts to ensure diverse and equitable representation, particularly focusing on including marginalized voices.
- 2. **Term Length and Rotation**: CAC members will serve terms of **two years**, with staggered rotations to ensure continuity while allowing for new perspectives.

### CONCLUSION

By incorporating a **Community Development Corporation** into the **Community Advisory Structure**, the program can significantly enhance community engagement, capacity building, and sustainable resource management. This structure ensures that impacted residents are central to the decision-making process, fostering trust, transparency, and resilience in communities affected by coal ash contamination.

If you would like further refinement on specific elements, such as funding strategies or the training curriculum for CAC members, feel free to ask!