AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

A DECADE LATER: A REVIEW OF CONGRESSIONAL ACTION, ENVIRONMENTAL PROTECTION AGENCY RULES, AND BENEFICIAL USE OPPORTUNITIES FOR COAL ASH

HEARING

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENT

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED NINETEENTH CONGRESS

FIRST SESSION

JUNE 26 2025

Serial No. 119–30

Published for the use of the Committee on Energy and Commerce
govinfo.gov/committee/house-energy
energycommerce.house.gov

U.S. GOVERNMENT PUBLISHING OFFICE
61–397 PDF WASHINGTON : 2026

COMMITTEE ON ENERGY AND COMMERCE

BRETT GUTHRIE, Kentucky
Chairman

ROBERT E. LATTA, Ohio
H. MORGAN GRIFFITH, Virginia
GUS M. BILIRAKIS, Florida
RICHARD HUDSON, North Carolina
EARL L. "BUDDY" CARTER, Georgia
GARY J. PALMER, Alabama
NEAL P. DUNN, Florida
DAN CRENSHAW, Texas
JOHN JOYCE, Pennsylvania, *Vice Chairman*
RANDY K. WEBER, SR., TEXAS
RICK W. ALLEN, Georgia
TROY BALDERSON, Ohio
RUSS FULCHER, Idaho
AUGUST PFLUGER, Texas
DIANA HARSHBARGER, Tennessee
MARIANNETTE MILLER-MEEKS, Iowa
KAT CAMMACK, Florida
JAY OBERNOLTE, California
JOHN JAMES, Michigan
CLIFF BENTZ, Oregon
ERIN HOUCHIN, Indiana
RUSSELL FRY, South Carolina
LAUREL M. LEE, Florida
NICHOLAS A. LANGWORTHY, New York
THOMAS H. KEAN, JR., New Jersey
MICHAEL A. RULLI, Ohio
GABE EVANS, Colorado
CRAIG A. GOLDMAN, Texas
JULIE FEDORCHAK, North Dakota

FRANK PALLONE, JR., New Jersey
Ranking Member
DIANA DEGETTE, Colorado
JAN SCHAKOWSKY, Illinois
DORIS O. MATSUI, California
KATHY CASTOR, Florida
PAUL TONKO, New York
YVETTE D. CLARKE, New York
RAUL RUIZ, California
SCOTT H. PETERS, California
DEBBIE DINGELL, Michigan
MARC A. VEASEY, Texas
ROBIN L. KELLY, Illinois
NANETTE DIAZ BARRAGÁN, California
DARREN SOTO, Florida
KIM SCHRIER, Washington
LORI TRAHAN, Massachusetts
LIZZIE FLETCHER, Texas
ALEXANDRIA OCASIO-CORTEZ, New York
JAKE AUCHINCLOSS, Massachusetts
TROY A. CARTER, Louisiana
ROBERT MENENDEZ, New Jersey
KEVIN MULLIN, California
GREG LANDSMAN, Ohio
JENNIFER L. MCCLELLAN, Virginia

PROFESSIONAL STAFF

MEGAN JACKSON, *Staff Director*
SOPHIE KHANAHMADI, *Deputy Staff Director*
TIFFANY GUARASCIO, *Minority Staff Director*

SUBCOMMITTEE ON ENVIRONMENT

H. MORGAN GRIFFITH, Virginia
Chairman

DAN CRENSHAW, Texas, *Vice Chairman*
ROBERT E. LATTA, Ohio
EARL L. "BUDDY" CARTER, Georgia
GARY J. PALMER, Alabama
JOHN JOYCE, Pennsylvania
RANDY K. WEBER, SR., TEXAS
AUGUST PFLUGER, Texas
MARIANNETTE MILLER-MEEKS, Iowa
LAUREL M. LEE, Florida
NICHOLAS A. LANGWORTHY, New York
GABE EVANS, Colorado
JULIE FEDORCHAK, North Dakota
BRETT GUTHRIE, Kentucky (ex officio)

PAUL TONKO, New York
Ranking Member
JAN SCHAKOWSKY, Illinois
RAUL RUIZ, California
SCOTT H. PETERS, California
NANETTE DIAZ BARRAGÁN, California
DARREN SOTO, Florida
JAKE AUCHINCLOSS, Massachusetts
TROY A. CARTER, Louisiana
ROBERT MENENDEZ, New Jersey
GREG LANDSMAN, Ohio
FRANK PALLONE, JR., New Jersey *(ex officio)*

C O N T E N T S

Page

Hon. H. Morgan Griffith, a Representative in Congress from the Commonwealth of Virginia, opening statement 1
Prepared statement 4
Hon. Paul Tonko, a Representative in Congress from the State of New York, opening statement 7
Prepared statement 9
Hon. Brett Guthrie, a Representative in Congress from the Commonwealth of Kentucky, opening statement 11
Prepared statement 12
Hon. Frank Pallone, Jr., a Representative in Congress from the State of New Jersey, opening statement 14
Prepared statement 16

WITNESSES

Michelle Freeark, Executive Director of Regulatory Affairs and Corporate Services, Arizona Electric Power Cooperative 18
Prepared statement 21
Answers to submitted questions 114
L. David Glatt, Director, North Dakota Department of Environmental Quality 26
Prepared statement 28
Answers to submitted questions 117
Lisa Evans, Senior Counsel, Earthjustice 33
Prepared statement [1]
Answers to submitted questions 118
Thomas H. Adams, Executive Director, American Coal Ash Association 34
Prepared statement 37
Answers to submitted questions 126

SUBMITTED MATERIAL

Inclusion of the following was approved by unanimous consent.
List of documents submitted for the record 81
Letter of June 26, 2025, from Sean O'Neill, Senior Vice President, Government Affairs, American Cement Association, to Mr. Guthrie, et al. 82
Statement of James Kenney, Cabinet Secretary, New Mexico Environment Department, and President, Enviromental Council of the States, before the , Subcommittee on Interior, Environment, and Related Agencies, House Committee on Appropriations 85
Article of June 16, 2025, "North Dakota DEQ Chief Eager To Work With EPA Amid Budget Cut Worry," InsideEPA.com 89
Article of June 19, 2025, "'It's American ingenuity': TVA transforms McCracken coal ash site into innovative solar farm," by Carly Dick, Paducah Sun 92
Fact sheet, "Burden vs. Benefit: Optimizing CCR Regulation to Unleash American Energy," Tennessee Authority, April 2025 95
Fact sheet, "TVA Draft Programmatic Environmental Assessment for Beneficiation Facilities," Tennessee Valley Authority, April 2025 97

[1] Ms. Evans' statement has been retained in committee files and is available at https://docs.house.gov/meetings/IF/IF18/20250626/118432/HHRG-119-IF18-Wstate-EvansL-20250626.pdf.

Page

Article of June 19, 2025, "How Black Lung Came Roaring Back to Coal Country," by Kate Morgan, New York Times 99
Report of the Environmental Protection Agency, "Risk Assessment of Coal Combustion Residuals: Legacy Impoundments and CCR Management Units," April 2024 [2]
Fact sheet, "Radioactive Wastes From Coal-fired Power Plants," Environmental Protection Agency, June 24, 2025 107
Letter of June 26, 2025, from Desmarie Waterhouse, Senior Vice President of Advocacy and Communications & General Counsel, American Public Power Association, to Mr. Guthrie, et al. 112

---

[2] The report has been retained in committee files and is included in the Documents for the Record at https://docs.house.gov/meetings/IF/IF18/20250626/118432/HHRG-119-IF18-20250626-SD767.pdf.

A DECADE LATER: A REVIEW OF CONGRESSIONAL ACTION, ENVIRONMENTAL PROTECTION AGENCY RULES, AND BENEFICIAL USE OPPORTUNITIES FOR COAL ASH

THURSDAY, JUNE 26, 2025

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENVIRONMENT,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:15 a.m., in room 2322, Rayburn House Office Building, Hon. H. Morgan Griffith (chairman of the subcommittee) presiding.

Members present: Representatives Griffith, Crenshaw, Latta, Carter of Georgia, Palmer, Joyce, Weber, Pfluger, Miller-Meeks, Evans, Guthrie (ex officio), Tonko (subcommittee ranking member), Ruiz, Peters, Barragán, Soto, Auchincloss, Carter of Louisiana, Menendez, Landsman, and Pallone (ex officio).

Staff present: Ansley Boylan, Director of Operations; Byron Brown, Chief Counsel, Environment; Sydney Greene, Director of Finance and Logistics; Christen Harsha, Senior Counsel, Environment; Calvin Huggins, Clerk; Megan Jackson, Staff Director; Sarah Meier, Counsel and Parliamentarian; Joel Miller, Chief Counsel; Ben Mullaney, Press Secretary; Kaitlyn Peterson, Policy Analyst, Environment; Chris Sarley, Member Services/Stakeholder Director; Matt VanHyfte, Communications Director; Jane Vickers, Press Assistant; Katie West, Press Secretary; Katherine Willey, Senior Counsel, Environment; Giancarlo Ceja, Minority Environment Fellow; Anthony Gutierrez, Minority Professional Staff Member; Caitlin Haberman, Minority Staff Director, Environment; Emma Roehrig, Minority Staff Assistant; Kylea Rogers, Minority Policy Analyst.

Mr. GRIFFITH. The Subcommittee on Environment will now come to order.

The Chair recognizes himself for a 5-minute opening statement.

OPENING STATEMENT OF HON. H. MORGAN GRIFFITH, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA

Today, this subcommittee will examine coal ash management practices and innovative ways people are utilizing coal waste. Coal, historically, has played a major role in keeping our lights on and powering our large industries, and our hospitals, et cetera.

Currently, there are over 200 coal-fired electric power plants in the United States and a fair amount of individual boilers that use coal for fuel. Coal's fuel storage attributes and its dispatchable power qualities continue to make it a crucial component of our domestic electric power mix.

Today's hearing will focus on one of the byproducts of coal use: coal combustion residuals, commonly called CCR or coal ash. The Environmental Protection Agency, or the EPA, first began regulating coal combustion residuals from electric utilities in 2014 under its Resource Conservation and Recovery Act, or RCRA, powers, subtitle D authority, to regulate solid waste.

In 2016, the Water Infrastructure and Improvements for the Nation Act amended RCRA to grant the EPA the authority to approve State CCR permit programs if a State chose to run its own program. However, nearly a decade later, only three State programs have been approved. Hopefully, today we will learn more about States' permitting programs and how EPA is using its CCR permitting approval authority.

Unfortunately, the Biden-Harris administration pressed necessary coal ash regulations into its wider attempts to force a transition to renewable energy by imposing unreasonable and onerous regulations on disfavored traditional energy resources, like coal.

This attack on coal included a 2024 rule regulating inactive coal combustion residual storage sites, or legacy impoundments, as well as sites where coal ash had previously been placed, known as coal combustion residuals management units. Utilities warned that this unworkable rule would impose needless and unplanned costs on ratepayers, who are already facing excessive increases in their rates.

Today, we will learn more about the problems with the current regulatory landscape and the cost it imposes on power generation and, in turn, ratepayers.

Thankfully, in March of this year, the EPA announced that it is reviewing this rule and plans to propose amendments within the next year. Additionally, EPA has announced it plans to prioritize working with States on their permit programs to hopefully facilitate more State management of coal ash disposal.

I am encouraged by the Trump administration's apparent willingness to listen to the States and their utilities, and hope that the EPA can work with them, and not against them, as partners in protecting our environment.

I also hope to learn more today about opportunities to improve the reuse of coal byproducts. In addition to this primary use, coal byproducts can be reused for many purposes, such as cement manufacturing, drywall manufacturing, road paving and producing concrete. And yesterday, I read an article about using it in wastewater treatment facilities to get out dyes and certain heavy metals. This recycling, known as beneficial use, can not only save cost, but also result in lower emissions.

Many may be surprised to hear that there is a thriving coal ash reuse industry in the United States. According to the American Coal Ash Association, 69 percent of all coal ash produced in 2023 was recycled.

In addition to these established uses in construction, agriculture, waste management, and mining, new uses are emerging. For example, research from the University of Texas found that as much as 11 million tons of rare earth elements—rare earth elements—can be found and be accessible in coal ash in the United States.

In fact, researchers from Virginia Tech, located in my home district—and where one of my children graduated, one is attending and one hopes to attend—they are leading projects to analyze the presence of critical minerals and rare earth elements in coal byproducts.

According to the U.S. Geological Survey, the United States currently relies on imports for 80 percent of its supply of rare earth elements, with 70 percent of those imports coming from China. Our regulatory policies for coal combustion residuals management must facilitate continued beneficial use.

I look forward to today's discussion of how we can address shortcomings of our current approach to coal combustion residuals management and innovation in how our country deals with waste.

[The prepared statement of Mr. Griffith follows:]

Chairman Morgan Griffith
Opening Statement—Subcommittee on Environment
"A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash."
June 26, 2025

As prepared for delivery

Today, this Subcommittee will examine coal ash management practices and innovative ways people are utilizing coal waste.

Coal, historically, has played a major role in keeping our lights on and powering our large industries.

Currently, there are over 200 coal-fired electric power plants in the United States and a fair amount of industrial boilers that use coal for fuel.

Coal's fuel storage attributes and its dispatchable power qualities continue to make it a crucial component of our domestic electric power mix.

Today's hearing will focus on one of the byproducts of coal use, coal combustion residuals, commonly referred to as CCR or "coal ash."

The Environmental Protection Agency, or the EPA, first began regulating coal combustion residuals from electric utilities in 2014, under its Resource Conservation and Recovery Act or "RCRA", Subtitle D authority, to regulate solid waste.

In 2016, the Water Infrastructure Improvements for the Nation Act amended RCRA to grant the EPA the authority to approve state CCR permit programs if a state chose to run its own program.

However, nearly a decade later, only three state programs have been approved.

Hopefully, today we will learn more about states' permitting programs, and how EPA is using its CCR permitting approval authority.

Unfortunately, the Biden-Harris administration pressed necessary coal ash regulations into its wider attempts to force a transition to renewable energy by imposing unreasonable and onerous regulations on disfavored traditional energy resources, like coal.

This war on coal included a 2024 rule regulating INACTIVE coal combustion residuals storage sites, or legacy impoundments, as well as sites where coal ash had PREVIOUSLY been placed, known as coal combustion residuals management units.

Utilities warned that this unworkable rule would impose needless and unplanned costs on ratepayers.

Today, we will learn more about the problems with the current regulatory landscape and the costs it imposes on power generation and in-turn, ratepayers.

Thankfully, in March of this year, the EPA announced that it is reviewing this rule and plans to propose amendments within the next year.

Additionally, EPA has also announced it plans to prioritize working with states on their permit programs to hopefully facilitate more state management of coal ash disposal.

I'm encouraged by the Trump administration's apparent willingness to listen to the states and their utilities and hope the EPA can work with them, and not against them, as partners in protecting our environment.

I also hope to learn more today on opportunities to improve the reuse of coal byproducts. In addition to this primary use, coal byproducts can be reused for many purposes, such as cement manufacturing, drywall manufacturing, road paving, and producing concrete.

This recycling, known as "beneficial use," can not only save costs but also result in lower emissions.

Many may be surprised to hear that there is a thriving coal ash reuse industry in the United States. According to the American Coal Ash Association, 69 percent of all coal ash produced in 2023 was recycled.

In addition to these established uses in construction, agriculture, waste management, and mining, new uses are emerging.

For example, research from the University of Texas found that as much as 11 million tons of rare earth elements could be found in accessible coal ash in the United States.

In fact, researchers from Virginia Tech, located in my district and where one of my children graduated, one is attending, and one hopes to attend, they are leading projects to analyze the presence of critical minerals and rare earth elements in coal byproducts.

According to the U.S. Geological Survey, the United States currently relies on imports for 80 percent of its supply of rare earth elements, with 70 percent of those imports coming from China.

Our regulatory policy for coal combustion residuals management must facilitate continued beneficial use.

I look forward to today's discussion of how we can address shortcomings of our current approach to coal combustion residuals management and innovation in how our country deals with waste.

Mr. GRIFFITH. And, with that, I yield back and now recognize the ranking member, Mr. Tonko of New York, for his 5-minute opening statement.

OPENING STATEMENT OF HON. PAUL TONKO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. TONKO. Thank you, Mr. Chair.

Yesterday, the committee marked up more than a dozen energy bills, several of which had the goal of continuing the operation of uncompetitive coal-fired power plants.

But one issue that was seriously overlooked in yesterday's debate was the public health and environmental threats posed by these generators. We should not lose sight of the serious downsides to burning coal. Air pollution is often the first thing discussed, including emissions of particulate matter, mercury, and other hazardous air pollutants, as well as tremendous amounts of climate pollution.

But we cannot forget that these power plants also create waste, known as coal combustion residuals, or coal ash. And for far too long this waste has not been disposed of safely, leading to groundwater contamination and other environmental damage. These contaminations are not only dangerous, but they also are costly and difficult to remediate.

In 2008, a major Tennessee Valley Authority coal ash impoundment failed, resulting in over a billion gallons of slurry polluting the environment, which took years and more than $1 billion to clean up. And while high-profile incidents like TVA's grab headlines, lower levels of contamination near these sites are, unfortunately, extremely common.

Analysis from the Environmental Integrity Project and Earthjustice found that 91 percent of U.S. coal plants are causing unsafe levels of groundwater contamination. EPA acknowledged these risks and finalized a rule in 2015 to support the safe disposal of coal combustion residuals.

This rule sought to prevent the disposal of coal ash in unlined ponds and require monitoring of groundwater and cleanup of contamination. But, unfortunately, the 2015 rule did not apply to landfills that had ceased receiving coal ash or generating facilities that had ceased operating prior to the rule's finalization. In 2024, EPA finalized another rule to cover these so-called legacy sites excluded from the 2015 rule.

And I am very concerned that several industry groups have already begun a lobbying campaign to roll back this rule. Like so many of EPA's previously announced deregulatory efforts, a weakening of either the 2015 or 2024 rule would represent an effort to shield polluters from costs associated with reasonable steps to protect public health and the environment, in this case ensuring the safe disposal and management of coal ash waste.

At yesterday's markup, we heard a lot of talk about subsidizing electricity producers, about whether renewables should receive subsidies, and whether or not fossil fuel generators currently receive subsidies at all. And I want to make it clear, they absolutely do.

When we socialize the cost of the environmental and public health harms caused by coal-fired power plants onto everyday

Americans, especially those living near these sites, we are providing coal plant operators with a massive subsidy.

When coal ash leaches into people's water supplies, they pay a price, including the healthcare costs and health outcomes associated with failing to address the safe disposal of this waste. But I understand that there may be different approaches as to how to effectively manage this waste.

So in addition to EPA's regulatory actions in 2015, Congress passed the Water Infrastructure Improvements for the Nation Act, or the WIIN Act. The WIIN Act allows States, with EPA's approval, to manage disposal of coal ash through a permitting program provided the State standards are as protective as Federal standards.

Cooperative Federalism is a hallmark of our Nation's successful environmental laws, and I do believe States can play an important role in addressing coal ash waste.

However, I am incredibly concerned by the President's fiscal year 2026 budget request, which included a $1 billion proposed cut to EPA's categorical grants that States rely upon to implement and enforce environmental laws. This is part of a troubling trend from the administration, which is also apparent in the majority's budget bill that pushes more costs onto States, which will make the successful implementation of State-led environmental programs that more difficult. If we want States to be effective partners in environmental protection, we must ensure they have the resources and capacity necessary to do the job.

Finally, I understand that much of today's hearing will focus on the beneficial uses of coal ash. I want to be clear that I am by no means opposed to beneficial uses, provided that these uses are proven to not harm public health and the environment. Finding effective methods to use coal ash is worth continuing to pursue. However, careful consideration of these potential uses must be a priority.

Unfortunately, the Trump administration's efforts to undermine EPA's scientific capacity by significantly shrinking the Office of Research and Development and attacking the Agency's scientific integrity policy is a serious cause for concern.

I worry that this could undermine EPA's ability to conduct independent scientific assessments of the risks of potential beneficial uses. I want to encourage Members on both sides of the aisle who want to see more safe, beneficial uses of coal ash to oppose the mass layoffs and reorganization of EPA.

With that, Mr. Chair, I look forward to today's discussion and, with that, yield back.

[The prepared statement of Mr. Tonko follows:]

Committee on Energy and Commerce

Opening Statement as Prepared for Delivery
of
Subcommittee on Environment Ranking Member Paul D. Tonko

Hearing on "A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash"

June 26, 2025

Thank you, Mr. Chair. Yesterday, the Committee marked up more than a dozen energy bills, several of which had the goal of continuing the operation of uncompetitive coal-fired power plants. But one issue that was seriously overlooked in yesterday's debate was the public health and environmental threats posed by these generators. We should not lose sight of the serious downsides to burning coal.

Air pollution is often the first thing discussed, including emissions of particulate matter, mercury, and other hazardous air pollutants, as well as tremendous amounts of climate pollution. But we cannot forget that these power plants also create waste, known as coal combustion residuals or coal ash, and for far too long this waste has not been disposed of safely, leading to groundwater contamination and other environmental damage.

These contaminations are not only dangerous, but they are also costly and difficult to remediate. In 2008, a major Tennessee Valley Authority coal ash impoundment failed, resulting in over a billion gallons of slurry polluting the environment, which took years and more than a billion dollars to clean up. And while high profiles incidents like TVA's grab headlines, lower levels of contamination near these sites are unfortunately extremely common.

Analysis from the Environmental Integrity Project and Earthjustice found that 91 percent of U.S. coal plants are causing unsafe levels of groundwater contamination. EPA acknowledged these risks and finalized a rule in 2015 to support the safe disposal of coal combustion residuals.

This rule sought to prevent the disposal of coal ash in unlined ponds and require monitoring of groundwater and cleanup of contamination. But unfortunately, the 2015 rule did not apply to landfills that had ceased receiving coal ash or generating facilities that had ceased operating prior to the rule's finalization.

In 2024, EPA finalized another rule to cover these so-called legacy sites excluded from the 2015 rule. And I am very concerned that several industry groups have already begun a lobbying campaign to roll back this rule.

Like so many of EPA's previously announced deregulatory efforts, a weakening of either the 2015 or 2024 rule would represent an effort to shield polluters from costs associated with reasonable steps to protect public health and the environment. In this case, ensuring the safe disposal and management of coal ash waste.

At yesterday's markup, we heard a lot of talk about subsidizing electricity producers; about whether renewables should receive subsidies, and whether or not fossil fuel generators currently receive subsidies at all. And I want to make it clear: They absolutely do!

When we socialize the costs of the environmental and public health harms caused by coal-fired power plants onto everyday Americans, especially those living near these sites, we are providing coal plant operators with a massive subsidy. When coal ash leaches into people's water supplies, they pay a price, including the health care costs and health outcomes associated with failing to address the safe disposal of this waste.

But I understand that there may be different approaches as to how to effectively manage this waste. So, in addition to EPA's regulatory actions, in 2016, Congress passed the Water Infrastructure Improvements for the Nation Act, or WIIN Act.

The WIIN Act allows states, with EPA's approval, to manage disposal of coal ash through a permitting program, provided the state's standards are as protective as Federal standards. Cooperative federalism is a hallmark of our nation's successful environmental laws, and I believe states can play an important role in addressing coal ash waste.

However, I am incredibly concerned by the President's Fiscal Year 2026 Budget Request, which included a $1 billion proposed cut to EPA categorical grants that states rely upon to implement and enforce environmental laws. This is part of a troubling trend from the Administration, which is also apparent in the majority's budget bill, that pushes more costs onto states, which will make the successful implementation of state-led environmental programs more difficult.

If we want states to be effective partners in environmental protection, we must ensure they have the resources and capacity necessary to do the job. Finally, I understand that much of today's hearing will focus on the beneficial uses of coal ash.

I want to be clear that I am by no means opposed to beneficial uses, provided that these uses are proven to not harm public health and the environment. Finding effective methods to use coal ash is worth continuing to pursue; however, careful consideration of these potential uses must be a priority.

Unfortunately, the Trump Administration's efforts to undermine EPA's scientific capacity by significantly shrinking the Office of Research and Development and attacking the agency's Scientific Integrity policy is a serious cause for concern. I worry that this could undermine EPA's ability to conduct independent scientific assessments of the risks of potential beneficial uses.

I want to encourage members on both sides of the aisle who want to see more safe, beneficial uses of coal ash to oppose the mass layoffs and reorganization of EPA.

Mr. Chair, I look forward to today's discussion, and with that I yield back.

Mr. GRIFFITH. The gentleman yields back.

I now recognize the chairman of the full committee, the gentleman from Kentucky, for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. BRETT GUTHRIE, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY

Mr. GUTHRIE. Thank you, Mr. Chairman.

And thank you to all of our witnesses for being here. We appreciate you being here today.

Coal ash is produced by coal-fired electric power plants. In 2014, EPA issued its first rule regulating coal ash as a nonhazardous waste under the Resource Conservation and Recovery Act. This is one of the rules issued as part of the Obama administration's war on coal.

There were immediate concerns about how the rule would be implemented, about how it did not take into account regional differences, and how it would affect the electric power supply.

Congress amended RCRA in 2016 to make it easier for States to regulate coal ash through permit programs, based on their local conditions. But it has been difficult for States to get the necessary approval from EPA. This is the committee's first hearing on coal ash in about 10 years.

The Biden administration continued the attack on fossil fuels, issuing a rule in April 2024 that expanded the scope of the Obama-era rule to facilities that were already closed. I cosponsored Subcommittee Chairman Griffith's resolution last Congress to overturn that rule.

And I welcome the steps EPA Administrator Zeldin has announced to prioritize the approval of State programs and to review the deadlines and requirements imposed on electric utilities by the Biden administration's 2024 rule.

Today, we will hear from a top environmental regulator of North Dakota and from Rural Electric Co-Op in Arizona about their experiences with EPA and how the coal ash program can be improved.

We will also hear about the environmental and other benefits of using coal ash in road and other infrastructure projects, and how this unassuming material may be an important domestic source of rare earth elements needed to power our artificial intelligence economy and our national security.

I look forward to the hearing from our witnesses. I absolutely appreciate each and every one of you for being here today. Look forward to your opening statements and our discussion, and I will I yield back the balance of my time.

[The prepared statement of Mr. Guthrie follows:]

Chairman Brett Guthrie
Opening Statement—Subcommittee on Environment
"A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash."
June 26, 2025

As prepared for delivery

Thank you, Chairman Griffith, for holding this important hearing and thank you to our witnesses for sharing your time today.

Coal ash is produced by coal-fired electric power plants.
In 2014, EPA issued its first rule regulating coal ash as a nonhazardous waste under the Resource Conservation and Recovery Act.

This was one of the rules issued as part of the Obama administration's "war on coal."

There were immediate concerns with how the rule would be implemented, about how it did not take into account regional differences, and how it would affect the electric power supply.

Congress amended RCRA in 2016 to make it easier for States to regulate coal ash through permit programs based on their local conditions, but it has been difficult for States to get the necessary approval from EPA.

This is the Committee's first hearing on coal ash in about 10 years.

The Biden Administration continued the attack on fossil fuels, issuing a rule in April 2024 that expanded the scope of the Obama era rule to facilities that were already closed.

I cosponsored Subcommittee Chairman Griffith's resolution last Congress to overturn that rule.

And, I welcome the steps EPA Administrator Zeldin has announced to prioritize the approval of State programs and to review the deadlines and requirements imposed on electric utilities by the Biden Administration's 2024 rule.

Today, we will hear from the top environmental regulator in North Dakota and from a rural electric co-op in Arizona about their experiences with EPA and how the coal ash program can be improved.

We will also hear about the environmental and other benefits of using coal ash in road and other infrastructure projects and how this unassuming material may be an important domestic source of rare earth elements needed to power the Artificial Intelligence economy and our national security.

I look forward to hearing from our witnesses and yield back my time.

Mr. GRIFFITH. The gentleman yields back.

The Chair now recognizes the ranking member of the full committee, the gentleman from New Jersey, for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Mr. Chairman.

Today the subcommittee is examining coal ash regulations at the EPA. Coal ash is a waste product generated from burning coal for energy. It is radioactive and contains toxic contaminants like arsenic, lead, mercury, and chromium.

Some power plants dispose of coal ash in surface impoundments, storing the waste in ponds at operating or inactive facilities, and this poses a serious risk to the surrounding communities, threatening human health and the environment.

Contaminants can leach into groundwater and drinking water supplies or become airborne as toxic dust. Aging or deficient impoundments can fail structurally, resulting in catastrophic floods of toxic sludge entering neighboring communities.

The EPA first determined that national disposal criteria were needed for coal ash 25 years ago, and this led to regulations starting in 2015. And then Congress acted 9 years ago with passage of the Water Infrastructure Improvements for the Nation, I guess the WIIN Act.

This law gave States the ability to create their own coal ash management programs as long as they provide equal or greater protection to Federal standards. And last year, EPA finally updated their rule to include all the legacy coal ash waste sites under their purview.

Now, the passage of this law now provides us many data points to measure the success of State and Federal regulations to manage coal ash waste and protect surrounding communities. Unfortunately, the data doesn't paint a good picture. There have been countless examples of weak State enforcement, large-scale releases of toxic sludge, and public health harms.

According to the industry's own data, over 90 percent of coal plants have reported groundwater contamination from their coal ash storage sites. And we still see coal ash stored in unlined pits that leach into groundwater or that gets blown into neighboring communities.

To protect the health and safety of those living near coal ash sites, we need strong Federal standards for the disposal and management of this toxic waste and strong enforcement of those standards at the State and Federal level.

But EPA's budget proposal and staffing cuts make it clear that Federal enforcement is not a priority. The Trump administration is hurting EPA's ability to ensure coal ash disposal and pollution do not put Americans' health at risk.

At a time when the administration should be ensuring States are following the law, EPA Administrator Zeldin is instead turning over responsibility of coal ash management to States, and this is

an abdication of responsibility, considering the well-documented pattern of States allowing this toxic pollution to continue unabated.

The Republican majority is also likely to discuss the beneficial uses of coal ash and explore additional opportunities to divert more of this waste from ponds or landfills. And I agree that coal ash recycling helps decrease Americans' exposure to this toxic substance, but it is critical that we follow the science to ensure the uses don't cause further harm and contamination.

While using encapsulated coal ash in construction materials can be a good recycling method for this waste, using unencapsulated coal ash as ground fill is not. And while pilot projects extracting critical minerals from coal ash are promising, they should not be touted as a reason to prop up uneconomic, outdated, and high-polluting coal ash plants.

Now, I heard the chairman of the full committee talk about Biden and the war on coal. Look, I don't think there is anyone who wants a war on coal. I think the problem is that we have—if there is anything, the war has been against, you know, the impact of coal harming people.

You know, there is nothing wrong with using a fossil fuel, in this case, coal or any—for energy purposes, but we can't have it cause harm to our health and safety, not only to the people who live there, downwind, whatever, but in this case, you know, clear contamination from coal ash.

So as we discuss this issue, let's not forget the broader legacy of coal and what any possible resurgence would mean for communities across the country. We are not saying there shouldn't be a resurgence, but there can't be a resurgence of the harm. We would see an increase in black lung disease in young people, more air pollution-related deaths, and increased cancer rates from exposure to coal ash fill.

And, you know, we can't afford to repeat the mistakes of the past. That is all we are saying. If you find beneficial uses, fine, but not things that are going to harm people in hopes of a different outcome. You are not going to have a different outcome. We know what the results are from some of this damage.

So I look forward to hearing from our witnesses, and I yield back the balance of my time, Mr. Chairman.

[The prepared statement of Mr. Pallone follows:]

Committee on Energy and Commerce

Opening Statement as Prepared for Delivery
of
Ranking Member Frank Pallone, Jr.

Hearing on "A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash"

June 26, 2025

Today, the Subcommittee is examining coal ash regulations at the Environmental Protection Agency (EPA).

Coal ash is a waste product generated from burning coal for energy. It is radioactive and contains toxic contaminants like arsenic, lead, mercury, and chromium. Some power plants dispose of coal ash in surface impoundments, storing the waste in ponds at operating or inactive facilities. This poses serious risks to the surrounding communities – threatening human health and the environment. Contaminants can leach into groundwater and drinking water supplies or become airborne as toxic dust. Aging or deficient impoundments can fail structurally, resulting in catastrophic floods of toxic sludge entering neighboring communities.

The Environmental Protection Agency (EPA) first determined that national disposal criteria were needed for coal ash 25 years ago. This led to regulations starting in 2015, and then Congress acted nine years ago with passage of the Water Infrastructure Improvements for the Nation (WIIN) Act. This law gave states the ability to create their own coal ash management programs, as long as they provide equal or greater protection to federal standards. And last year, EPA finally updated their rule to include all the legacy coal ash waste sites under their purview.

The passage of this law now provides us many data points to measure the success of state and federal regulations to manage coal ash waste and protect surrounding communities. Unfortunately, the data doesn't paint a good picture. There have been countless examples of weak state enforcement, large scale releases of toxic sludge, and public health harms.

According to industry's own data, over 90 percent of coal plants have reported groundwater contamination from their coal ash storage sites. We still see coal ash stored in unlined pits that leach into groundwater or that gets blown into neighboring communities.

To protect the health and safety of those living near coal ash sites, we need strong federal standards for the disposal and management of this toxic waste, and strong enforcement of those standards at the state and federal levels.

But EPA's budget proposal and staffing cuts make it clear that federal enforcement is not a priority. The Trump Administration is hurting EPA's ability to ensure coal ash disposal and pollution do not put Americans' health at risk. At a time when the Administration should be ensuring states are following the law, EPA Administrator Zeldin is instead turning over responsibility of coal ash management to states. This is an outrageous abdication of

responsibility considering the well-documented pattern of states allowing this toxic pollution to continue unabated.

The Republican Majority is also likely to discuss the beneficial uses of coal ash and explore additional opportunities to divert more of this waste from ponds or landfills. I agree that coal ash recycling helps decrease Americans' exposure to this toxic substance, but it is critical that we follow the science to ensure the uses don't cause further harm and contamination. While using encapsulated coal ash in construction materials can be a good recycling method for this waste, using unencapsulated coal ash as ground fill is not. And while pilot projects extracting critical minerals from coal ash are promising, they should not be touted as a reason to prop-up uneconomic, outdated, and high-polluting coal power plants.

As we discuss this issue, let's not forget the broader legacy of coal and what any possible resurgence would mean for communities across the country. We'd see an increase in black lung disease in young people, more air pollution related deaths, and increased cancer rates from exposure to coal ash fill. We cannot afford to repeat the mistakes of the past, in hopes of a different outcome.

I look forward to hearing from our witnesses and yield back the balance of my time.

Mr. GRIFFITH. The gentleman yields back.

We now conclude with Member opening statements.

The Chair would like to remind Members that. pursuant to committee rules, all Members' opening statements will be made a part of the record.

I want to thank our witnesses for being here today and taking the time to testify before the subcommittee.

Although it is not the practice of this subcommittee to swear in witnesses, I would remind our witnesses that knowingly and willfully making materially false statements to the legislative branch is against the law under Title 18, Section 1001 of the United States Code.

You will have an opportunity to give an opening statement, followed by questions from Members.

Today, our witnesses are Mrs. Michelle Freeark, executive director of Regulatory Affairs and Corporate Services at Arizona G&T Cooperative; Mr. Dave Glatt, director at the North Dakota Department of Environmental Quality; Ms. Lisa Evans, senior attorney at Earthjustice—welcome; and Mr. Tom Adams, executive director at the American Coal Ash Association.

We appreciate all of you being here today.

And I now recognize Mrs. Freeark for 5 minutes to give an opening statement.

STATEMENTS OF MICHELLE FREEARK, EXECUTIVE DIRECTOR OF REGULATORY AFFAIRS AND CORPORATE SERVICES, ARIZONA ELECTRIC POWER COOPERATIVE; L. DAVID GLATT, DIRECTOR, NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY; LISA EVANS, SENIOR COUNSEL, EARTHJUSTICE; AND THOMAS H. ADAMS, EXECUTIVE DIRECTOR, AMERICAN COAL ASH ASSOCIATION

STATEMENT OF MICHELLE FREEARK

Ms. FREEARK. Chairman Griffith, Ranking Member Tonko, and members of the subcommittee, thank you for the opportunity to testify before you today.

My name is Michelle Freeark, and I serve as the executive director of regulatory affairs and corporate services at Arizona Electric Power Cooperative. AEPCO is a member-owned, not-for-profit generation and transmission cooperative based in Benson, Arizona.

AEPCO's purpose is to generate electricity and transmit it to distribution cooperatives that deliver power to end-use consumers in Arizona, Nevada, New Mexico, and California. AEPCO's service area includes cost-sensitive rural and disadvantaged communities, and we are committed to balancing our environmental stewardship with the cooperative's mission to provide safe, reliable, and competitively priced power to its members.

Reliable and affordable electricity is essential to America's economic growth. And as our Nation increasingly relies on electricity to power our economy, keeping the lights on has never been more important or more challenging.

Over the next 5 years, the North American Electric Reliability Corporation forecasts that all or parts of several States are at high risk of rolling blackouts during normal peak conditions. This prob-

lem is compounded by the rapid growth of data centers in rural areas. Some forecasts project data centers will consume 9 percent of all U.S. electric generation by 2030. In AEPCO's service territory alone, there are currently over 3 gigawatts of capacity demand for development.

AEPCO is presently constructing new natural gas units and solar plus battery energy storage systems to expand and diversify our generation portfolio. Renewable energy sources, like solar and batteries, can play a strategic role in the Western energy grid, but reliable and dispatchable generation sources, including coal and natural gas, are necessary to carry out our mission of providing safe, reliable, competitively priced power to electric co-ops in the Southwest. Because electric co-ops are owned and governed by the consumer members we serve, we have a vested interest in protecting and maintaining the environment within our communities.

Just as all generation sources have some form of waste, coal ash, also referred to as coal combustion residuals, or CCR, is a byproduct of coal-fired electric generation. AEPCO has a robust CCR compliance program to comply with all operational monitoring, reporting, and recordkeeping requirements of Federal CCR regulation and has worked closely with the EPA to comply with such regulations.

AEPCO's current and past CCR disposal activities are also robustly regulated under Arizona's Aquifer Protection Program, administered by the Arizona Department of Environmental Quality, which requires frequent groundwater monitoring and CCR unit maintenance and inspections to reduce the potential discharge of pollutants to the greatest degree achievable.

Additionally, AEPCO currently exceeds Federal CCR regulation beneficial use provisions by selling 90 percent-plus of our fly ash to a third party owned by the Salt River Pima–Maricopa Indian Community for alternative uses, reducing the amount of CCR that is disposed in our impoundments.

Federal action and inaction regulating coal combustion residuals has resulted in unworkable and unreasonable regulatory requirements for the power sector, making it more difficult for electric co-ops to serve their consumer members and your constituents.

The EPA's legacy rule finalized last year established regulatory requirements for two new classes of CCR units but fails to consider the diverse characteristics, sizes, and relative risks of sites. Instead, its one-size-fits-all approach will result in massive costs to the utility industry that will ultimately be borne by rural end consumers and which will exacerbate challenges to the reliable delivery of electricity.

Furthermore, Federal CCR regulations are currently self-implementing, which means that utilities are unable to work with State or Federal regulators to tailor regulatory requirements to site-specific conditions through permit programs, unlike with other Federal environmental programs. This is despite the fact that our State has effectively regulated CCR for decades.

Without a Federal permitting in place, enforcement is presently serving as an ill-fitting substitute and exposing power companies to a great deal of uncertainty.

We commend the EPA's decision to reconsider the harmful legacy rule but urge EPA to delay upcoming deadlines while they determine what to do with the requirements.

We also urge the administration and Congress to support site-specific, risk-based Federal and State CCR programs as mandated by the WIIN Act of 2016 to support our country's rapidly growing energy demands while maintaining important environmental protections.

Thank you for the opportunity to testify on this important issue. I look forward to answering any questions.

[The prepared statement of Ms. Freeark follows:]



Testimony of Michelle Freeark
Executive Director of Regulatory Affairs and Corporate Services
Arizona Electric Power Cooperative (AEPCO)

To the United States House of Representatives, Committee on Energy and Commerce
Subcommittee on Environment

"A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash"

Thursday, June 26, 2025

Introduction

Chairman Griffith, Ranking Member Tonko, and Members of the Environment Subcommittee, thank you for the opportunity to testify before you today. My name is Michelle Freeark, and I serve as Executive Director of Regulatory Affairs and Corporate Services of Arizona Electric Power Cooperative (AEPCO). I am testifying today to provide my own insights as a co-op leader but am also representing the National Rural Electric Cooperative Association (NRECA) and the nearly 900 electric cooperatives across the country that are members of NRECA.

AEPCO is a member-owned, not-for-profit generation and transmission (G&T) cooperative based in Benson, Arizona. AEPCO is considered a small utility by the Federal Energy Regulatory Commission and a small business by the Small Business Administration. AEPCO's purpose is to generate electricity and transmit it to distribution cooperatives that deliver power to end-use member-consumers in Arizona, Nevada, New Mexico, and California.

AEPCO's service area includes cost-sensitive rural and disadvantaged communities. Regulatory costs have a direct impact on not-for-profit electric cooperatives and their rural end users. AEPCO is committed to balancing environmental stewardship with the cooperative's mission to provide safe, reliable, competitively priced power to its members.

NRECA is the national trade association representing nearly 900 rural electric cooperatives across the country, including 64 G&T cooperatives and 832 distribution cooperatives. America's electric co-ops comprise a unique sector of the electric industry. These not-for-profit entities are independently owned and governed by the people they serve. From growing exurban regions to remote farming communities, electric co-ops provide power to 42 million Americans across 48 states. They keep the lights on across 56% of the American landscape – areas that are primarily residential and sparsely populated. These characteristics make it comparatively more expensive for electric co-ops to operate than the rest of the electric sector, which tends to serve more

compact, industrialized, and densely populated areas. This means that co-ops are constantly asked to do more with less.

Cost-effective and lawful federal regulations that minimize unnecessary burdens on the power sector are critical to electric co-ops' ability to provide affordable, reliable, and safe electricity to their consumer-members. Federal action – and inaction – regulating coal combustion residuals (CCR) has resulted in unworkable and unreasonable regulatory requirements for the power sector, making it more difficult for electric co-ops to serve their consumer-members. We are pleased that this Administration has taken important steps to address harmful U.S. Environmental Protection Agency (EPA) regulations that will impact reliability and affordability. We look forward to continuing to work with the Administration and Congress to reform federal CCR regulations to support our country's rapidly growing energy demands while maintaining important environmental protections.

A Balanced Electricity Portfolio is Essential to Maintain Energy Reliability and Affordability

As our nation increasingly relies on electricity to power our economy, keeping the lights on has never been more important – or more challenging. Over the next five years, the North American Electric Reliability Corporation forecasts that all or parts of several states are at high risk of rolling blackouts during normal peak conditions. Flawed public policies that force the premature closure of existing power plants are a big reason for this threat. This problem is compounded by the rapid growth of data centers in rural areas. Some forecasts project data centers will consume 9% of all US electricity generation by 2030. In AEPCO's service territory alone, there are currently over 3 gigawatts of capacity demand for development.

AEPCO is presently constructing new natural gas units and solar plus battery energy storage systems (BESS) to expand and diversify our generation portfolio. Renewable energy sources like solar and BESS can play a strategic role in the Western energy grid, but reliable and dispatchable generation sources, including coal and natural gas, are necessary to fill the gaps caused by intermittency. Coal also offers energy security benefits because the fuel is readily available on the ground as opposed to pipeline fuel or intermittent renewable resources.

Communities throughout our service territory experience extremely hot summers that cause a high demand for electricity. Energy market prices often soar due to high demand or during adverse reliability events, such as wildfires. Maintaining the capability to utilize coal as part of our energy mix ensures that summer demand is met at affordable rates. The cost of electricity is of particular concern to AEPCO because roughly one third of our members' residential consumers live below the federal poverty line. For these reasons, coal complements AEPCO's renewable and natural gas generation resources.

How AEPCO Safely and Responsibly Manages CCR

Because electric co-ops are owned and governed by the consumer-members we serve, we have a vested interest in protecting and maintaining the environment within our communities. Environmental stewardship is not and should not be mutually exclusive with ensuring that our

consumer-members have access to reliable and affordable electricity to meet the needs of our growing and ever-changing economy.

Just as all generation sources produce some form of waste, CCR is the byproduct of coal-fired electric generation. AEPCO currently owns and operates one coal-fired generating facility, Apache Generating Station (Apache) in Cochise, Arizona. Apache has composite-lined CCR impoundments on-site subject to federal CCR regulations. AEPCO has a robust CCR compliance program to comply with all operational, monitoring, reporting and recordkeeping requirements of federal CCR regulations and has worked closely with EPA to comply with such regulations.

In addition, Arizona's Aquifer Protection Permit (APP) program, administered by the Arizona Department of Environmental Quality (ADEQ), has had oversight of the Apache CCR disposal units for nearly 30 years. APP is a protective state program that has provided historical oversight of CCR units. AEPCO's current and past CCR disposal activities are regulated under an APP Permit. The APP program calls for routine ground water monitoring and CCR unit maintenance and inspections, regular state inspections, semi-annual and annual reporting to ADEQ, Contingency Plan requirements, and closure and post-closure activities. Monitoring well data is also subject to Alert Levels and Aquifer Quality Limits to measure and identify any potential groundwater impacts.

AEPCO's impoundments are designed to meet the APP program's stringent Best Available Demonstrated Control Technology (BADCT) requirements. The purpose of BADCT is to employ engineering controls, processes, operating methods or other alternatives, including site specific characteristics, to reduce the potential discharge of pollutants to the greatest degree achievable.

Additionally, AEPCO currently exceeds federal CCR beneficial use provisions by selling 90%+ of its fly ash to a third party owned by the Salt River Pima-Maricopa Indian Community. By doing so, AEPCO reduces the amount of CCR that is disposed in its regulated impoundments. AEPCO supports this safe alternative use of coal ash.

Federal Polices to Further Support CCR Management

EPA Legacy CCR Rule

In 2015, EPA finalized federal CCR regulations that established minimum federal standards for the disposal of CCR generated from coal-fired power plants. The power industry has been working in good faith to comply with the 2015 rule through closure, groundwater monitoring, and corrective action to safely manage CCR.

However, last year EPA finalized the Legacy Coal Combustion Residuals Surface Impoundments and CCR Management Unit Rule (Legacy Rule or Rule), which established regulatory requirements for two new classes of CCR units, inactive CCR surface impoundments at inactive power plants and accumulations of CCR directly placed on the land at any time (CCRMUs). For both new categories, EPA's approach fails to consider the diverse characteristics, sizes, and relative risk of particular sites. It also upends the long-recognized beneficial reuse of CCR. Instead, it adopts a one-size-fits-all approach that is not supported by EPA's risk analyses and will result in massive costs to the utility industry. These costs will eventually be borne by rural

end users in cooperative service areas. EPA's approach and the associated costs and regulatory requirements will exacerbate challenges to the reliable delivery of electricity.

For example, under the Legacy Rule, CCR regulation extends to CCR units that were responsibly closed decades ago under a state permit, and which meet the federal protectiveness standards under Resource Conservation and Recovery Act (RCRA), because they do not pose an unacceptable risk to human health or the environment. Such units would nonetheless be required to reclose under the new Legacy Rule's requirements at significant cost to electric co-op consumer-members. Such reclosing would entail a complete reevaluation and possible alternative remediation and closure requirements. These changes come with significant costs but do not necessarily provide additional environmental protections. The Legacy Rule also expands CCR regulation to certain areas located under existing critical energy infrastructure such as generating units, cooling towers, and substations. Closure of these areas would require serious disruptions to critical components of power plant's energy infrastructure, which would only further exacerbate pressures on grid reliability and electricity affordability.

AEPCO has units that have been closed-in-place (Closed Impoundments), but which now fall under the current definition of CCRMU. Such Closed Impoundments were closed via state approval of a closure plan and oversight of ADEQ under the APP program. They have an earthen cap that is designed to prevent pooling of water, making the risk of release of CCR minimal. Regardless, the Closed Impoundments continue to be under post-closure oversight of ADEQ and are subject to regular inspections, monitoring, and reporting requirements. There is no need to re-close or duplicate the solid waste management efforts of ADEQ. EPA's CCRMU risk analysis does not consider CCR disposal areas like APP-regulated CCRMUs and exceeds EPA's regulatory authority under RCRA. AEPCO urges EPA to perform a comprehensive risk assessment of CCRMUs. That assessment should be reliable and should include the benefits of state programs on the management and disposal of CCR.

We commend EPA's decision this spring to reconsider the harmful CCR Legacy Rule and hope to work with the Administration to develop workable and cost-effective revisions to the Rule. In the meantime, we support an immediate delay of the Legacy Rule compliance deadlines. AEPCO is already outlaying significant expenses for compliance with Legacy Rule deadlines. As a cost-sensitive, smaller cooperative, regulatory certainty from EPA is critical during the reconsideration process.

Federal and State CCR Permit Programs

Federal CCR regulations were originally promulgated under the Solid Waste Disposal Act because CCR is a solid waste and not a hazardous waste. Congress gave states the primary authority to regulate the broader category of "solid waste management practices." But in almost all states, including Arizona, federal CCR regulations are currently being "self-implemented" without the benefit of state or federal permits and a regulatory infrastructure to work with regulators to demonstrate compliance. This self-implementing framework has proven unworkable for several reasons. Facilities are unable to work with state or federal regulators to tailor regulatory requirements to site-specific conditions. Instead, utilities must implement the CCR Rule without any regulatory guidance or compliance certainty unlike with other federal

environmental programs. Without a permitting program in place, enforcement is presently serving as an ill-fitting substitute for organic collaboration between an agency and a regulated party. Additionally, EPA's evolving stance on federal CCR regulatory requirements has resulted in a lack of clarity surrounding CCR compliance requirements, forcing facilities to make major operational decisions under immense regulatory uncertainty.

For instance, EPA has challenged site-specific decisions such as sufficiency of a groundwater monitoring network, the validity of statistical approaches chosen, and the technical bases of alternate source demonstrations, which are used to show that a statistically significant level of an identified constituent is from a source other than the monitored CCR unit. These issues are not enforcement issues, but rather should be the basis of discussion and collaboration between a utility and regulator through a permitting program.

To address this issue, Congress in 2016 passed the Water Infrastructure Improvements to the Nation Act, which amended RCRA to allow states to establish CCR permit programs for EPA approval and to require EPA to implement a federal CCR permit program subject to the availability of appropriations. Congress has appropriated funding to implement a federal CCR permit program every year since 2018. Despite this, no federal CCR permit program has been finalized, and only a handful of states have EPA-approved state CCR permit programs, although additional states have submitted applications or have expressed interest in doing so, including Arizona. Establishing state and federal CCR permit programs will allow for a more effective way to regulate CCR units by tailoring requirements based on an individual site's characteristics, size, and relative risk.

We appreciate EPA's recent proposal to approve North Dakota's CCR permit program application, and Arizona is working with EPA in advance of submitting a CCR permitting program proposal. We urge EPA to work with states and quickly review all permit program applications it receives in the spirit of cooperative federalism. Additionally, we urge Congress to continue to appropriate funds for the development of site-specific and risk-based federal and state CCR programs to support electric co-ops as they comply in good faith with federal CCR regulations.

Conclusion

As the electricity demands of our nation continue to grow, electric co-ops are committed to meeting increasing demand while continuing to provide reliable and affordable electricity to their consumer-members and protecting the environment within their communities.

Smart energy policy is critical to meeting this goal. We look forward to working with this Subcommittee and the Administration to address federal CCR regulation to allow co-ops to better serve their consumer-members.

Mr. GRIFFITH. Thank you.
Mr. Glatt, you are now recognized.

STATEMENT OF L. DAVID GLATT

Mr. GLATT. Good morning, Chairman Griffith and members of the Subcommittee on Environment.

My name is Dave Glatt. I am director of the North Dakota Department of Environmental Quality and have been with the Department for just over 42 years. Thank you for the opportunity to testify today on this important issue.

What I would like to do today is my testimony will highlight North Dakota's experience with the regulation of beneficial use of coal ash and the Federal coal combustion residuals program review process. In addition, I will touch on the more recent interest in rare earth mineral extraction from coal deposits and coal ash.

North Dakota is known for its agriculture and energy dominance. It is home to abundant natural resources of lignite coal deposits and significant oil and gas reserves.

Since the 1980s, North Dakota has regulated coal ash at several mine mouth electric generation facilities, ensuring the protection of public and environmental health through comprehensive rules, which identify appropriate landfill locations through a multi-interstate agency review process, require groundwater monitoring and routine reporting, restrict permit lengths to a maximum of 10 years, require 30-year postclosure monitoring and financial assurance, require landfill cells to be engineered to ensure slope stability, liner suitability, and cap integrity, require public review and participation in the permit process. The State rules have, for over four decades, proven to be effective in the protection of the environment and public health.

With the proven success of North Dakota's CCR program, there was the belief that seeking Federal program approval would have its challenges but overall would be a straightforward process. Unfortunately, our assessment could not have been more wrong, as the State has spent over 5 years seeking Federal primacy approval, with the process ongoing.

Since the State initiated its quest for CCR Federal program approval pre-2020, there have been over three different draft submittals, a change in North Dakota law in reference to a groundwater definition, and several rounds of last final comments with no defined outcome.

The Federal review and approval process can be characterized as frustrating, unnecessarily long, time-consuming, and at times, not rooted in sound science and the law.

Federal comments relating to program implementation were provided without visiting the North Dakota facilities, resulting in some comments being seen as inappropriate based on existing site conditions, such as recommending placing monitoring wells that would have been in the middle of a haul road, on severe side slopes, or that would have pierced the landfill liner. We believe site-specific knowledge of local climate, geology, facility design and operations is critical in the proper regulation of facilities.

To improve the review and approval process and incentivize States to seek Federal program approval, we suggest the following:

visit the State seeking Federal program approval to get an understanding of the regulatory and physical State-specific conditions; respect and acknowledge State expertise; comply with law and rigid timelines; avoid agenda-driven processes by following applicable science and the law; have clearly defined outcomes and goals; acknowledge State sovereignty; pursue a doctrine of cooperative Federalism.

In addition to the North Dakota history of the regulation of handling storage and disposal of coal ash, we regulate the beneficial use of certain coal ash materials. We believe coal ash can exhibit certain beneficial use characteristics and is not appropriate to regulate as a hazardous waste.

State law outlines the legislative intent that coal combustion residuals can be beneficially used in concrete, construction applications, and other innovative uses.

To ensure coal ash is beneficially used and does not impart undue public or environmental risk, we require periodic laboratory testing of all coal ashes relating to leachability of trace metals and other physical characteristics, including radioactive characteristics.

Product testing and approval are required before beneficial use application and required not less than every 5 years, or sooner if feed source or EDU environmental controls change.

Fly ash can be used for a lot of beneficial uses, which you described today, such as concrete admixture. We use it for abandoned mines. And some of the ash has actually been used for sand traps at golf courses.

In the United States, there is a growing concern regarding our dependence on imported rare earth minerals, especially those from our foreign adversaries. These rare earth minerals are critical to modern technology. They are needed for technological advancements, manufacturing, and, most importantly, national defense and security.

North Dakota is ready to step up to meet this growing demand. We are exploring the potential of coal and coal ash products. In our most recent legislative session, we passed a bill that would allow coal companies to further explore mining these rare earth minerals in the United States.

In our State, we have a fantastic team of researchers from State agencies to our universities, and the Energy and Environmental Research Center at the University of North Dakota in Grand Forks, looking at the potential of North Dakota lignite to supply marketable quantities of 14 rare earth and other critical minerals.

We know rare earth elements are found in CCR and coal——

Mr. GRIFFITH. Mr. Glatt, if you could conclude your comments.

Mr. GLATT. Yes. One sentence.

Mr. GRIFFITH. Thank you.

Mr. GLATT. We have potential to redefine traditional uses of coal towards meeting the U.S. demand for these elements, and we are in the process of researching and improving our recovery potential.

Thank you.

[The prepared statement of Mr. Glatt follows:]

Testimony before

Congress of the United States

House of Representatives

Committee on Energy and Commerce

Subcommittee on Environment

June 26, 2025

Chairman Griffth and members of the Subcommittee on Environment, my name is L. David Glatt, P.E., Director of the North Dakota Department of Environmental Quality. Thank you for the invitation to be here and to provide testimony on the topic, “A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules and Beneficial Use Opportunities for Coal Ash.”

My testimony today will highlight North Dakota’s experience with the regulation of beneficial use of coal ash, and the federal coal combustion residuals (CCR) program review process. In addition, I will touch on the more recent interest in Rare Earth Metal extraction from coal deposits and coal ash.

North Dakota Coal Ash Regulation History

North Dakota is known for its agriculture and energy dominance. It is home to abundant natural resources of lignite coal deposits and significant oil and gas reserves. Since the

1980s, North Dakota has regulated coal ash at several mine-mouth electric generation facilities ensuring the protection of public and environmental health through comprehensive rules which:

- Identify appropriate landfill locations through a multi-interstate agency review process.
- Require groundwater monitoring and routine reporting.
- Restrict permit lengths to a maximum of 10 years.
- Require 30-year post-closure monitoring and financial assurance.
- Require landfill cells to be engineered to ensure slope stability, liner suitability and cap integrity.
- Require a public review and participation in the permit process.

The state rules have, for over four decades, proven to be effective in the protection of the environment and public health.

Federal Review and "Approval" Process

With the proven success of North Dakota's CCR program, there was the belief that seeking federal program approval would have its challenges but overall would be a straightforward process. Unfortunately, our assessment could not have been more wrong, as the state has spent over five years seeking federal primacy approval with the process ongoing. Since the state initiated its quest for CCR federal program approval pre- 2020, there have been over three different program draft submittals, a change in North Dakota law in reference to a groundwater definition, and several rounds of "last final comments" with no defined outcome.

The federal review and approval process can be characterized as frustrating, unnecessarily long, time consuming, and at times not rooted in sound science and the law. Federal comments relating to program implementation were provided without visiting the North Dakota facilities, resulting in some comments being seen as inappropriate based on existing site conditions (i.e., recommending placing monitoring wells that would have been in the middle of a haul road, on severe side slopes or that would have pierced the landfill liner). We believe site-specific knowledge of local climate, geology, facility design, and operations is critical in the proper regulation of facilities.

To improve the review and approval process and incentivize states to seek federal program approval, we suggest the following:

- Visit the state seeking federal program approval to get an understanding of the regulatory and physical state-specific conditions.
- Respect and acknowledge state expertise.
- Comply with the law and rigid timelines. Avoid agenda-driven processes by following applicable science and the law.
- Have clearly defined outcomes and goals.
- Acknowledge state sovereignty.
- Pursue a doctrine of cooperative federalism.

Coal Ash Beneficial Use

In addition to the North Dakota history of the regulation of handling, storage, and disposal of coal ash, we regulate the beneficial use of certain coal ash materials. We believe coal ash can exhibit certain beneficial use characteristics, and it is not appropriate to regulate

as a hazardous waste. State law (NDCC 23.1-08-04) outlines the legislative intent that coal combustion residuals can be beneficially used in concrete, construction applications, and other innovative uses. To ensure coal ash is beneficially used and does not impart undue public or environmental risks, we require periodic laboratory testing of all coal ashes relating to leachability of trace metals and other physical characteristics. Product testing and approval are required before beneficial use application and required not less than every 5 years or sooner if feed source or EGU environmental controls change.

Some current use of coal ash for beneficial use are:

- Fly ash as concrete admixture
- Grouting mixture for Abandoned Mine Land Reclamation
- Soil stabilization
- Waste solidification at approved sites
- Surface mine haul roads in regulated mines
- Coal slag as roofing granules, sand blast media, road traction material, and golf course sand traps.

Rare Earth and Critical Minerals

In the United States, there is growing concern regarding our dependence on imported rare earth minerals, especially those from our foreign adversaries. These rare earth minerals are critical to modern technology. They are needed for technological advancements, manufacturing, and most importantly national defense and security.

North Dakota is ready to step up to meet this growing demand. We are exploring the potential of coal and coal ash products. In our most recent legislative session, we passed a bill that would allow coal companies to further explore mining these rare earths here in the United States. In our state, we have a fantastic team of researchers from state agencies to our universities, and the Energy & Environmental Research Center (EERC) at the University of North Dakota in Grand Forks, looking at the potential for North Dakota lignite to supply marketable quantities of 14 rare earth and other critical minerals. We know rare earth elements are found in CCR, and coal seam margins have the potential to redefine traditional uses of coal toward meeting the U.S. demand for these elements. North Dakota is on the path to refine our knowledge of available resources, extraction technologies, and potential markets to continue to meet the growing demand.

This concludes my testimony, and I will stand for questions.

Mr. GRIFFITH. Ms. Evans, you are now recognized for your 5-minute opening statement.

STATEMENT OF LISA EVANS

Ms. EVANS. Thank you. Chairman and members of the subcommittee, thank you for this opportunity to——

Mr. GRIFFITH. Mic.

We are going to restart your time too.

Ms. EVANS. Chairman and members of the subcommittee, thank you for this opportunity to address the threats from coal ash to health, environment, and the economy.

I am Lisa Evans, senior counsel for Earthjustice, the Nation's largest nonprofit environmental law firm. I worked previously as an assistant regional counsel for U.S. EPA enforcing hazardous waste laws.

My fellow panelists would have you ignore the hazardous constituents in coal ash. They don't want to talk about the hundreds of leaking toxic dumps created by the coal power industry, but ignoring this is to allow the utility industry to continue to pollute our water.

As Ranking Members Tonko and Pallone mentioned—but it bears repeating—91 percent of U.S. coal plants are today contaminating groundwater with hazardous pollutants above Federal safe standards. This is based on industry data from nearly 300 coal plants in 43 States.

Coal ash contains hazardous substances, including arsenic, chromium, cobalt, lead, lithium, radium. and more. These cause a long list of serious health problems, many types of cancer, heart and thyroid disease, respiratory problems, damage to the brain and reproductive organs.

Coal ash can harm every major organ in the human body. Coal ash is also one of the largest sources of industrial toxic waste. U.S. coal plants produce nearly 70 million tons each year, enough to fill train cars stretching round trip from Washington, DC, to Los Angeles.

We can't recycle our way out of the toxic mess created by the coal industry. While we support the reuse of ash into products like concrete and wallboard, where the waste is encapsulated and unable to leach toxic chemicals, these products use less than 40 percent of the coal ash generated each year. Reuse can't solve the problems posed by the millions of tons of toxic waste sitting currently in leaking ash dumps.

The American Coal Ash Association claims that coal ash is just like dirt, but I don't want this arsenic-laden, radioactive dirt anywhere near my children or grandchildren, and I don't think you do either.

The utility and coal ash recycling industries don't want EPA rules to address practices given the misleading label of, quote, "beneficial use." But what is beneficial use?

It is not what is happening in Michigan City, Indiana, where NIPSCO dumped 2 million tons of coal ash directly into Lake Michigan to make more land for its power plant. The people of Michigan City do not benefit from the toxic mess held back by aging steel pilings. The structural fill is leaking toxic chemicals

into their drinking water source and following a stream where locals fish.

Beneficial use also did not occur in Morrisville, North Carolina, where a million tons of arsenic-laden, radioactive coal ash from Duke Energy was used as a substitute for soil at the high school, homes, a public park, a daycare center, and roads. Ask some Morrisville teenager whose friends have died of thyroid cancer.

The only people who benefit from so-called beneficial use of coal ash when it is used as a replacement for dirt is the industry, who profits on the backs of the communities left with the toxic mess that has been moved from power plants into people's backyards.

Americans near the almost a thousand regulated coal ash dumps and countless more places where toxic ash was used as soil need your help to ensure that there are strong laws to stop coal plants from polluting our water.

But the utility industry is pushing back to weaken current laws. They told EPA to back off enforcement. In response, the Trump administration promptly abandoned EPA's national enforcement initiative, which made coal ash a priority. Trump's reckless U-turn gives industry a free pass to continue to violate essential safeguards.

The coal industry is demanding the Federal Government outsource its oversight to State coal ash permit programs. In response, the Trump administration is speeding the approval process in coal-friendly States where coal ash programs are less protective than the Federal rule. Once these programs are approved and lax permits are issued, residents will suffer.

The coal industry is calling on EPA also to delay for an indefinite time the cleanup of hundreds of coal ash dumps newly regulated in 2024.

Lastly, the coal industry wants EPA to ignore science, because they don't like what it says about coal ash. Recently, EPA found that coal ash was much more dangerous than previously thought, because of elevated arsenic and radioactivity.

Coal ash pollution is a problem that recycling cannot solve. The solution requires Federal and State regulators and Members of Congress to place public health above polluters' pocketbooks.

Thank you.[1]

Mr. GRIFFITH. The gentlelady yields back.

I now recognize Mr. Adams for his 5-minute opening statement.

STATEMENT OF THOMAS H. ADAMS

Mr. ADAMS. Chairman Griffith, Ranking Member Tonko, and members of the subcommittee, we would like to thank you for organizing a hearing to focus on beneficial use of coal ash. This is a topic that is often overlooked in the heated debates over coal-fueled electricity and coal ash disposal regulations.

My name is Thomas Adams. I am the executive director of the American Coal Ash Association. Our mission is to encourage the beneficial use of coal ash in ways that are environmentally respon-

[1] Ms. Evans' statement has been retained in committee files and is available at https://docs.house.gov/meetings/IF/IF18/20250626/118432/HHRG-119-IF18-Wstate-EvansL-20250626.pdf.

sible, technically appropriate, and promoting more sustainable activities in construction and other uses.

Coal ash beneficial use already constitutes one of America's greatest recycling success stories. Over the past several decades, hundreds of millions of tons of coal ash have been used to construct resilient infrastructure and manufacture more sustainable building materials. In doing so, our Nation has conserved natural resources, reduced energy and water consumption, and significantly reduced greenhouse gas emissions from production of materials coal ash replaces when used in concrete.

My written testimony contains details about coal ash beneficial use trends and steps that can be taken to become even more effective in utilizing this important resource, but please permit me to highlight a few key points.

First of all, utilizing materials that otherwise go to waste is not a new concept. Solid waste regulation is under the Resource Conservation and Recovery Act. Let me repeat that: Resource Conservation and Recovery Act. Beneficial use of materials like coal ash is not an afterthought. It was one of the central goals established when it enacted our Nation's guide for environmental regulations when Congress acted on this in the mid-'70s.

Second, the reasons for using coal ash go beyond the apparent environmental benefits of building fewer landfills, conserving natural resources, and reducing greenhouse gas emissions by millions of tons per year.

Improved product performance was the driving factor behind the development of an industry that today beneficially uses nearly 70 percent of the Nation's new ash production and has begun harvesting millions of tons of previously disposed ash for the same purposes.

It is a fact that concrete made with coal ash is stronger and more durable than concrete made with cement alone, all while significantly reducing concrete's carbon footprint.

Harvesting previously disposed coal ash is a rapidly growing activity, accounting for approximately 4 million tons of utilization in 2023, with numerous additional harvesting projects coming online since that time and more coming in the next 2 years.

With more than 2 billion tons of previously disposed ash in the United States, this represents an abundant and secure domestic resource. Those who would argue against harvesting coal ash are for continuing to rely on imported cementitious materials and exporting the environmental impacts of manufacturing those materials when imported.

This is probably a good place to emphasize an important point: Coal ash is not toxic. Coal ash contains only trace amounts of metals of potential concern. A 2012 study by the U.S. Geological Survey data concluded that metals are found in coal ash at levels similar to levels in ordinary soils and rock throughout the United States. Coal ash is no more toxic than the materials it replaces when used in manufacturing products.

Furthermore, EPA itself has validated the safety of coal ash beneficial use in risk evaluations of major uses, including fly ash used in concrete and synthetic gypsum used in wallboard, as well as synthetic gypsum used in agriculture. ACAA has utilized EPA's

risk evaluation methodology to validate the safety of ash used in controlled low-strength materials, also known as flowable fill.

Finally, the potential opportunity to simultaneously extract rare earth elements from coal ash resource provides additional incentive for regulators and other policymakers to return to the resource conservation and recovery mindset that was present at the outset of the Nation's solid waste regulatory structure.

Careful development of these extraction technologies could reduce America's dependence on foreign supply of critical materials while maintaining the ability to use the bulk of the resource for traditional beneficial uses like cement and concrete.

ACAA encourages policymakers at all levels to identify and remove regulatory barriers and to take a more active role in encouraging coal ash beneficial use.

For those who are concerned about issues related to coal ash disposal, may I offer one suggestion: The best solution to coal ash disposal problems is to quit throwing it away.

Thank you.

[The prepared statement of Mr. Adams follows:]

A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash

U.S. House Committee on Energy & Commerce
Environment Subcommittee
June 26, 2025

Testimony of:
Thomas H. Adams, Executive Director
American Coal Ash Association

Introduction and Summary

Beneficial use is anticipated in the very name of the Resource **Conservation and Recovery** Act that is the basis for coal ash regulation.

In beneficial use settings, coal ash is a valuable mineral resource that conserves natural resources, saves energy, reduces greenhouse gas emissions, and in many cases improves durability and performance of finished products. Millions of tons of coal ash are currently beneficially used annually in proven applications featuring robust quality control and adhering to consensus engineering standards.

As coal-fueled power plants close and the supply of new ash declines, the industry has begun harvesting previously disposed ash – with an estimated 4 million tons of material harvested for use in 2023 and numerous new harvesting operations currently under development. The more than 2 billion tons stockpile of previously disposed coal ash in the United States should be viewed not as an environmental liability, but as a secure domestic resource that can be utilized using long-proven technologies to produce more sustainable infrastructure and building materials.

The potential opportunity to simultaneously extract strategic rare earth elements from this resource provides additional incentive for regulators and other policymakers to return to the Resource **Conservation and Recovery** mindset that was present at the outset of the nation's solid waste regulatory structure. ACAA encourages policymakers at all levels to identify and remove regulatory barriers and to take a more active role in encouraging coal ash beneficial use.

About ACAA

The American Coal Ash Association (“ACAA”) was established in 1968 as a trade organization devoted to beneficial use of the materials created when coal is burned to generate electricity. Our members comprise the world's foremost experts on coal ash (fly ash and bottom ash), boiler slag, flue gas desulfurization (“FGD”) gypsum (aka "synthetic gypsum”), and other FGD materials captured by emissions controls. ACAA's mission is to advance the management and use of these coal combustion products (“CCP”) in ways that are: environmentally responsible, technically sound, commercially competitive, and supportive of a sustainable global community.

A note on terminology: Coal Combustion Residuals (“CCR”) is a term adopted by the U.S. Environmental Protection Agency (“EPA”) in its 2015 Final Rule regulating disposal of the solid materials produced by coal combustion for the generation of electricity. Coal Combustion Products is a term (also previously used by EPA) referring to the same family of materials when utilized in a beneficial use setting. Popular media often refer to the same family of materials generically as “coal ash.” These comments use the term “CCR” to refer to the materials in a disposal setting and “CCP” or “coal ash” to refer to the same materials in a beneficial use setting.

Coal Ash Beneficial Use Overview

Coal remains the fuel source for 20 percent of electricity generation in America and produces large volumes of solid coal combustion products – primarily ash and synthetic gypsum from emissions control devices.

There are many good reasons to view coal combustion products as a resource, rather than a waste. Recycling them conserves natural resources and saves energy. In many cases, products made with CCP perform better than products made without it. For instance, coal fly ash makes concrete stronger and more durable. It also reduces the need to manufacture cement, resulting in significant reductions in greenhouse gas emissions – about 12 million tons in 2023 alone.

Major uses of coal combustion products include concrete, gypsum wallboard, blasting grit, roofing granules, and a variety of geotechnical and agricultural applications. Numerous research efforts are also under way exploring the potential for extracting rare earth elements from the abundant coal ash resource.

The use of coal ash in concrete, in particular, is a practice of strategic importance. Builders of roads, bridges, and other concrete structures routinely utilize coal ash to improve the workability of concrete as it is being placed and to improve the long-term durability of the finished material. In a 2011 study[1], the American Road and Transportation Builders Association concluded that use of coal ash in concrete saves $5.2 billion per year in federally funded road and bridge construction costs, chiefly because of the increased lifespan of structures using the material.

For additional background on the types of coal ash and their beneficial uses, see ACAA's brochure entitled: "Beneficial Use of Coal Combustion Products – An American Recycling Success Story."[2]

Coal Ash Beneficial Use Trends

ACAA has conducted a survey quantifying the production and use of coal combustion products in the United States each year since 1968.[3] Data is compiled by directly surveying electric utilities and utilizing additional data produced by the U.S. Energy Information Administration. The survey's results have been widely utilized by federal agencies including the U.S. Environmental Protection Agency and U.S. Geological Survey.

Production and Use Survey Results

Survey results from 2023 – the most recent year available – indicate that 69 percent of the coal ash produced during that year was beneficially used – increasing from 62 percent in 2022 and marking the ninth consecutive year that more than half of the coal ash produced in the United States was beneficially used rather than disposed.

Notably, use of coal fly ash in concrete increased from 10.9 million tons in 2022 to 11.9 million tons in 2023. Concrete producers and consumers indicated a desire to use more fly ash, but several regional markets continued to be affected by shifting supply dynamics associated with closures of coal-fueled power plants. Use of all coal combustion products in cement production increased from 6 million tons in 2022 to 6.8 million tons in 2023.

More detail on 2023 CCP production and use is available on the ACAA website.[4]

"Harvesting" Activities Growing Rapidly

---

[1] American Road and Transportation Builders Association Transportation Development Foundation, "The Economic Impacts of Prohibiting Coal Fly Ash Use in Transportation Infrastructure Construction," September 2011, https://acaa-usa.org/wp-content/uploads/2021/05/2011FlyAshStudy_lowres-FINAL.pdf
[2] 25-ACAA-Brochure_5-20v2.pdf
[3] Production & Use Reports – ACAA
[4] News-Release-Coal-Ash-Production-and-Use-2023.pdf

In addition to this "fresh" ash production and use, a rapidly growing practice of "harvesting" previously disposed ash has begun to supply significant volumes of material to beneficial use markets. ACAA estimates more than 4 million tons of previously disposed ash was utilized in a variety of applications in 2023, including coal ash pond closure activities, concrete products, cement kiln raw feed, and gypsum panel manufacturing.

Harvested ash utilization represents growth in coal ash beneficial use above and beyond the increasing volumes of ash recycled from current power plant operations. The rapidly increasing utilization of harvested CCP shows that beneficial use markets are adapting to the decline in coal-fueled electricity generation in the United States. New logistics and technology strategies are being deployed to ensure these valuable resources remain available for safe and productive use. Conservative estimates of the volume of previously disposed coal ash conclude that more than 2 billion tons of material are available – making coal ash an abundant domestic natural resource.

The rapid expansion of coal ash harvesting is being supported by adoption of engineering standards for the activity. The consensus standards organization ASTM International in 2019 published a guide[5] for harvesting activities and in 2023 published a guide[6] for characterization of harvested materials. Harvesting activities utilizing thermal beneficiation are now in commercial operation in South Carolina and at three facilities in North Carolina. Harvesting activities that require less capital-intensive processing of the CCP are now in commercial operation in Pennsylvania, Virginia, Kentucky, Florida, Arkansas, Arizona, New Mexico, and Louisiana. Numerous additional harvesting projects are under development nationwide.

These harvesting operations require significant capital investment for material recovery, processing, and product distribution to end markets. Current coal ash disposal regulations requiring closure of ash facilities on aggressive timelines constitute a barrier to some of these investments. A regulatory pathway encouraging "closure by removal **for** beneficial use" is a concept for consideration that would allow the United States to maximize the potential for its abundant, domestic coal ash resource while simultaneously removing large volumes of material from the disposal setting permanently.

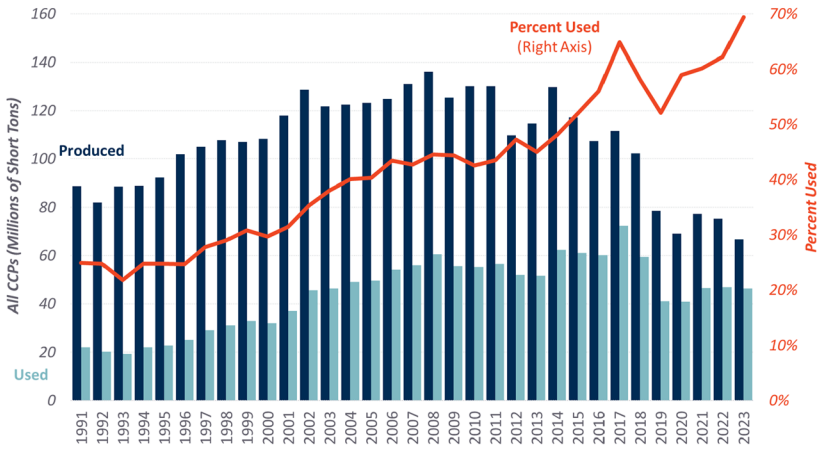
Charts depicting production and use trends for all types of CCPs and for coal fly ash specifically are reproduced below. (These charts do not include utilization of additional volumes from harvesting activities.) Also included below is a map showing locations of ash harvesting operations that are active and currently under development.

---

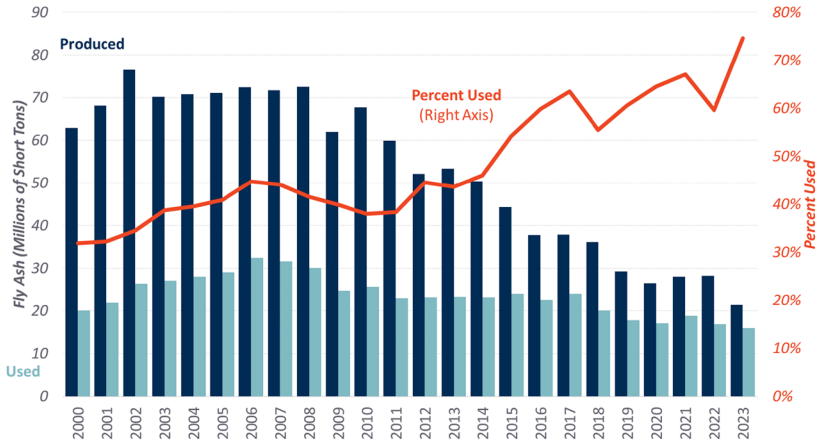
[5] ASTM E3183 Standard Guide for Harvesting Coal Combustion Products Stored in Active and Inactive Storage Areas for Beneficial Use

[6] ASTM E3355 Standard Guide for Characterization of Coal Combustion Products (CCPs) in Storage Area(s) for Beneficial Use

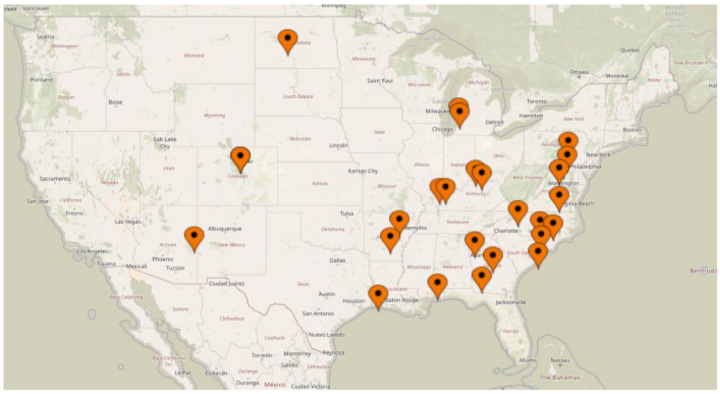
All CCPs Production and Use with Percent Used



Fly Ash – Production and Use



Coal Ash Harvesting Operations (Active and Under Development)



Federal Policy Impact on Coal Ash Beneficial Use – Past and Present

CCP beneficial use is anticipated in the very name of the Resource **Conservation and Recovery** Act that is the basis for coal ash regulation. In beneficial use settings, CCP is a valuable mineral resource that conserves natural resources, saves energy, reduces greenhouse gas emissions, and in many cases improves durability and performance of finished products.

Although CCR beneficial use, as that term is defined in 40 CFR 257.53, is exempt from federal regulation, CCR disposal regulations can be instrumental in either encouraging or creating barriers to beneficial use.

Disposal Regulations Affecting Exempt Beneficial Use

Decades of EPA activities under both Democratic and Republican administrations – including Reports to Congress in 1988 and 1999; Regulatory Determinations in 1993 and 2000; and the 2015 CCR Final Rule – all concluded that beneficial use should be exempt from regulation. But even though beneficial use itself is exempt from regulation, CCR disposal regulations (and regulatory uncertainty related to CCR disposal regulations) have significant impacts on beneficial use activities.

For example, the volume of CCP utilization stalled between 2009 and 2013 as EPA pursued a protracted rulemaking process that posed the threat of a “hazardous waste” designation

for CCRs that are disposed. Even though beneficial use was exempt from the proposed regulation, ash producers, specifiers, and users restricted coal ash use in light of the regulatory uncertainty and often negative publicity surrounding EPA's activities. In 2014, EPA began signaling that the "hazardous waste" designation proposal was off the table and in December 2014 finalized CCR disposal regulations under the non-hazardous section of federal law. Ash utilization began to increase again once regulatory certainty was restored. Analysis of CCP production and use trends by the American Road and Transportation Builders Association[7] demonstrated that the 2009-2013 performance was not linked to an economic downturn inasmuch as every previous recession saw CCP utilization increase as users sought out more economical materials.

According to ACAA Production and Use Surveys, CCP utilization remained below 2008 levels for the five consecutive years of regulatory uncertainty concluding in 2013. If those five years had simply remained equal with 2008's utilization, 26.4 million tons less coal ash would have been disposed in landfills and impoundments.

Previous Federal Actions Supporting Beneficial Use

EPA initiatives can also create positive impacts on CCP beneficial use. For instance, a program led by EPA was in place during the most rapid expansion of coal combustion products beneficial use in history. The Coal Combustion Products Partnership (C2P2 program) was a cooperative effort between EPA, American Coal Ash Association, Utility Solid Waste Activities Group, U.S. Department of Energy, Federal Highway Administration, Electric Power Research Institute, and U.S. Department of Agriculture Agricultural Research Service to encourage beneficial use of CCP as an environmentally preferable alternative to disposal. The initiative included a challenge program, various barrier breaking activities, and development of coal combustion products utilization workshops.

In 2000, when EPA issued a Final Regulatory Determination that CCP should be regulated under "non-hazardous" RCRA Subtitle D and subsequently initiated the C2P2 program, beneficial use volume was 32.1 million tons. Just eight years later, beneficial use volume had nearly doubled to 60.6 million tons. However, EPA abruptly terminated this successful C2P2 program after it initiated the CCR disposal rulemaking that concluded in 2015. Beneficial use volume of fresh ash produced by power plants in 2023 had declined to 46.3 million tons.

[7] American Road and Transportation Builders Association, "Production and Use of Coal Combustion Products in the U.S. – Historical Market Analysis, May 2015, https://acaa-usa.org/wp-content/uploads/free-publications/ARTBA-final-historical.compressed.pdf

EPA Has an Obligation to Encourage Beneficial Use

It is important to remember that EPA's CCR disposal regulations are under the authority of the Resource **Conservation and Recovery** Act. In its findings establishing the Act, Congress stated:

> "The Congress finds with respect to materials, that— (1) millions of tons of recoverable material which could be used are needlessly buried each year; (2) methods are available to separate usable materials from solid waste; and (3) the recovery and conservation of such materials can reduce the dependence of the United States on foreign resources and reduce the deficit in its balance of payments."[8]

Furthermore, Congress stated specific objectives for encouraging materials recovery and reuse throughout Section 1003 of the Solid Waste Disposal Act.

The beneficial use of CCP is fully integrated in many sectors of the U.S. economy, including natural resources, energy, transportation, agriculture, and manufacturing settings. Beneficial use of CCP is a key component in improving the sustainability and economic productivity of these industries. If it is EPA's objective to use environmental policy to encourage sustainability and economic productivity, then it cannot ignore the impacts on a sector that accounts for the beneficial use of more than half of a large resource base, even if the primary focus of a regulation is disposal.

The original rulemaking docket for EPA's 2015 CCR Final Rule contains numerous statements concerning beneficial use by international entities, as well as statements by professional standards-setting organizations whose standards are globally adopted. These statements make it clear that EPA's decisions on CCR disposal regulations affect beneficial use worldwide.

A Voluminous Record Supports Beneficial Use as a Preferred Management Alternative

In its 2015 Final Rule for CCR disposal, EPA expressly elected to preserve the regulatory exemption for beneficial use, stating:

> "As EPA stated in the May 2000 Regulatory Determination, 'In the [Report to Congress], we were not able to identify damage cases associated with these types of beneficial uses, nor do we now believe that these uses of coal combustion wastes present a significant risk to human health and the environment. While some

[8] Solid Waste Disposal Act, Section 1002 (c)

> commenters disagreed with our findings, no data or other support for the commenters' position was provided, nor was any information provided to show risk or damage associated with agricultural use. Therefore, we conclude that none of the beneficial uses of coal combustion wastes listed above pose risks of concern.' (See 65 FR 32230.) EPA noted that since the original Regulatory Determination, the Agency had found no data or other information to indicate that existing efforts of states, EPA, and other federal agencies had been inadequate to address the environmental issues associated with the beneficial use of CCR that were originally identified in the Regulatory Determination."

For decades EPA has expressly supported CCP beneficial use.

> "EPA encourages the beneficial use of coal ash in an appropriate and protective manner, because this practice can produce positive environmental, economic, and product benefits such as:
>
> - reduced use of virgin resources,
> - lower greenhouse gas emissions,
> - reduced cost of coal ash disposal, and
> - improved strength and durability of materials."[9]

CCP Use Is a Key Component of Sustainable Materials Management

EPA advocates that:

> "Sustainable materials management (SMM) is a systemic approach to using and reusing materials more productively over their entire life cycles. It represents a change in how our society thinks about the use of natural resources and environmental protection. By looking at a product's entire life cycle, we can find new opportunities to reduce environmental impacts, conserve resources and reduce costs."[10]

Beneficial use of CCP has been well-established for decades, with use rates exceeding 50 percent of production for the past nine years. Use of recovered materials such as CCP is consistent with longstanding EPA policy that:

> "The beneficial use of industrial non-hazardous secondary materials (secondary materials) is a key part of EPA's Sustainable Materials Management (SMM) effort.

[9] https://www.epa.gov/coalash/coal-ash-reuse
[10] https://www.epa.gov/smm

> The appropriate beneficial use of secondary materials can advance the goals of EPA's SMM program, which emphasizes a materials management approach that aims to reduce impacts to human health and the environment associated with materials over their entire life cycle (e.g., extraction, manufacture, distribution, use, disposal). Through SMM, EPA is helping change the way our society protects the environment and conserves resources for future generations."[11]

Current Regulatory Challenges

Since EPA's abrupt termination of the Coal Combustion Products Partnership in 2010, the Agency has focused almost exclusively on development of coal ash disposal regulations with little apparent regard for the beneficial use impacts of those regulations and no active support for beneficial use activities. This posture was adopted in a policy environment characterized by relentless publicity by environmental non-governmental organizations ("ENGOs") touting the purported dangers of "toxic coal ash."

To be clear, coal ash is not "toxic." Coal ash contains only trace amounts of metals of potential concern. A 2012 study based on U.S. Geological Survey data[12] concluded that metals are found in coal ash at levels similar to the levels in ordinary soils. Millions of tons of coal ash are safely recycled every year into construction materials like concrete and wallboard. In truth, coal ash is no more "toxic" than the materials it replaces when used in these products.

Furthermore, EPA itself has validated the safety of coal ash beneficial use in risk evaluations of major uses including fly ash used in concrete and synthetic gypsum used in wallboard[13], as well as synthetic gypsum used in agriculture[14]. ACAA has also utilized EPA's risk evaluation methodology to validate the safety of ash use in controlled low-strength material (aka "flowable fill[15].")

Nevertheless, EPA's coal ash disposal regulations enacted in 2015 and 2024 have memorialized new and poorly defined terms that erect new barriers to CCP beneficial use.

2015 CCR Rule and the Definition of Beneficial Use

In establishing the regulatory exemption for beneficial use contained in the 2015 CCR Rule, EPA created a new four-part definition of what constitutes beneficial use. That definition

---

[11] https://www.epa.gov/smm/sustainable-management-industrial-non-hazardous-secondary-materials
[12] https://acaa-usa.org/wp-content/uploads/free-publications/ACAA_CoalAshMaterialSafety_June2012.pdf
[13] https://acaa-usa.org/wp-content/uploads/2023/04/ccr_bu_eval.pdf
[14] acaa-usa.org/wp-content/uploads/2023/04/FGD_Ben_Use_Eval_with_Appendices_March_2023_508.pdf
[15] https://acaa-usa.org/wp-content/uploads/2021/03/CLSM-Evaluationpdf.pdf

contained a mathematical error that EPA refused to correct, which led to the U.S. Circuit Court for the District of Columbia remanding the issue to EPA for further rulemaking. EPA in 2021 made one attempt to propose an alternative beneficial use definition that was roundly criticized by all stakeholders, after which EPA moved the issue to its "Long-Term Actions" list, where it remains today. For more background on the definition issue, see ACAA's comments in the 2021 rulemaking docket.[16] [17]

The 2015 CCR rule also introduced new terminology characterizing coal ash beneficial uses as either "encapsulated" or "unencapsulated." This has served as fodder for the aforementioned ENGOs to characterize "unencapsulated" uses as dangerous despite decades of experience without damage cases and the presence of robust consensus standards defining best practices for these important beneficial use activities.[18] [19] [20]

2024 "Legacy" Rule and CCR Management Units

EPA's most recent CCR regulation – the 2024 "Legacy" Rule – introduced new terminology for CCR Management Units ("CCRMU"). In proposing the rule that was eventually finalized, EPA itself acknowledged its CCRMU definition is "broad." In fact, it may sweep under regulation a host of activities including structural fills, storage piles, subbase for plant access roads, use as foundation for power plant structure, and use as a sub-base below railways and spurs.

This broad expansion of the universe of activities proposed for regulation was undertaken with no factual demonstration of risk to human health or the environment other than a recently revised coal ash risk assessment that was significantly flawed.[21] The agency appeared to assert that any amount of CCR placed anywhere on the ground at any time exceeds the agency's acceptable risk levels under RCRA, even in the face of demonstrated evidence that the area does not pose a risk or was compliant with consensus standards or oversight by state regulatory authorities. For more background on the CCRMU issue, see ACAA's comments in the 2024 rulemaking docket.[22]

Potential Federal Actions to Support Coal Ash Beneficial Use

---

[16] https://www.regulations.gov/comment/EPA-HQ-OLEM-2020-0463-0027
[17] https://www.regulations.gov/comment/EPA-HQ-OLEM-2020-0463-0047
[18] https://acaa-usa.org/wp-content/uploads/2021/07/ASH-2021-1-7-12-21.pdf
[19] https://acaa-usa.org/wp-content/uploads/ash-at-work/ASH02-2019.pdf
[20] https://acaa-usa.org/wp-content/uploads/ash-at-work/ASH01-2020.pdf
[21] https://acaa-usa.org/wp-content/uploads/2024/04/ASH-2024-1_f-web.pdf (See page 18)
[22] https://www.regulations.gov/comment/EPA-HQ-OLEM-2020-0107-0296

EPA has publicly indicated that it intends to reconsider the 2024 "Legacy" Rule, with potential publication of its proposal before the end of 2025. Within that context and any other forthcoming CCR regulatory actions, ACAA will advocate for:

- Reconsideration of the faulty CCR risk assessment utilized to justify the rule.
- Creation of greater regulatory flexibility for "closure by removal for beneficial use."
- Correction of the long-standing error in EPA's definition of coal ash beneficial use.

ACAA also encourages policy makers at all levels to take a more active role in encouraging coal ash beneficial use. The more than 2 billion tons stockpile of previously disposed coal ash in the United States should be viewed not as an environmental liability, but as a secure domestic resource that can be utilized using long-proven technologies to produce more sustainable infrastructure and building materials. The potential opportunity to simultaneously extract strategic rare earth elements from this resource provides additional incentive for regulators and other policymakers to return to the Resource **Conservation and Recovery** mindset that was present at the outset of the nation's solid waste regulatory structure.

XXX

Mr. GRIFFITH. The gentleman yields back.

I thank you all for your testimony. We will now move into the question-and-answer portion of the hearing. And I will begin the questioning and recognize myself for 5 minutes.

Mr. Adams, we heard the comments both from the dais and from other witnesses that coal ash has radioactive elements in it.

Is that predominantly radon?

Mr. ADAMS. Radon is present as are a number of other things. And radon testing is required across this country. In some places, you cannot get a residential mortgage without doing radon testing prior to executing the mortgage. So this is a material that is known, and it is being addressed.

Mr. GRIFFITH. I was going to say it apparently is in a significant portion of my district in the clays and other rock material. And so when I bought my house, the testing was done, and we had to have a radon mitigation unit put into the house. It is fairly simple, but we had to have it put in. It wasn't very expensive, but still. And we are not anywhere near a coal ash pond or a coal-generating facility, but there was the radon.

All right. Let me get to the questions I originally had.

As you know, Mr. Adams, Congress reinforced the coal ash solid waste determination in 2016 by amending the Resource Conservation and Recovery Act, or RCRA, to have States and utilities look at contamination risk and make sure coal ash ponds are structurally safe. I do agree we need to make sure that coal ash ponds don't fail.

Could you explain how the EPA's coal combustion residual rule under the Biden administration didn't take into account the advantages of beneficial use and restricted what types of CCR or coal combustion residual sites are considered harvestable?

Mr. ADAMS. Yes. When the rules were put together, we raised the issue of harvesting as an opportunity to take the materials out of disposal units, landfills, and ponds and put them into beneficial use.

At that point in time, the rule was at review at Office of Management and Budget. And they basically listened to us and said, "We don't have time to really investigate this in this rulemaking for this particular rule." So we raised the issue of harvesting way back when when the rule was being put together, and it was ignored.

Today, we are getting that industry off the ground, and it is proving to be very successful and increasing, and it is removing ash from storage units in several places around the country already—this coming year about 5 million tons, which will grow in the next coming years as well.

Mr. GRIFFITH. I appreciate that.

Ms. Freeark, last year the Biden EPA issued the legacy coal combustion residual rule that was not based on site-specific risk.

If some of those coal ash sites don't pose a significant risk, shouldn't they be evaluated on a risk-based standard under the Resource Conservation and Recovery Act, or RCRA, to understand if the costs are being spent to actually address contamination or potential contamination?

Ms. FREEARK. Thank you for the question. Yes, we agree that, without having the risk-based site-specific conditions, it was a one-size-fits-all approach.

So the sweeping part of the legacy rule was all the new classes of existing impoundments at inactive or active sites just kind of got swept into one class and not evaluated on a site-specific basis, whereas AEPCO has closed-in-place impoundments that were closed under a State-permitted program with postclosure monitoring that would be considered a CCR management unit today under the legacy rule.

So why would you want to reopen something that has already been closed when it met standards for the States?

Mr. GRIFFITH. I appreciate that.

Mr. Glatt, can you explain to me why was coal ash restricted for some other uses in the 2024 rule when in the 2015 regulation EPA specifically mentions how coal ash has beneficial uses and is not—let me repeat: not—classified as hazardous waste?

Mr. GLATT. Mr. Chairman, I struggle with that a lot. Sometimes I wonder where the science is in all of this as we move forward. And at times I felt those decisions were arbitrary, not really looking at the science behind really what the risks were associated with coal ash.

And so I can't tell you why they went that direction other than I do think they ignored some of the science and actual work that was being done in the States on this issue.

Mr. GRIFFITH. Now, can you explain how each site is different and how you would expect to evaluate a coal ash site? And I assume you do that in your State.

Mr. GLATT. Mr. Chairman, yes, we do. You have to look at everything site-specific. North Dakota geology is different from the east part of the State to the west part of the State. North Dakota geology is different than West Virginia geology.

And so you have to look at site-specific conditions and really what the risk is. And then based on that, then you come up with a plan that is protective of the environment and public health. The States need that flexibility.

Mr. GRIFFITH. I appreciate it.

I now yield back, my time being up.

And I recognize the ranking member, Mr. Tonko, for his 5 minutes of questions.

Mr. TONKO. Thank you, Mr. Chair.

Ms. Evans, let's start with a few basic questions about why coal ash was regulated in the first place. Can you explain how coal ash may pose a threat to our health and our environment if it contaminates groundwater?

Ms. EVANS. [Mic turned off.]

Mr. GRIFFITH. And the reason we need the mic on is the folks watching on C–SPAN later tonight or tomorrow or next week can't hear you if you don't talk into the mic.

Ms. EVANS. OK. My button does not seem to work very well. So I believe the question was——

Mr. GRIFFITH. We reset your time. If you would please go forward.

Ms. EVANS. Could we have the question again, please?

Mr. TONKO. Sure. Can you explain how coal ash may pose a threat to our health and our environment if it contaminates groundwater?

Ms. EVANS. The threat to groundwater and to surface water and to air and soil through mismanagement of the disposal of coal ash is rampant throughout the United States.

One of the biggest problems is that the States have not regulated coal ash during the start of the burning of coal. So we have been burning coal in the United States at coal-fired power plants since the early 1900s.

For the entirety of the time until 2015, when the Federal Government stepped in, there was just a patchwork of mostly very poor State regulations. And in fact, in some States there were no regulations at all.

So what you had was the dumping of this toxic material into unlined pits, whether wet or dry, throughout the U.S., creating this huge legacy of pollution.

And the reason why coal ash is so dangerous is that coal naturally contains hazardous pollutants, and when you burn it, those pollutants are concentrated in the coal ash. And not only are they concentrated, but they are in a form that when water hits it, it weaponizes those constituents.

So those hazardous constituents flow into water. And when you have an unlined dump, you have rain coming in, you have groundwater coming in from the bottom of the sites, you have the hazardous contamination coming out.

Mr. TONKO. Thank you. Well, it seems that lining ponds where coal ash is stored and requiring monitoring of nearby groundwater is a pretty commonsense approach to protect water quality.

If there was already a 2015 coal ash rule that did this, can you give us a sense of why the Biden administration felt it was necessary to finalize another coal ash rule in 2024?

Ms. EVANS. Sure. Well, this answer has two parts. First, the 2015 rule entirely left out what we call legacy ponds, which are the older coal ash ponds at facilities that no longer generated electricity after October of 2015, the effective date of the 2015 rule.

Those ponds, which are about 200 throughout the United States, fell out of that regulation. We sued EPA, because that made no sense and left a huge universe of potentially polluting dump sites. The DC Court of Appeals agreed with us and required EPA to regulate those legacy ponds. So that is part of the 2024 rule. Those 200-some ponds will now be regulated—or are now regulated.

The second part of the 2024 rule is all of the old dry disposal areas at the power plant sites. Those were also not covered under the 2015 rule if they didn't receive waste after the effective date. But industry data showed that those units are polluting as well. So we sued to get those included so that corrective action, cleanup could be sitewide, not at individual units.

You know, the way the 2015 rule worked is it would be as if the L.A. firemen addressed one house, that was that, and left the other ones burning. You have to address the entire site to make sure that the groundwater is remediated.

Mr. TONKO. Thank you. I mentioned earlier that I am very concerned by the President's budget request, which includes major

cuts to grant programs that States rely upon. If enacted, it would fundamentally change cooperative federalism as we know it, all while we see a much more lax approach to enforcement at the Federal level.

I would like to insert, Mr. Chair, into the record testimony from the Environmental Council of States to the House Committee on Appropriations from earlier this year.

Mr. CARTER OF GEORGIA [presiding]. Without objection.

[The information appears at the conclusion of the hearing.]

Mr. TONKO. Thank you. ECOS testified, and I quote, "States carry out more than 90 percent of the Nation's Federal environmental laws. Dramatic cuts to EPA that are passed along to States will incapacitate State environmental programs while creating massive uncertainty for State legislatures and businesses."

So I would also like to insert into the record, Mr. Chair, an article from the InsideEPA titled "North Dakota DEQ Chief Eager To Work With EPA Amid Budget Cut Worry."

Mr. CARTER OF GEORGIA. Without objection.

[The information appears at the conclusion of the hearing.]

Mr. TONKO. Thank you.

Mr. Glatt, is it safe to say you agree with the previous quote from ECOS that if the proposed EPA budget cuts go into effect, it will impact your State's ability to properly administer environmental programs like the CCR permit program?

Mr. GLATT. Mr. Vice Chair, it has the potential to do that. I guess we are going to have to see what the cuts are, the magnitude and where they are at. But I will tell you that the State will step up and take care of the problem if EPA does not fund us.

Mr. TONKO. I noted in that article that you were quoted as saying the budget cuts, quote, "will have a very negative impact on the States."

And with that, I yield back.

Mr. CARTER OF GEORGIA. The gentleman yields.

The Chair now recognizes the chair of the full committee, Representative Guthrie, for 5 minutes of questioning.

Mr. GUTHRIE. Thank you very much. I appreciate it.

Ms. Freeark, based on your experience, does the 2024 legacy coal ash rule require the closure of coal ash sites even if they are not causing harm to human health and the environment? And can you share your views on how much it will cost to comply with this rule and what it would mean for your co-op members?

Ms. FREEARK. Congressman, thank you for the question.

I can speak from my perspective at Arizona Electric Power Cooperative. The 2024 legacy rule would require us to identify, through a facility evaluation procedure, if we have any of those new classes of legacy facilities at our site or, like I mentioned before, our closed-in-place facilities that were closed historically under a State program.

We would not have to reclose them as long as they met the current EPA standards, but we would have to include those as our existing facilities' CCR compliance for groundwater monitoring, which we do under the State program. So it would have to be rolled up into our existing CCR compliance program and not under the State program.

As far as cost, I can tell you, just working through over the last several months on, you know, the legacy rule requires the steps of analysis to get through. And we are spending a substantial amount of resources to complete those deadlines because those deadlines still exist today without the repeal going through.

And so, as we work through expending our funds to complete those mechanisms of requirements, we are unable to put those dollars towards other infrastructure that would be more necessary.

So we are reviewing ponds that do not have an impact to the environment, have been monitored since they have been closed since 2005 under a State program for just essentially checking a box under the Federal CCR rule that is duplicative of what we have been doing.

Mr. GUTHRIE. So you are required to do something that is going to cost you money that is not going to have any benefit——

Ms. FREEARK. Right.

Mr. GUTHRIE [continuing]. To the health and——

So EPA is reviewing the 2024 legacy standard. What recommendations do you have for EPA in considering the cost and benefits of any amendments they may propose? What do you think they should look at as they consider?

Ms. FREEARK. Given I have been on the practitioner side doing boots-on-the-ground work at our coal combustion residual surface impoundments for nearly 21 years, I think going back to those site-specific risk-based programs, identify those, identify the uniqueness of all these sites—they are very different, as Mr. Glatt has identified—continue to be able to approve the funds for the development of those programs for EPA.

Remind EPA that they need to implement the WIIN Act of 2016. And delaying these compliance deadlines for the legacy rule need to be considered just so that we are not doing unnecessary work right now, that if it goes away, we have expended all these resources for no reason.

Mr. GUTHRIE. All right. Thank you.

So Mr. Glatt, you mentioned EPA has never visited the State throughout the approval process.

Did EPA adequately consider State experience regulating coal ash when reviewing your application?

Mr. GLATT. Representative, not in our experience. It was pretty much a top-down "Do as we say." It became very clear they were book smart, practical dumb, in my terminology, is that you really need to get out to the site and take a look at what the totality of the site is geologywise, monitoring, and to really get a feel before you can start commenting. But they had no lack of comments without coming out to the site.

Mr. GUTHRIE. Thank you.

And so, Mr. Adams, my great friend sitting to my immediate left, my good friend from Alabama talks about critical rare earth minerals, critical minerals all the time, and appropriately so, because it is a dire national security issue we have to focus on.

Can you share your views on if coal ash is a source of rare earth elements, and what are the barriers, regulatory barriers for recovering those, in 30 seconds.

Mr. ADAMS. Well, right now the biggest challenge is to develop extraction technology that is going to be appropriate for the material that is left behind, if you will.

If we extract the rare earth elements and we create a waste product that is truly hazardous, then we haven't done ourselves much good, really. We have solved one problem partially and created another one that is much bigger.

So the technology research is really what is being focused on right now, is finding a way to extract these materials without causing harm to the residual material. So that is where the market is right now. And there is a lot of work going on—I can say that—a lot of ideas out there. But nobody has really pinned it down as yet.

Mr. GUTHRIE. Thank you. My time is expired, and I yield back.

Mr. CARTER OF GEORGIA. The gentleman yields back.

The Chair now recognizes the ranking member of the full committee, Representative Pallone, for 5 minutes of questioning.

Mr. PALLONE. Thank you, Mr. Chairman.

I wanted to focus on the track record of coal ash management over the past few years and how we should approach this waste product, given its toxic nature and risk it poses for public health and safety.

When Congress passed the WIIN Act, we gave States the ability to create their own coal ash permit programs, subject to EPA approval. And the law was structured this way to address one of the primary concerns, that States could not or would not maintain the same level of protection that would otherwise be required by the Federal Government.

So I just have a series of questions of Mrs. Evans. Since the law's enactment, your organization has expressed concerns with some of the State petitions.

So first, why do you think some States are not prepared to manage coal ash on their own, if you will?

Ms. EVANS. I think it is a matter of inadequate rules, perhaps inadequate approach, and inadequate resources. So first, in order for EPA to approve a State under the WIIN Act, the regulations have to be at least as protective as the Federal rule, and the implementation of those regulations in the State must indicate that the State is applying these rules to ensure that every coal ash dump in the State is following those rules.

In multiple States, not just North Dakota—and we are preparing comments on that proposed approval—but in Alabama is a good example of a State that had exactly the same rules as the Federal rules, but the way in which they applied them left dumps violating the CCR rule in very important ways, whether it was by closing coal ash ponds in groundwater so that they would leak perpetually, perhaps approving inadequate groundwater monitoring systems. And that cannot stand.

Approving a State that does not ensure that each coal ash unit complies with Federal rules is approving a plan, a State program, that is not as protective. And once EPA approves a State program, it is very difficult to roll that back.

The WIIN Act says that EPA must evaluate the programs, but only once every 12 years. And so you are going to have generations

of folks that are going to be dealing with permits and with oversight that simply is not adequate.

We are seeing that in Georgia. So Georgia has a partial approval. They have had it for many years now. And what we are seeing in Georgia is that the State is approving permits for inadequate groundwater monitoring systems, so we won't know how much hazardous contaminants are leaving the dumps and also the disposal of ash in groundwater at at least two facilities.

So that is totally unacceptable, and Earthjustice doesn't want to see that happen in the States that are currently interested, which are coal-friendly, coal-burning, they have many coal-burning units. And we fear for the protection of the residents in those States.

Mr. PALLONE. What do you think—I think you answered it, my second question, with what you said as well. But let me go to my last question.

I mentioned in my opening statement that Mr. Zeldin has decided to turn over coal ash enforcement responsibilities to the States. He also committed to quickly consider North Dakota's application for a State coal ash permit program. And EPA granted North Dakota conditional approval in May and has signaled it is posed—or poised to take similar actions in other State applications.

So my question, Ms. Evans: In your opinion, how could public health and safety be impacted by a shift to State enforcement of coal ash, especially for communities in the States seeking program approval from EPA, if you will?

Ms. EVANS. You know, one thing that can occur is that enforcements simply won't happen. The States, as you mentioned earlier, are really stretched for funding. The funds for solid waste versus funds for hazardous wastes in States is miniscule. So they have got programs that may not be able to get the inspectors out to determine whether there is compliance at the facility.

And if there is not compliance, you are going to have environmental damage. You are going to have contaminants leaving those coal ash dumps, entering groundwater, entering the air, following rivers. It is going to happen. It has happened at almost every site that we have seen in the United States. So there is no mystery here.

What is needed are Federal or State programs that follow the requirements of the coal—the 2015 and 2024 rules because those rules were meant to detect the pollution, stop the pollution, and require cleanup.

Mr. PALLONE. Thank you so much. Thank you, Mr. Chairman.

Mr. GRIFFITH [presiding]. The gentleman yields back.

I now recognize the vice chairman of the subcommittee, the gentleman from Texas, Mr. Crenshaw.

Mr. CRENSHAW. Thank you, Mr. Chairman, and thank you to our witnesses for being here. It is an important hearing.

I think we all agree that we don't want our environment destroyed by coal ash or these byproducts. There is obviously some disagreement as to whether that is happening at the scale some claim.

We also have to, of course, think about grid reliability. That is a common theme on this committee. Grid reliability, people's power turning on is incredibly important. And baseload power just dis-

appearing is a pretty exceptional matter, to say the least. And it shouldn't happen without some careful thought, and I think—I believe many of these regulations are perhaps unnecessary.

And also not taking into account another theme which has been talked about, which is the—you know, the overlooked aspect of this, which is that these CCP byproducts are indeed strategic resources that need to be utilized. They can be utilized to reduce greenhouse gas emissions, strengthen our critical infrastructure, help keep reliable power plants online. It contains rare earth elements and critical minerals essential for defense, semiconductor production, clean energy tech.

Tapping into that potential could reduce our dangerous dependence on China and strengthen America's industrial base and national security base all while still keeping the environment clean.

Mr. Adams, could you speak to that for just a minute, about these byproducts and why the EPA even labels them as a product for good reason?

Mr. ADAMS. Well, certainly, when you talk about a product, you are talking about something that has market value. If you talk about them merely as residual materials, it doesn't indicate anything to the marketplace that there is any economic value to them.

EPA itself said that—this was a number of years ago—that this industry had a value of about $23 billion in direct and indirect expense, and that was over 10 years ago. That has only grown a great deal as the value of these materials has started to increase and approach the pricing that we see for commodities like Portland cement.

So it has really developed into a much bigger economic factor all by itself than just a waste material that you would have if you regard the material as just something we need to get rid of and get out of the way and get it out of our mind. It is a resource—

Mr. CRENSHAW. Let me respond. I mean, Ms. Evans' witness testimony claims the opposite, says that uses of coal ash, such as mining projects, structural fills, agriculture applications, says they are—sham, sham recycling. And when coal ash is placed on the ground, dangerous pollutants such as arsenic, boron, cobalt, lithium, mercury, radium will leak into the groundwater.

You said in a number of studies about the safety of the reuse of coal ash in your written testimony, so wanted to give you an opportunity to talk to us about that.

Mr. ADAMS. Well, as I referenced and I will reference again, the USGS study that is in our written testimony indicated that you will find arsenic and all these other things that you just talked about is common background material in soil and rock around the country. It was referenced earlier, I believe by Chairman Griffith, that radon, that is in soils in his area, and there is no coal-fired power plant anywhere around.

So you run into these situations where background is automatically assigned to coal ash if there happens to be a plant somewhere, and it is not the case in many, many cases.

So when we are looking at these kinds of claims, you have to look at what the background is in the area to make a legitimate, honest evaluation of whether there is any kind of problem there.

Mr. CRENSHAW. OK. I appreciate that.

Mr. Glatt, quickly give you a chance to just—tell us some of the safe and beneficial uses that we could be looking to across industry.

Mr. GLATT. We currently—Vice Chair, we currently use it for admixture to concrete. We use it for flowable fill for abandoning mines. We use it in soil stabilization. I will say that before it gets to that point, first the coal ash has to show a beneficial characteristic. It can't be just waste disposal. It has to be of beneficial use. Then we go through testing to make sure it will not leach these products into the environment. Once it goes through all that testing and it has shown to be of beneficial use, then we approve it to move ahead with concrete and all the things I mentioned.

Mr. CRENSHAW. OK. I appreciate it. I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize Mr. Ruiz for his 5 minutes of questioning.

Mr. RUIZ. Thank you, Mr. Chairman.

It is interesting that we are having this discussion about protecting the environment, protecting health from coal ash, and yet we are also saying that there is actually no harm to the public's health because the materials exist in the surrounding environment, and then—you know, it is sort of speaking from two sides of the mouth.

But, Ms. Evans, what is the public health effect of coal ash?

Ms. EVANS. Well, I would first like to say that I vehemently disagree—and I said this in my testimony—that coal ash is similar to dirt. I think the statistics that Mr. Adams has provided are extremely misleading, and I would like to provide some supplementing information to indicate—to illustrate this.

I have worked at numerous coal ash waste sites, some of which are Superfund sites, where the data shows that coal ash contains magnitudes more hazardous contaminants than is found in the surrounding soil.

So you take the Town of Pines Superfund site where you have—on playgrounds, I believe the arsenic approached, let's say, 600 parts per million. I know they had 888 parts per million in other areas. On the playground, at 600 parts per million. That is nowhere near the average arsenic content of soil, which should be around between 6 and 10.

So we don't have a substance that is like dirt. All coal ashes are different, and not all coal ashes are going to be extremely high in arsenic and radioactivity. But EPA has found—let's take radioactivity. EPA has found that the average coal ash has radioactivity of over 6 picocuries per gram. And——

Mr. RUIZ. How much radioactivity do you find in dirt?

Ms. EVANS. One to three. So you have—and then you can get much more. I have seen 14 in Mooresville sitting on top of the dirt. I think we had over 8—8 to 9 picocuries per gram. So this is not average dirt. This is—you know, that is already almost 3 times the radioactivity that you find in dirt.

So I think we have—the real problem here with the understanding of what is the threat from coal ash——

Mr. RUIZ. And so what are the health—what are the health impacts?

Ms. EVANS. So the health impacts, I mean, they are myriad. And one problem with coal ash is that it has so many toxic elements.

And these toxic elements can work together. The cumulative effect can be more than a single contaminant. So, for instance, arsenic causes cancer. Radium causes cancer. And about seven other coal ash contaminants cause cancer. You have them all together. That is a cancer-causing material.

Mr. RUIZ. What are the effects on pregnant women and children?

Ms. EVANS. So, I mean, if you mention children and pregnant women, the ingestion of toxic chemicals is much more harmful to a fetus than it would be to an adult. A child playing in contaminated dirt is going to be more sensitive to the radioactivity or the arsenic or other contaminants. So surely you have got more vulnerable populations——

Mr. RUIZ. More risk for stillbirths, spontaneous abortions, malformations in children with chronic consumption of lead and arsenic, could lead to cerebral damage, developmental delays, not doing well in school, not really growing at the pace that they can.

So I am not sure who here would want to have coal ash. Show me—anybody raise your hands—if you would like to live next to a coal ash dump. I don't think anybody would like to live next to a coal ash dump. And the ash—the fine particle, too, are so small that if the wind blows it, right, you breathe it, it goes straight into your lungs.

What do you propose that we do with this coal ash, Ms. Evans?

Ms. EVANS. Well, the answer is—the part that can be recycled into encapsulated products should be put into encapsulated products that do not leach. But there is a big difference between putting coal ash in a product, encapsulating it, than using it as a unencapsulated material, such as a structural fill, mine fill. I would posit that using it in the sand trap would cause potential harm to inhalation of particulates, whether it is just simply particulate matter 2.5 or the other hazardous contaminants of coal ash.

Mr. RUIZ. Thank you. I yield back.

Mr. GRIFFITH. I would point out to the gentleman that lithium is one of the contaminants listed in Ms. Evans' chart, and we certainly wouldn't want to encapsulate the Salton Sea.

I now recognize——

Mr. RUIZ. You made a point. Can I—can I——

Mr. GRIFFITH. Yes, sir. It is only fair.

Mr. RUIZ. This is what is very important to understand, is that the lithium extraction from brine, from geothermal, is in a closed-loop circuit. So lithium doesn't get exposed to the air, nor does dust—

Mr. GRIFFITH. So it is encapsulated.

Mr. RUIZ. It is a filtration system, that you pull out the filter, and then it—you know, you keep it. So it is not exposed to the—to the air.

Mr. GRIFFITH. I appreciate that. It is encapsulated.

And I now recognize Mr. Latta of Ohio for his 5 minutes of questions.

Mr. LATTA. Well, thank you very much, Mr. Chairman, and thanks so much for our witnesses for being with us today.

If I could start, Ms. Freeark, with you for some questions. You had mentioned about, you know, the power needs that you are looking at, and they increased because of—especially with the data

centers coming online. And we had hearings in our Energy Subcommittee not too long ago where we had all the RTOs and the ISOs here in the country before us. But they said the same thing: We have to be producing more power in this country because of, really, the influx of all of the data centers coming online.

But at the same time, we can't be taking generation offline. And it is—the estimations out there that are talking about maybe in the future, it will probably be all coal, they are looking at about 115 gigawatts going offline. But at the same time, we need 150 gigawatts on top of what we are already producing. So really, if that would happen, we are really, really short.

So quick question. Do you know what your energy mix is for the co-op?

Ms. FREEARK. Congressman, we have had—so Arizona Electric Power Cooperative owns and operates only one generating facility where we have—traditionally, we had coal, natural gas. We have implemented very large-scale solar and battery energy projects. We have converted one of the coal units to natural gas for back in 2017. And so we have one remaining coal unit at our facility.

So we are—you know, we have been expanding and diversifying our portfolio over time. But that dispatchable resource of baseload generation coal is critical so that we can continue to serve our members with affordable, reliable power. And it ensures that we can have, you know, fuel on the ground. That is a critical component of the coal unit, is that we can have coal on the ground without intermittent pipeline issues, intermittent renewable resources. So coal is critical. Although we have backed down, as I have mentioned, the conversion of one unit, that one remaining coal unit is critical for——

Mr. LATTA. Well, let me ask this, then: With the new coal combustion residuals requirements, how is that going to affect your decisions in the future with that one remaining facility?

Ms. FREEARK. So under the coal combustion residual rule, we will continue to monitor postclosure—so if we had to close our remaining coal unit, we would still have 30 years of postclosure monitoring, closure of those facilities. So it would be beneficial to AEPCO and its members to continue to be able to operate that coal unit, responsibly disposing of coal ash in our lined impoundments that have 30 years of operation with, you know, groundwater monitoring. And so to prematurely close those would cost in the tens of millions of dollars that would be borne by rural end-use consumers.

Mr. LATTA. Thank you very much.

Mr. Glatt, do you believe the 2024 amendments strike the right balance between environmental protection and operational feasibility?

Mr. GLATT. One more time on that question?

Mr. LATTA. Yes. Do you believe that the 2024 amendments strike the right balance between environmental protection and operational feasibility?

Mr. GLATT. I don't believe it does like it should. I think there should be a little more acknowledgment of the work that is done beforehand so the risk is pretty minor. I don't think EPA has acknowledged that.

Mr. LATTA. And let me follow up. I think the chairman of the full committee was getting into this. You had stated that, you know, that the Federal review approval is frustrating. It is not rooted in sound science and law. Could you, in my last 50 seconds, maybe touch on that?

Mr. GLATT. Sure. Going through this whole process, we had indications that our program was approvable. It went beyond what EPA had required. But they said they would not approve it because they had concerns regarding implementation.

We answered their questions through several different rounds regarding implementation, and yet they wouldn't approve—the frustrating part was they would not give any rationale why they felt that the implementation wasn't there.

We felt that we went way beyond what EPA required and showed the documentation, had the science, and yet there was no approval. That is where the frustration came.

Mr. LATTA. Mr. Chairman, my time has expired, and I yield back.

Mr. GRIFFITH. The gentleman yields back.

I now recognize the other gentleman from California, Mr. Peters, for 5 minutes of questioning.

Mr. PETERS. Thank you very much, Mr. Chairman.

A century of burning coal ash—or coal across the United States has generated roughly 5 billion tons of coal ash, and there is merit in examining how we can safely manage and even repurpose coal ash. Reusing coal combustion residuals or coal ash in concrete, drywall, or other applications can reduce landfill use and even lower emissions relative to conventional production methods so long as manufacturers take the proper precautions. In San Diego, we have long incentivized the use of low-carbon construction materials.

But as we explore the beneficial uses of coal ash, we can't use them to justify extending the life of outdated and expensive coal power generation.

Coal generation has declined by over 60 percent since 2008, not as a result of government regulation but because it has been outcompeted. Natural gas, wind, and solar are now the cheapest sources of new electricity in most regions of the country. Coal plants are aging, expensive to maintain, and increasingly reliant on subsidies or taxpayer support to stay online.

All of this evidence has made it clear coal has not declined based on some conspiracy or clean energy bias but because of well-documented market factors.

Additionally, arguments for using coal ash as a domestic supply of rare earth minerals are unconvincing to me. The concentration of rare earth materials in coal ash is far lower than in commercially mined deposits. Despite years of research, no commercial-scale rare earth recovery operation of coal ash has proven technically or financially viable.

We are nowhere near being able to use coal ash as a reliable domestic source of critical minerals, and there are better options to shore up our supply chain. Investing in coal ash as a rare earth source is a distraction from cleaner, more financially viable solutions and an attempt to artificially bolster the industry.

While recycling and reuse is an important solution for existing waste stockpiles, we should not reverse engineer the need to burn more coal. The goal should be to manage legacy waste responsibly, not to prop up an unviable energy source.

We need to build our energy policy around an all-of-the-above approach, an all-of-the-above approach that deals in reality, one that provides the security and reliability we so desperately need to meet rising energy demand.

Ms. Evans, to be clear, do any of the beneficial uses of coal ash require that we continue burning coal, or can they be supplied entirely from existing waste stockpiles?

Ms. EVANS. They can be supplied from existing waste deposits. There is so much waste—Mr. Adams said 2 billion, I have heard the estimate 3 billion. There is an abundance of coal ash that could be used, and it would never be necessary to burn coal for those——

Mr. PETERS. And you agree that coal generation has declined primarily due to market competition from cheaper and cleaner energy like wind, solar, natural gas rather than because of regulations?

Ms. EVANS. Absolutely. And that is what the experts say.

Mr. PETERS. Is there any long-term scenario in which coal becomes a competitive critical energy source again?

Ms. EVANS. I don't see it. I mean, I see that the price of wind and solar is dropping. It has shown itself to be more reliable. The battery storage will be a faster solution than the building of new power plants. And I don't see where coal fits into that scenario.

Mr. PETERS. OK. I appreciate it very much. Mr. Chairman, I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the gentleman from Pennsylvania, Mr.—not here. No. There he is. I missed him. I thought you would be on the top row, Mr. Joyce. Mr. Joyce of Pennsylvania.

Mr. JOYCE. Thank you, Chairman Griffith and Ranking Member Tonko. Thank you to our witnesses for appearing here today.

For years, from Pennsylvania, I recognized that coal-fired power generation facilities have worked in Pennsylvania and throughout the entire United States, and they have worked to properly manage coal combustion residuals, or coal ash. This has long been done either through disposal and monitoring or through beneficial uses, such as the making of concrete or construction applications, as in drywall production.

With the EPA's finalized 2024 legacy CCR rule, electric utilities will be faced with burdensome costs for sites where coal ash has already been safely disposed of and environmental concerns mitigated, and beneficial uses with programs that will be subjected to harsh regulations despite the evidence that they pose little or absolutely no environmental or health or safety risks.

To start, I want to be clear on both the effectiveness of current methods of coal ash disposal and the beneficial use.

Mr. Adams, in your written testimony you discuss how the regulatory treatment of beneficial use has been impacted by environmental organizations raising false alarms about the supposed toxicity of coal ash. Can you clarify how coal ash is safely used in other commercial applications?

Mr. ADAMS. Certainly. We know, from decades of use in concrete, that this material performs, and it performs just as expected. EPA itself ran a risk evaluation of this material and found that there is no difference in performance of concrete with fly ash and without fly ash. That was EPA's own work.

In addition, if you look at what EPA has done over the years in terms of regulating coal ash, back in 1993 the EPA made a determination that coal ash did not warrant treatment as a subtitle C hazardous waste under RCRA based on toxicity. They repeated that ruling again in the year 2000, both under President Clinton and Administrator Carol Browner, that coal ash did not warrant management under subtitle C as a hazardous waste. And it was repeated one more time in 2015.

So if we hear all these claims of coal ash being hazardous and toxic, EPA hasn't made that claim yet. And they have looked at it, really, since 1980 when the Bevill Amendment was passed declaring coal ash to be exempt from hazardous waste management. So as we look at all these applications and we hear all these claims, EPA has not found that to be the case.

Mr. JOYCE. The 2024 legacy rule created a new definition: CCR management units, or CCRMU. Mr. Adams, has the expansion of Federal regulation to CCRMU potentially undermined opportunities for beneficial uses? Beneficial uses that we talk about, you just mentioned, with the use in concrete, I talked about in drywall production—are we stifling innovation?

Mr. ADAMS. It is an interesting attempt—the 2024 rule has a risk assessment, which is terribly flawed, to supplement its claims in that rule. Beneficial use will be impacted by it, but EPA has done a nice job of trying to draw fences around things and create back doors, if you will, to restrict beneficial use, and based on that flawed risk assessment.

Mr. JOYCE. You also noted, Mr. Adams, in your remarks that the EPA used flawed risk adjustment in justifying that role. I think that is what you were just mentioning. Can you further explain some of your major concerns with that risk management? That risk assessment?

Mr. ADAMS. For example, it claims that arsenic is many, many more times more dangerous than it ever has been before. What changed? Nobody has been able to explain to us what changed to make arsenic more concentrated, more of a danger than it has been for decades and centuries, actually.

We run into things like that in the report that actually give people rise for concern when there is really no change at all that has happened there.

Mr. JOYCE. From your testimony, both written and stated orally, a Federal regulation which fails to consider State or facility-specific characteristics and that imposes strict regulations not based on any real finding of risk is not the way to handle CCR. The EPA announced earlier this year that they are reviewing this rule to determine what regulatory relief is appropriate.

I look forward to that determination and to working with my colleagues on this committee to ensure that electric utilities, especially in rural areas that need that increased electrification in America, are not burdened by this unnecessary cost.

Thank you all for appearing today. My time has expired. Thank you, Mr. Chairman. And I yield back.

Mr. GRIFFITH. The gentleman yields back.

I now recognize Mr. Auchincloss from Massachusetts for his 5 minutes.

Mr. AUCHINCLOSS. Thank you, Chairman.

I represent Brayton Point in Somerset, Massachusetts, which formerly was the site of a coal-fired power plant, was going to become the site and a clean energy hub for offshore wind interconnection until the manufactured chaos from this administration issued a moratorium on offshore wind and has canceled that manufacturing opportunity.

Before it ceased operations in 2017 as a coal-fired power plant, Brayton Point used lined landfills for coal ash. The last of them are due for final closure this year.

Ms. Evans—first of all, thank you for joining us. Can you describe how these proposed changes might affect Brayton Point and surrounding areas?

Ms. EVANS. Sure. Excuse me with the mic.

Brayton Point—and I know a little bit about this because I have some history on the original Massachusetts DEP actions at the site. Brayton Point had operated unlined coal ash ponds and also oil combustion ponds. And so there is quite a bit of contamination on the site, most of which was removed. However, Brayton Point power plant continued to operate, continued to do more waste disposal. And now there is still remaining groundwater contamination.

That groundwater flows into Mount Hope Bay, which is a bay shared by Rhode Island as well as Massachusetts. And it is a valuable estuary for fish spawning and growth.

The new requirements will be very important to cleaning up Brayton Point. So Brayton Point is an excellent example of a very large power plant that, over decades, has produced waste, some of which was placed in unlined ponds, now lined landfills and other waste disposal areas at the site.

Mr. AUCHINCLOSS. And am I correct, ma'am, that we are still showing excess arsenic and lithium and other chemicals in the groundwater?

Ms. EVANS. Yes. I believe so. That is what the groundwater monitoring reports say. So what you have is it is obvious that whatever cleanup that they did pursuant to a Massachusetts order has not cleaned up the site in a way that makes it a safe site for the citizens in your district, for the people of Rhode Island, you know, for the fish in the estuary.

And the legacy rule is really meant to address that. The legacy rule requires a power plant order to look at the site as a whole and do a facility evaluation report where it will find where are all those old disposal areas that are likely contributing to the problem.

Mr. AUCHINCLOSS. And I believe that for Brayton Point there could be as many as 12 of those——

Ms. EVANS. Yes.

Mr. AUCHINCLOSS [continuing]. Coal ash dump sites that would be newly regulated under the 2024 rule——

Ms. EVANS. Right, which is not unusual because, you know, a lot of these plants have been operating for almost 100 years.

Mr. AUCHINCLOSS. So in some ways, Brayton Point encapsulates the benefit of this legacy rule in that it is not just a go forward, it is also a look back, and as you said, treat the site holistically to ensure that there is not continuing groundwater contamination or discharge into Mount Hope Bay.

Ms. EVANS. Right.

Mr. AUCHINCLOSS. So do you believe the 2024 rule and its faithful execution is critical to the complete and long-term cleanup of the site?

Ms. EVANS. It is absolutely critical. And it is critical that we don't delay its execution. EPA was very late to the game regulating coal ash in the first place. RCRA was passed in 1976, but it took them decades to get a Federal coal ash rule. So we are way behind in stopping coal ash contamination.

And coal ash contamination groundwater keeps moving. How much has it gotten into Mount Hope Bay? How much is in the sediment? How much more will get in if industry is successful in delaying the legacy rule?

Mr. AUCHINCLOSS. And can you just describe for my constituents in Somerset and surrounding environs, what does that groundwater contamination mean for them? What does it affect for their quality of life?

Ms. EVANS. Yes. I mean, it will be different at each site. From the little I know about Brayton Point, I know that the groundwater flows to the bay. So if that bay is an area where young fish are, one will be the young fish not survive—will be—less fish to eat and to enjoy. The fish that survive—a lot of the coal ash contaminants like arsenic and selenium are biocumulative, so those fish may be tainted and be unable to be consumed.

In environmental justice areas or poor areas, you have people who are subsistence fishermen, and they may not—there might be public advisories, but they may eat the fish anyway.

Mr. AUCHINCLOSS. I am going to have to yield my time. Thank you, Ms. Evans, for——

Ms. EVANS. Thank you.

Mr. AUCHINCLOSS [continuing]. Your input on this.

Mr. GRIFFITH. The gentleman yields. I now recognize the gentleman from Texas, Mr. Weber, for his 5 minutes of questioning.

Mr. WEBER. Thank you, Mr. Chairman.

I am going to come to you, Mr. Glatt. Only 3 States currently—Oklahoma, Georgia, and my home State of Texas—have EPA-approved coal combustion residuals, CCR, permit programs, meaning that these States—we have talked about this—rather than the Federal Government oversee these programs. It is my understanding that North Dakota is in line to become the fourth State, should its approval be granted. Has that happened?

Mr. GLATT. They are in the process now, with a public hearing scheduled for July 8th.

Mr. WEBER. July 8th. OK.

Can you elaborate on exactly how this process has gone with the EPA? How much time do you need? Yes.

Mr. GLATT. It has been very frustrating. We were led to believe that we complied with all of the elements required, and then there was always one more thing and one more thing. And we got the feeling that they never had any intent to approve the program.

Mr. WEBER. Was that in the previous administration or the current one?

Mr. GLATT. Previous.

Mr. WEBER. Has it changed?

Mr. GLATT. It has now. They have looked at the program. They said it is approvable. The previous administration said it was approvable as well, but they always had one more thing to deal with. Now we are going through the process, and we fully expect that we will get approval.

Mr. WEBER. So are you familiar with the phrase, "It is morning in America again"?

Mr. GLATT. Yes, I have heard that.

Mr. WEBER. OK. I think a lot of people are.

Has North Dakota engaged with other CCR-authorized States to learn best practices regarding that application process and program—I guess, are you hiring out to them?

Mr. GLATT. Yes, we are in contact and conversation but understanding that every State is a little bit different and they approach it differently. Where we can find commonalities and benefit from those other States, we adopt that. But we understand that North Dakota is not Oklahoma, is not Texas, and they do things for their own reasons, but we keep an eye on what other States do.

Mr. WEBER. So you can learn from, you know, each other, basically.

Mr. GLATT. Correct.

Mr. WEBER. OK.

Is it "Free-ark"? Is that how you say that? OK. I am coming to you next. Are you ready? OK.

According to Arizona Electric Power Cooperative's website, the Apache generation station has a steam-generating unit powered by coal. You are aware of that.

Ms. FREEARK. Yes, sir.

Mr. WEBER. In your testimony, you emphasized the importance of affordable electricity, particularly given that one-third of—how do you all say that? "A-ep-co"?

Ms. FREEARK. "Ap-co."

Mr. WEBER. "Ap-co" was my next guess.

One-third of AEPCO's customers live below the Federal poverty line. Can you share in further detail how this coal-fired unit, as well as coal units nationwide, contribute to keeping electricity rates affordable?

Ms. FREEARK. As I mentioned before, our mission is to provide safe, reliable, affordable electricity. As you pointed out, a third of our member residential customers live below Federal poverty line. It is hot in Arizona. So the summer heat demands cause, you know, demand for reliability events, partnered with potential wildfires.

So it is critical that we continue to be able to have that baseload generation to be able to afford to—to be able to provide affordable electricity that isn't, you know, subject to the market so that our members can afford to keep the lights on.

Mr. WEBER. As I said to Mr. Glatt, so do you reach out with some of your other colleagues in other different States? Is there an organization of the co-ops, I guess?

Ms. FREEARK. There is.

Mr. WEBER. What is the name of it?

Ms. FREEARK. We have on a—on the high level, basically, we have the National Rural Electric Cooperative Association. And then within that we have different organizations, and one of them is the National Rural Electric Environmental Association. So we coordinate, collaborate on what is happening in all the States.

Mr. WEBER. Sure.

Ms. FREEARK. What is working, what is not. And we also do that within our own home State. We have all the Arizona utilities, whether it is co-ops, public power, IOUs, we work together to ensure that, you know, that we have sensible regulation, that we can—you know, we may not always see eye to eye, but we can come together in those times where it makes sense to work with our regulators, work with, you know, work with others that are—as they develop rulemaking.

Mr. WEBER. In most of those meetings, I guess, you said you coordinate and cooperate with them when you talk about meeting with the regulators in other States. You are finding that pretty much everybody wants to do the right thing for their customers and the environment? Would you agree?

Ms. FREEARK. I would agree with that.

Mr. WEBER. And so I guess—I have got 19 seconds. So did you find the same thing in the previous administration? Has it lightened up a bit in this administration?

Ms. FREEARK. The last administration, absolutely not. It was block walls put up, zero communication. This new administration, we have already been able to coordinate with them and have those conversations.

Mr. WEBER. Are you familiar with the phrase "There is morning in America"?

Ms. FREEARK. Yes.

Mr. WEBER. I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the gentleman from New Jersey, Mr. Menendez, for his 5 minutes of questioning.

Mr. MENENDEZ. Thank you, Chairman.

We have to legislate for the realities of a changing climate. We are here today in the midst of a historic heat wave that has stressed our energy infrastructure, endangering the health of millions of Americas. And it is caused in large part by the greenhouse gases accumulating in our planet's atmosphere. Greenhouse gas is disproportionately released by the combustion of coal.

And today we are focusing on another harmful aspect of burning coal: its residuals, coal ash. EPA has made important strides over the last decade to regulate coal ash, but 91 percent of coal-fired power plants continue to leak toxic radioactive pollutants into water that eventually comes out of our kitchen tap. Meanwhile, climate change is accelerating and intensifying natural disasters, sea level and groundwater rise, and flooding, all of which worsen the

risk of a spill and increase the threat that these sites pose to our communities.

In my coastal district, we have low-lined coal ash landfills in Jersey City that will become even more susceptible to flooding and sea level rise over the coming decades. If these sites, which previously showed evidence of contamination, already pollute our community under normal circumstances, another major weather event or a 6-foot increase in sea level would cause catastrophic damage.

Ms. Evans, can you briefly describe how climate change impacts coal ash management?

Ms. EVANS. Thank you. And this is an important question because coal ash dump sites are uniquely vulnerable to climate change. Coal plants have to be built near water source, so they are near the shorelines of lakes, rivers, and the oceans. We know that these waters are rising. And in some instances, groundwater is rising as well.

A couple of statistics. We have—74 percent of coal plants have a landfill or a pond within a quarter-mile of the surface water, and 57, almost 60 percent have a landfill or pond within 50—I am sorry—500 feet of surface water. So these units are very, very close to water, and many, especially ponds, have been built in the floodplains.

The risk is not hypothetical. We have had hurricanes, Hurricane Florence in the Carolinas, that flooded coal ash ponds, you know? So we know that the more intense storms can do extensive damage to coal ash ponds and landfills and cause significant releases.

Mr. MENENDEZ. Right.

Ms. EVANS. So the sooner we can get this ash out of the floodplain to protect it from the sea rise and the intense storms, the better.

Mr. MENENDEZ. Right. And you see these once-in-a-lifetime weather events, but they are changing, sort of, where they are—what communities they are impacting, what States they are impacting, right? So it impacts, sort of, how we think about the management of these sites. And, perhaps, areas that have not previously been impacted could be, and you could see really harmful outcomes for those surrounding communities.

How does robust enforcement of coal ash pollution regulations help mitigate these climate-related risks?

Ms. EVANS. Well, the coal ash ponds that are poorly sided, that are in floodplains, that have their ash in contact with groundwater, need to be closed. And in many cases, they need to have their ash removed and redeposited in a safe area in a lined landfill or, you know, the ash may be used to create encapsulated products, such as concrete.

But in no event should the ash be left at the shoreline. And the CCR rule, the original 2015, requires the safe closure of those sites.

Mr. MENENDEZ. Right. And should Federal standards and enforcement be strengthened to address the impacts we anticipate from a changing climate?

Ms. EVANS. I am sorry. Can you repeat that?

Mr. MENENDEZ. Sure. Just yes or no: Should Federal standards and enforcement be strengthened to address the impacts we anticipate from a changing climate?

Ms. EVANS. Yes.

Mr. MENENDEZ. I agree. Yet, instead of taking commonsense, data-driven action, the Trump administration is cutting staff and funds at the EPA. It rolled back Federal requirements on coal ash regulation enforcement, delegating authority to States that have proven records of failing to meet Federal standards as required by law.

In your view, will weakening EPA's ability to enforce existing coal ash pollution standards intensify climate-related risk at these sites and ultimately endanger the clean drinking water that so many of our families rely on on? Just yes or no.

Ms. EVANS. Yes.

Mr. MENENDEZ. And to close out, I want to make sure that the folks at home in New Jersey get a sense of what this means for them. Can you touch on what increased groundwater contamination would mean for families and communities that live in proximity to coal ash waste?

Ms. EVANS. If those communities use the groundwater for drinking water, that can absolutely impact their health. That can harm their health. For communities that don't yet use the groundwater, the groundwater's an incredibly important resource. And so if the groundwater is not currently being used for drinking water, irrigation, that doesn't mean that it should be poisoned and polluted by contaminants.

Mr. MENENDEZ. I agree with you. Thanks so much. I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the other gentleman—or another gentleman from Texas, Mr. Pfluger, for his 5 minutes of questioning.

Mr. PFLUGER. Thank you, Mr. Chairman.

Let's just follow up with that line of questioning, and I will go to Mr. Glatt and Ms. Freeark. Are there communities that are drinking contaminated groundwater because they are not regulated appropriately, Mr. Glatt?

Mr. GLATT. No.

Mr. PFLUGER. Yes, Ms. Freeark?

Ms. FREEARK. No.

Mr. PFLUGER. I mean, this is just insane that we are sitting here talking about, you know, unregulated groundwater. I mean, no, that is not the case. So that was not my line of questioning, but I just—I couldn't help but correct the record here that—is there a threat because of our regulatory posture, Mr. Glatt?

Mr. GLATT. No. Based on the State program, there is not a threat.

Mr. PFLUGER. Talk to us about the expense. You have touched on this today, but I want to get back to what will this rule do in terms of cost and then in terms of effectiveness.

Mr. GLATT. As far as the baseline CCR rule and the State adopting that, I don't see that as being a whole lot. I think the concern is with the legacy rule of having to go back and look at landfills that were appropriately closed that do not pose a risk now.

We have the concern that if we had to go back in and somebody saw the need to dig that back up, that would create a greater environmental hazard than what they have today.

Mr. PFLUGER. Yes, jJust can't get around ourselves for making smart decisions on that.

Ms. Freeark, you know, let's go on the line of questioning on cost. And we know that they are going to be significant. They estimated the cost would be at a minimum $214 million per year with only 53 million in benefits. That is the Biden administration. And this ultimately impacts the ability to provide energy to our communities.

So you noted in your written testimony that Arizona Electric Power Cooperative is incurring significant expenses to comply with the legacy rule and its deadlines. And again, you have touched on this already today, but I want to make this point. Can you describe some of the major expenses that this rule has imposed? And do you think that these costs will produce commensurate benefits on the other side of it?

Ms. FREEARK. So far, as others have mentioned, there is a laundry list of things that we have to do under the legacy rule. So every single one of the steps incurs costs with outside professionals, qualified professional engineers, consultants that help.

We are a rural co-op. We have a very small staff, so we can't—we don't have the bandwidth to perform it all ourselves, so we rely on those outside resources. So you are talking about contracting with ongoing support to do facility evaluation.

And when we talk about the facility evaluation, it is of the entire site. We own 4,000 acres. So evaluation of the entire site where—you know, we have the proper area, but you are looking at in the entire site, going back to historical records, any project, anywhere where you could have found that CCR materials may have been used.

So that has taken us months and hundreds of thousands of dollars to get through. That report is not yet done. We are in the final completions of it.

But then, moving from there, then once you identify those new classes of units that they identified in the rule, then you will have to institute groundwater monitoring, public websites. There is just a laundry list, again, of items that would have to be included just to regulate something that—for instance, again, like our facility, we have closed-in-place ponds that we would have to, you know, look back, which is insane that you are going to look back—those were closed in 2005—have not had a impact to groundwater, human health.

And, you know, we are not near any surface waters. So we have a really different geologic site condition. The risk, if you measure the risk based on that, it is very different.

Mr. PFLUGER. Thank you.

Mr. Adams, some of my questions for you were already asked. I will give you the last minute to tell the committee anything. Any followup statements that you——

Mr. ADAMS. Yes, I think it is kind of interesting that we have spent a great deal of time today talking about disposal and disposal regulations and disposal impacts and all that kind of thing and a lot less time talking about beneficial use and the things that are really benefiting not only the construction industry but society in general, in terms of greenhouse gas reduction.

We are taking materials out of landfills and ponds, returning those facilities to more palatable uses, for parks and green spaces and things like that. We are doing a lot of good things through beneficial use, but we spent a heck of a lot more time today talking about things that have more to do with disposal and less about beneficial use than we hoped. But we would like to come back and reengage and talk more about beneficial use.

Mr. PFLUGER. Thank you. I thank the witnesses, and I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the gentleman from Ohio, Mr. Landsman, for his 5 minutes of questioning.

Mr. LANDSMAN. Thank you, Mr. Chairman.

I agree. The beneficial use conversation is super important. I suspect we can get closer to having a meaningful conversation about that when we resolve some of the legitimate questions about the leftover coal ash and how we manage that so that it does not undermine public health. So I think I—I think those are the concerns, obviously, that, you know, this committee is in a position to resolve.

We know that this leads to some toxins that can get into the air, into the drinking water, et cetera. And I do think it is important to acknowledge that the unsafe disposal of coal ash is something we have to take on. And the worry with the administration at the moment is that the attempt to gut the EPA and indiscriminately fire all kinds of people—I mean, part of what government does is mitigate risk, right? That is why we invest collectively, so that we can do all kinds of things, knowing the Government is going to help mitigate risk. And that is what my line of questions are as it relates to this conversation.

Ms. Evans, the regulatory standards—which ones should be strengthened or introduced to ensure that the coal ash is managed safely?

Ms. EVANS. It is essential that the coal ash rule complies with the statute. And the statute, under subtitle D, nonhazardous waste, requires that there be no reasonable probability of harm. So the CCR rule in 2015 and 2024 generally followed those constraints. I think the problem is not, right now, do we need additional rules. Certainly, we can still close some gaps. The problem is the administration and enforcement——

Mr. LANDSMAN. Yes.

Ms. EVANS [continuing]. Of the current CCR rule.

Mr. LANDSMAN. So to that end, what are the most responsible strategies to ensure—or prevent the contamination of air and water? I mean, what would be the top two or three that matter most?

Ms. EVANS. Yes. And, you know, that is easy. That is a question that could have been answered 50 years ago, 70 years ago. When you have a waste that releases its toxins when it is in contact with water, you put it in a safe, dry place above groundwater, lined. Since all landfills eventually leak, you want a leak detection system, and you want to be monitoring that for all of the contaminants that are in the waste. And when you find any leaks, you want it to be—to immediately address them.

So, you know, this is not rocket science. We don't need new technology to keep communities safe from coal ash. We just need the utilities to follow the rules that we have already got on the books. And we are not seeing that happen.

Mr. LANDSMAN. Super helpful. That, to me, is also a conversation we should have, which is, you know, where are we doing that? Because it is very straightforward in terms of, you know, the dry space, the lined—you know, lining that contaminant and then having basic technology, and making sure that the disposal is done in this way.

So as we move forward, I hope that is also part of the conversation. Maybe we separate them out so we can talk about the benefits separately from just making sure that we are protecting people because it does—it is very difficult to get to a conversation just about the benefits if there are remaining questions around making sure people aren't dealing with contaminated air, water. And obviously we would make—we would be making this a lot easier if there wasn't this attack at the EPA.

Yes, did you have—I have 38 seconds, so they are yours.

Ms. EVANS. Yes. Let me make an important correction to my answer, is that you asked what else does EPA need to do. They absolutely need to prohibit the use of structural fill or fill—or use of coal ash as dirt. And I apologize that I forgot to say that.

Mr. LANDSMAN. That is OK. Thank you.

Ms. EVANS. Thank you.

Mr. LANDSMAN. I yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the gentleman from Colorado, Mr. Evans, for his 5 minutes of questioning.

Mr. EVANS. Thank you, of course, to the Chair, to the ranking member, and to our witnesses for coming today.

First question to you, Mr. Adams. How much concrete does the United States use versus some of our global competitors, specifically China, on an annual basis?

Mr. ADAMS. How much concrete in terms of cubic yards?

Mr. EVANS. Yes, in cubic yards or however you want—

Mr. ADAMS. We are about, I believe, about one-tenth of what China uses.

Mr. EVANS. Yes, so I have heard about the same, anywhere from one-tenth to one-20th of what China uses.

And can you just speak very briefly to the environmental standards that are in place around how we produce and use concrete versus how China is producing and using concrete at 10 to 20 times the scale we are?

Mr. ADAMS. I have no knowledge of the Chinese market. I can only speak to the U.S. market. The U.S. market is very much committed these days to carbon reduction, to sustainable business practices that include use of these kinds of materials like coal ash and things like that, to reducing the amount of Portland cement, which is very intensive in terms of CO_2 emissions.

So the cement industry and the concrete industry both have roadmaps which are very, very similar to accomplish this carbon reduction objective that they have. And in order to do that, an important part of those roadmaps is the increased use of materials

like coal ash and reducing the amount of Portland cement, which is very CO_2 intensive, and causing the carbon footprint of concrete construction to come down. We are very committed to that. I don't see there is any indication that I read anywhere that the Chinese market is interested in that at all.

Mr. EVANS. Yes, and thank you for that. And I would tend to agree with that, you know. So I represent Colorado's 8th Congressional District, north Denver suburbs up to Greeley, Colorado, one of the fastest-growing areas in the country. And so we have a massive footprint in our area dedicated to producing the raw materials that build Colorado, to include a lot of concrete and cement production in the area. And I know that our producers are working as hard as they can because we all want clean air, clean land, and clean water.

And we also have the technology these days to see where a lot of the pollution is coming from in my area. Double-digit percentages of pollution along the Colorado front range are coming from China. And the fact is if we don't produce things in the United States, it is not like we get suddenly clean air, clean land, clean water. That production is going to go other places, and we are still going to inherit the pollution of that.

So thank you for all of the work that the concrete association has done to make sure that we are being good environmental stewards here in the United States, recognizing that we are not in a vacuum, that there are other competitors around the world who do not have the same commitment to environmental or social responsibility that we have in the United States.

And so I would like to hear you talk a little bit more about specifically the topic before us today, using things like coal ash or fly ash in the production of cement and then ultimately concrete. Particularly for my area, that is a major concern because of the housing shortage that we have. We know that houses need foundations. Foundations are typically built out of cement and concrete.

So can you talk about the process to bring that ash to the market and how cement and concrete producers are in a position to environmentally and socially responsibly use some of these byproducts of energy production in the United States with, you know, keeping in the back of our mind that our global competitors don't have the same commitment to environmental and social responsibility that we have?

Mr. ADAMS. Great question. I will try to answer it very quickly here.

The industry is working hard on carbon reduction by using one of the most important things, using supplementary cementitious materials, of which coal ash is one. These are raw materials which enhance the performance of cement that is added to concrete. Currently, in terms of fly ash and coal ash, the usage rate around the U.S. is about 15 percent of the total cementitious material put into concrete.

In order to meet the goals of these roadmaps that I have referred to, experts in this area estimate that we are going to have to get the supplementary cementitious material content from 15 percent to at least 35 percent. So that means we are going to have to come up with new sources of materials to add to concrete, to reduce car-

bon—the carbon footprint of our construction. And that is going to mean we are going to need things like more harvesting, a lot more harvesting, to feed the market with these materials that are going to allow them to make that goal a reality.

Mr. EVANS. 20 seconds. Anything else you would like to add?

Mr. ADAMS. I would say that in terms of helping the industry, finding ways to support beneficial use by harvesting the material, adjusting deadlines for closure of facilities and that kind of thing that are already operating, harvesting operations, would be greatly helpful instead of causing these facilities to close prematurely, leaving material in those landfills and ponds that could be removed and put into concrete and real beneficial use.

Mr. EVANS. Thank you. Yield back.

Mr. GRIFFITH. The gentleman yields back. I now recognize the gentleman from Louisiana, Mr. Carter, for his 5 minutes of questioning.

Mr. CARTER OF LOUISIANA. Thank you, Mr. Chairman. And thank you to all of our witnesses for being here today.

I represent a district in Louisiana where families live in the shadow of aging industrial facilities. And I know when we talk about coal ash, we are talking about more than just byproducts. We are talking about public health. Coal ash is a radioactive waste product, and exposure has been shown to raise the risk of cancer and other health problems.

And yet, what is strikingly absent from most of today's testimony is any serious discussion about the health and safety of the communities living near coal power plants and facilities that use coal ash. We cannot ignore the human cost of these so-called beneficial uses.

We should focus on reducing pollution at the source by accelerating the transition to cleaner, cheaper, and more sustainable energy, but instead the Trump administration is pushing policies that force aging, inefficient coal plants to continue operating regardless of the cost or the public health issues.

If you want to talk about beneficial use, let's talk about the benefit of clean air, safe water, and lower utility bills. We owe it to our constituents to pursue an energy policy that protects both their health, their wallets, and their families' growth.

Ms. Evans, would you agree that low-income communities of color are often disproportionately impacted by coal ash ponds?

Ms. EVANS. Absolutely.

Mr. CARTER OF LOUISIANA. Why should the Federal Government have strong rules if States have their own coal ash management programs?

Ms. EVANS. Well, States' coal ash management programs have been shown to be ineffective and inadequate.

Mr. CARTER OF LOUISIANA. How does the Trump administration's recent push to eliminate State and Tribal Assistance Grants impact the ability of States to maintain or take delegated programs like coal ash management?

Ms. EVANS. I think that Mr. Glatt would agree that a good State coal ash program needs resources. So starving States of resources needed to conduct inspections, launch enforcement actions, do the technical evaluations needed in any oversight of disposal, you know, requires trained professionals and lots of resources.

Mr. CARTER OF LOUISIANA. Thank you.

Mr. Adams, in your testimony, you state that coal ash is basically similar to regular soil.

Quick question: Would you move your family near a coal ash detention pond? Would you drink groundwater that was impacted by these ponds?

Mr. ADAMS. No, just as people would not move their family near a municipal solid waste facility. You know, it is not where you would move your family. In fact, in many cases——

Mr. CARTER OF LOUISIANA. Why not? It is not safe? Is it not safe?

Mr. ADAMS. It is just unattractive.

Mr. CARTER OF LOUISIANA. It is unattractive. But many people are forced to be in that situation, because they are forced to because of their economies, because of their situations, because of their economic—or the colors of their skin.

So let's be real and let's be honest about where we are. How would you feel—would you feel comfortable with coal ash being used to fill, to use fill in your backyard?

Mr. ADAMS. It depends on what the application was and what——

Mr. CARTER OF LOUISIANA. Let's say you were planting vegetables.

Mr. ADAMS. No, no, you can't say all——

Mr. CARTER OF LOUISIANA. Yes, I can.

Mr. ADAMS. No, you cannot.

Mr. CARTER OF LOUISIANA. It is my time. Sir, reclaiming my time. I am reclaiming my time.

Mr. GRIFFITH. The gentleman has reclaimed his time. You have to stop answering.

Mr. CARTER OF LOUISIANA. I am asking you a question, sir, and you can answer it or you can choose not to.

Would you use coal ash to plant vegetables in your backyard, yes or no?

Mr. ADAMS. No.

Mr. CARTER OF LOUISIANA. OK, thank you.

I find it hard to believe that we know what we know about the impacts of our health, our home values, living near these facilities.

Burning coal releases harmful pollutants in the air, including particulate matter, nitrogen oxide, sulfide dioxide, and heavy materials like mercury. These pollutants can lead to respiratory illness, heart disease, neurological damage, and even premature death.

Unlined ponds allow contaminants to leach into groundwater and drinking water, with the ash sometimes becoming airborne as toxic dust. Aging or deficient coal ash impoundments can fail structurally, resulting in catastrophic floods of toxic sludge entering neighboring communities.

America needs to move forward with clean power for the sake of our communities and future generations instead of looking for excuses to cling to the 19th century technologies.

Mr. Adams, surely you are aware that EPA has updated its 2024 study, yet your testimony, you cite findings from a 2000 and a 2012 report. The 2024 report assesses and amplifies the harms of coal ash.

My time is expired, and I yield back.

Mr. GRIFFITH. The gentleman yields back.

I now recognize the gentlelady from Iowa, Mrs. Miller-Meeks, for 5 minutes of questioning.

Mrs. MILLER-MEEKS. Thank you so much, Mr. Chairman.

And I want to thank all of our witnesses for being here today.

As a Representative from Iowa, I understand the critical importance of striking the right balance between protecting our natural resources and promoting practical, science-based solutions to manage industrial byproducts, coal ash being a prime example.

So today I am looking forward to a productive discussion on how we can continue regulating coal ash safely and effectively while supporting innovation and economic growth.

Mr. Adams, the 2024 legacy rule defines CCR management units broadly enough to potentially regulate foundational materials under buildings, roads, and even rail spurs.

Has ACAA documented examples of beneficial use projects in which this overbroad definition created legal or financial uncertainty, perhaps delaying or canceling investment?

Mr. ADAMS. We have not done specific detailing of the kind of information that you are looking for. We are working on some things to that effect, but we do know that basically what we are looking at is some beneficial uses are OK inside the fence line of the power plant, but now they want to make them not OK outside the fence line of the power plant. What is the difference?

These are the kinds of flaws that are in the 2024 rule in addition to that risk assessment that need to be fixed and need to be looked at more closely to make the rule effective and do the thing it is supposed to do.

Mrs. MILLER-MEEKS. Rather than arbitrary and capricious, I am insinuating from your comment.

Mr. Glatt, you testified that Federal reviewers submitted recommendations, such as well placements, without visiting North Dakota sites. In your view, what are the practical consequences of remote, one-size-fits-all Federal assessments that ignore site-specific geology, design, or hydrology?

Mr. GLATT. Well, without looking at the full site and having a good appreciation of all those things you just indicated, you can come up with erroneous conclusion or bad design.

Mrs. MILLER-MEEKS. Thank you.

Ms. Freeark, AEPCO sells over 90 percent of its fly ash for beneficial reuse, reducing the amount of coal ash needing disposal. However, the EPA's new definition of CCR management units appears to threaten the viability of such practices by expanding what qualifies as a regulated unit.

Could you elaborate on how this undermines the incentive to beneficially reuse coal ash and whether the EPA provided any justification in its risk analysis for this change?

Ms. FREEARK. Congresswoman, for our facility, even under the legacy rule, we would still be able to sell the fly ash. As I mentioned, we only have one remaining coal unit that burns coal, so our coal ash obviously over time has decreased. But we do everything that we can to get as much of the fly ash into spec for the beneficial reuse, which is adjacent to our facility.

So nothing is handled on the ground. It is all sluiced over there or the access is sluiced to our ponds. The material that they take is sent over via pipe to their facility. So nothing is ever touching the ground. It goes straight to silos, and then shipped off site.

Mrs. MILLER-MEEKS. Mr. Glatt, how does your State's periodic product testing regime ensure that beneficial use of coal ash doesn't pose a risk to soil, water, or public health, particularly in rural areas where ash might be used for haul roads or land reclamation?

Mr. GLATT. We take a look at all the different ash characteristics, make sure it doesn't leach the chemicals, the compounds that were of concern.

We also look at the radioactivity of the material to make sure it doesn't impart a negative impact that way. Once it passes all those tests being within standards, then the product is deemed safe for beneficial use.

Mrs. MILLER-MEEKS. And Mr. Adams, you mentioned that the EPA's coal ash risk assessment used to justify the 2024 rule is significantly flawed.

Could you describe the primary errors or assumptions that concern your association?

Mr. ADAMS. I think we can just start with the arsenic claim, that the arsenic is much more intense than we previously thought. I didn't see any science there to support that. It is just a claim.

And we can go through the rule and come up with others in there that are just as questionable. However, when you start right there, you really have to wonder about if science has been applied to all the others.

Mrs. MILLER-MEEKS. Thank you very much.

I yield back.

Mr. GRIFFITH. The gentlelady yields back.

I now recognize the gentlelady from California, Ms. Barragán.

Ms. BARRAGÁN. Thank you, Mr. Chairman.

When I saw the title of the hearing, I thought it was a mistake. I looked at it and it said "beneficial use opportunities for coal ash," as if this toxic waste is a gift to the hundreds of communities with polluted groundwater from coal ash landfills.

The Energy and Commerce Committee, here in the Environmental Subcommittee, is tasked with protecting clean air and water. Instead, Republicans want to highlight how we can promote the use of coal ash.

Here is what I have believed and seen the reality to be, is over 90 percent of monitored coal ash sites contaminate groundwater, and enforcement has been weak. And communities that live near these sites often are low-income or they are communities of color, and they bear the brunt of increased health impacts.

Ms. Evans, I want to follow up on a conversation my colleague started but ran out of time on. And that is, you know, one of the witnesses next to you has cited the outdated EPA assessment that coal ash is not hazardous.

Yet, a 2024 EPA assessment studied coal ash that is mixed with clean surface soil in residential areas and found that even a small amount of coal ash can result in elevated cancer risk.

Can you speak to the health risk found in this assessment?

Ms. EVANS. Yes. And I think that perhaps the objections are both to the findings regarding radioactivity and arsenic. Regarding arsenic, the EPA did a full new toxicogical assessment of arsenic, which involves, you know, through peer review and through many years, the assessment of new scientific studies.

So it is not that arsenic has changed. It is that the medical evidence of development of cancer, development of heart disease has been recognized, and it has been recognized to occur at much lower levels of exposure.

So, in fact, the conclusions of the EPA new IRA study was that the cancer potency of arsenic is 21 times higher than previously acknowledged, and that heart disease, which was not acknowledged to be an impact of arsenic exposure, is evident by the medical evidence. So these are science-based conclusions.

As for radioactivity, which was extremely troubling in the EPA final risk assessment, you are right that EPA looked at the average level of radioactivity in coal ash. They looked at what does that mean when that radioactivity is used to fill at differing concentrations.

So they weren't even looking at what I see routinely happening in the field, is that you use coal ash as a substitute for dirt, not that you are mixing dirt with the coal ash. You know, I think the point of these companies is to use as much coal ash as possible.

But in any case, the risk of—and one in 10,000 cancers is sort of the hallmark limit whereby EPA gets very concerned and starts to regulate. That has been exceeded by coal ash mixed with soil at 11 percent when you have a certain amount of radioactivity in the ash, and then it goes down from there.

But 11 percent of coal ash in the structural fill, you know, is very unusual. It is usually much more. So it was a very concerning conclusions on the part of the EPA as to the safety of coal ash used as fill.

Ms. BARRAGÁN. And is it fair for the EPA to update their science and understanding of this risk over 10 years?

Ms. EVANS. I am sorry?

Ms. BARRAGÁN. Would it be fair for the EPA to update their science and their understanding of the risk over 10 years?

Ms. EVANS. Absolutely. And EPA has been doing that routinely. I don't know what the—well, I know what the impact of Trump's decimating the Office of Research and Development. We won't have these updates.

But it is absolutely critical to keep looking at this as the medical evidence indicates things are either less or more dangerous.

Ms. BARRAGÁN. Thank you. You know, when constituents watch these hearings and they hear a witness say something like, "Well, coal ash is not toxic," that can translate to them as, "Oh, this isn't harmful for me. Oh, this is actually OK for me."

Yet the EPA's own website—why does EPA regulate coal ash? It says, "Coal ash contains contaminants like mercury, cadmium, and arsenic. Without proper management, these contaminants can pollute waterways, groundwater, drinking water, and the air."

So I think if a constituent would read that would say, "Hold on a second. Actually, this is something that is going to cause me

harm." So it is concerning when we have statements like that made, and then they are misinterpreted from constituents.

There is clear evidence that there is harm in this, and that is why there is a need to regulate. And it is unfortunate we are not talking about more of the harms as opposed to how there is beneficial use, as if to suggest we should burn more to get more coal ash.

Thank you, and I yield back.

Ms. EVANS. Absolutely.

Mr. GRIFFITH. The gentlelady yields back.

I now recognize the gentleman from Florida, Mr. Soto, for his 5 minutes of questioning.

Mr. SOTO. Thank you, Mr. Chairman.

You know, yesterday we saw legislation to keep unnecessary dirty coal plants online. So the committee got to have a wonderful, comprehensive update on the massive expansions we have seen on solar, wind, hydro, and finally seeing some improvements on nuclear as well. Of course, the natural gas, a key bridge fuel that we will see for the foreseeable future. And that is most of the makeup in central Florida.

So there is no need to keep open aging coal plants when cleaner fuels are available. And it is not just about the air pollution. We heard about it today. And it is not just about climate change, which are two compelling reasons.

It is about the coal ash, 6.1 million tons of it in Florida, and then 800 tons of it produced every day in my family's native island of Puerto Rico. These are things that we pay close attention to.

You look at the kilowatt hours. Solar, 6 to 10 cents a kilowatt hour; nuclear, 3 to 10 cents a kilowatt hour; natural gas, 6.5 cents per kilowatt hour; coal, 14 cents, because of the carbon capture, the storage, all these costs associated with it.

And that is why a lot of us are compelled to help stop the bleeding, to make sure we keep the Inflation Reduction Act, which some of these things are done away with in the One Big Ugly Bill.

And so it would be great to hear from Ms. Evans. You know, we see some of these systems, leachate collection systems that aren't there, the landfills that are unlined.

What are the true costs of coal ash that isn't contained for a community?

Ms. EVANS. The cost can be extremely high. You look at the town of Pines, which had a partially unlined landfill. Their entire groundwater was contaminated. The town became a Superfund site.

I am sure no one can sell or can't get the right price for their house in Pines. And they had a double whammy in that coal ash was used as fill throughout the town, in their backyards and public playgrounds. And so they have contamination throughout the town. The town was declared a Superfund site in 2001, and 24 years later they still have not finished the cleanup.

So if you are talking about cost to a small community, you know, that tears at the very fabric, you know, of their health, their economy, and their well-being.

Mr. SOTO. And we see in central Florida, we are working with the Orlando Utility Commission to retire their last coal plant. They

have natural gas plants. They are boosting solar. They are looking to also buy nuclear generation that is being invested in. And so we see how we could get beyond this, but then we are talking about literally millions of tons of coal ash that is still there.

Now, Mr. Adams, I certainly agree with you that we need to do something with a lot of these millions of tons of coal ash left. Some of it will be that we have to store it, but I see in my own district fly ash being used by Cemex to help with road building. It is not the base material, but it does help, and they sure use a lot of it.

And then it has been mentioned a little bit already, rare earth metals, lanthanide, yttrium, scandium, and I am sure a few other very complicated metals that are hard to pronounce. And electronics, superconductors, lasers, aluminum alloys for aerospace and sporting goods.

So if we were to use some of this coal ash—and I know it is already starting to happen—for rare earth metals, what do you think should be the best practices as we do that?

Mr. ADAMS. I am not familiar with what the extraction technologies are and then the processing. You have got three levels here. You have got the mining of the material, where you are going to find the resource, and when you find it, how do you extract it to the condition?

Mr. SOTO. I mean through coal ash——

Mr. ADAMS. Through coal ash——

Mr. SOTO [continuing]. Metals in coal ash.

Mr. ADAMS. It is finding the materials that are rich in these particular elements. And on a periodic table, it is easy to find them, 57 through 71. That is all you got to remember, you don't have to pronounce them.

But in terms of coal ash, it is still being studied closely. As I mentioned earlier in the hearing, no one has found a good extraction technology yet that doesn't give us the rare earth elements we are looking for without creating another problem, another big problem.

So the research continues, and there are people out there who think they may have an answer. I haven't seen it yet.

Mr. SOTO. Well, you may have bipartisan support for efforts like this, so I suggest you all keep working on it. And with the example, fly ash, that is an example of one that is being used right now in the district.

Thank you, and I yield back.

Mr. GRIFFITH. The gentleman yields back.

Seeing no further Members to ask questions, I would like to thank our witnesses for being here today.

Members may have additional questions for you. I remind the Members that they have 10 business days to submit additional questions for the record.

And I would ask our witnesses to do their best to submit responses within 10 days of receipt of the questions from the Members. And I appreciate that.

I ask unanimous consent to insert in the record the documents included on the staff hearing documents list, including some documents from Mr. Palmer that were added during the hearing.

[The information appears at the conclusion of the hearing.]

Mr. GRIFFITH. Without objection, that will be the order.
And, without objection, the subcommittee is adjourned.
[Whereupon, at 12:33 p.m., the subcommittee was adjourned.]
[Material submitted for inclusion in the record follows:]

U.S. House Committee on Energy and Commerce
Subcommittee on Environment
"A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash."
Documents for the Record
June 26, 2025

1. A letter from the American Cement Association addressed to Chairman Guthrie, Ranking Member Pallone, Chairman Griffith, and Ranking Member Tonko, submitted by the Majority.
2. Testimony of James Kenney to the U.S. House Committee on Appropriations, Subcommittee on Interior, Environment, and Related Agencies, submitted by Rep. Tonko.
3. An article from Inside EPA entitled, "North Dakota DEQ Chief Eager to Work with EPA Amid Budget Cut Worry," submitted by Rep. Tonko.
4. An article from the Paducah Sun entitled, "It's American ingenuity: TVA transforms McCracken coal ash site into innovative solar farm," submitted by the Majority.
5. A fact sheet from the Tennessee Valley Authority (TVA) entitled, "Burden vs. Benefit: Optimizing CCR Regulation to Unleash American Energy," submitted by the Majority.
6. A fact sheet from TVA entitled, "TVA Draft Programmatic Environmental Assessment for Beneficiation Facilities," submitted by the Majority.
7. An article from the New York Times entitled, "How Black Lung Came Roaring Back to Coal Country," submitted by the Minority.
8. A report from the Environmental Protection Agency entitled, "Risk Assessment of Coal Combustion Residuals: Legacy Impoundments and CCR Management Units," submitted by the Minority.
9. An article from the Environmental Protection Agency entitled "Radioactive Wastes From Coal-fired Power Plants," submitted by the Majority.
10. A letter from the American Public Power Association, addressed to Chairman Guthrie, Ranking Member Pallone, Chairman Griffith, and Ranking Member Tonko, submitted by the Majority.

[1] The report has been retained in committee files and is included in the Documents for the Record at https://docs.house.gov/meetings/IF/IF18/20250626/118432/HHRG-119-IF18-20250626-SD767.pdf.

American Cement Association
200 Massachusetts Ave NW, Suite 200
Washington D.C., 20001
202.408.9494
www.cement.org

June 26, 2025

The Honorable Brett Guthrie
Chair
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20150

The Honorable Frank Pallone
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20150

The Honorable Morgan Griffith
Chair
Committee on Energy and Commerce
Subcommittee on Environment
U.S. House of Representatives

The Honorable Paul Tonko
Ranking Member
Committee on Energy and Commerce
Subcommittee on Environment
U.S. House of Representatives

Dear Chair Guthrie, Ranking Member Pallone, Chair Griffith, and Ranking Member Tonko:

On behalf of the American Cement Association (ACA), I write in support of your hearing, *A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash*.

Cement is essential to building and maintaining the nation's infrastructure – from highways and bridges to airports, mass transit systems, and water facilities. Our products enhance energy efficiency in buildings, improve fuel efficiency on roads, and contribute to the resilience of critical infrastructure. Cement and concrete manufacturing supports over 600,000 American jobs and contributes more than $100 billion to the U.S. economy annually.

Over the past decade, legislation and regulation have paved the way for limited use of coal combustion residuals (CCRs), but significant opportunities remain to promote innovation and the industriousness of cement manufacturers to maximize their value. As you examine legacy CCR impoundments, we urge Congress and the Environmental Protection Agency (EPA) to promote the responsible beneficial use of CCRs—an approach that protects public health and the environment while strengthening domestic cement manufacturing and capturing the associated economic benefits.

Coal Combustion Residuals in Cement

ACA supports the responsible beneficial reuse of CCRs that have historically been disposed of at impoundments and landfills. CCRs are chemically stable and decarbonated. When used as kiln feedstock, they displace virgin raw materials like limestone and reduce emissions from cement production.

Further, CCRs enhance the strength and durability of cement. The U.S. Department of Transportation and many state DOTs recognize CCRs as essential supplementary cementitious materials, particularly in concrete for critical infrastructure. Coal ash has unique properties that drives a chemical reaction with cement during the hardening process, ultimately allowing for concrete production that is similarly dense, less porous, and more resistant to erosion. As the industry works to expand domestic production to meet our nation's infrastructure and energy dominance goals, continued access to CCRs is vital.

Beneficial Use Policy

To that end, the ACA is concerned by the existing regulatory framework that EPA finalized in May 2024, following a flawed rulemaking process that relied on inadequate evaluations and risk assessments.

Specifically, the EPA did not properly evaluate the environmental and economic advantages of removing and reusing CCRs for industrial applications like cement manufacturing. The EPA further failed to provide a reasonable explanation of its decision as to why the rule does not provide flexibility to allow for beneficial use. By restricting access to harvestable CCRs, the rule limits the industry's ability to enhance energy security, reduce emissions, reuse industrial byproducts, and eliminate legacy impoundments altogether.

EPA's rule misses the mark on creating a win-win scenario whereby material is removed from environmentally-sensitive sites *and* that same material provides sustainable and domestically sourced raw materials to industry. EPA could have incorporated flexibility and oversight mechanisms, such as groundwater monitoring, to allow safe removal and beneficial use. Instead, the agency's failure to evaluate this option renders the rule both short-sighted and, arguably, arbitrary and capricious under administrative law standards.

Lastly, EPA seemed to have also neglected to consider that CCRs can cause an increase in environmental contamination far into the future. America's local communities will bear the burden of this overly restrictive rule if industry were to be hamstrung in its endeavor to better mitigate, or even eliminate, such risks. Ultimately, EPA's rule will fail to meet the Resource Conservation and Recovery Act (RCRA)'s broad goal to protect groundwater if it restricts the availability and beneficial use of CCRs.

Conclusion

EPA should revise its policies to support responsible CCR reuse, especially from legacy sites. This approach would allow for continued oversight while promoting environmental stewardship, resource efficiency, and industrial competitiveness. Providing sufficient time prior to final closure of impoundments would enable safe, beneficial use of CCRs, helping to meet energy needs, emissions goals, and infrastructure demands.

We appreciate the Committee's efforts to examine this issue. We encourage bipartisan support for pragmatic, economically-viable solutions that tackle the complexities of coal ash use and storage while simultaneously protecting human health, advancing sustainability, and strengthening domestic manufacturing. Thank you for your consideration of this letter. If you have any questions, please contact me at soneill@cement.org or (202)719-1974.

Sincerely,



Sean O'Neill
Senior Vice President, Government Affairs
American Cement Association

Testimony of James Kenney,
Cabinet Secretary, New Mexico Environment Department
and President, Environmental Council of the States,
to the U.S. House Committee on Appropriations,
Subcommittee on Interior, Environment, & Related Agencies
Addressing the FY26 Budget Request for the U.S. Environmental Protection Agency

FY26 Funding to States. The Environmental Council of the States (ECOS) – the national nonprofit, nonpartisan association of state, territorial, and District of Columbia environmental agency leaders (hereinafter referred to as "states") – appreciates the opportunity to submit written testimony on the Fiscal Year 2026 (FY26) U.S. Environmental Protection Agency (EPA) budget. For FY26, states request robust funding for state-led implementation of the nation's environmental programs, including not less than $683.097M for four specific Categorical Grant programs using FY24 enacted levels as the minimum funding amount – **State and local air quality management (Sec. 103, 105, and 106) at $235.922M, Resource Recovery and Hazardous Waste Grants at $105.5M (FY20 levels for hazardous waste and FY24 levels for coal combustion residuals or CCR and recycling), Water Pollution Control (Sec. 106) at $225.685M, and Public Water System Supervision (PWSS) at $115.99M.** These funds directly support the implementation of our nation's environmental programs at the state-level of government. Moreover, this funding level improves and sustains cooperative federalism by ensuring decisions related to state economies and environmental issues occur at the state level of government as opposed to the federal level. States support funding above the FY24 minimum levels for the four Categorical Grants – essentially state implementation grants – to reflect increased business, municipal, and community needs. For example, ensuring safe drinking water from emerging contaminants like per- and polyfluoroalkyl substances (PFAS) while hardening our drinking water infrastructure from cybersecurity threats demands a PWSS grant investment of a greater amount, such as **$200M**. In addition, states request appropriations at the fully authorized amount of **$3.25B each for the Clean Water (CW) and Drinking Water (DW) State Revolving Funds (SRFs)**. With such funding, states can increase investment in municipal infrastructure and leverage private sector investments to address the pressing issues impacting their economies and environment.

Critical Funding Juncture. States carry out more than 90% of the nation's federal environmental laws in communities around the United States, and states, state legislatures, and the business community depend on Congress to fund our efforts through grants and partnerships with EPA, including with its science labs and research and development functions. Dramatic budget cuts to EPA that are passed along to states will incapacitate state environmental programs while creating massive uncertainty for state legislatures and businesses across the United States. If that occurs, states, in cooperation with their legislatures, would need to evaluate the fiscal impact of passing these program implementation costs to their industry or taxpayers. Candidly, states may elect to terminate primacy, delegation, or authorization agreements and return full program

implementation to EPA. In addition, state primacy, delegation, or authorizations were approved by EPA and published in the Federal Register following public notice and comment. Such primacy, delegation, or authorization agreements are predicated on resource demonstrations that include a federal and state cost share. A reduction or elimination of the federal cost share will create implementation issues resulting in legal liabilities that may contribute to a state's decision to return a program to EPA for implementation within a state.

Cooperative Federalism Model. Our nation's environmental laws establish a process whereby Congress establishes the law, EPA sets national minimum standards for the designated pollutant or technology, and states implement these regulations through primacy, delegation, or authorization of federal programs to achieve the standards.

Congress established a required state match of federal funding, for instance requiring a 25% match of total project costs for the PWSS /drinking water and hazardous waste management programs, as well as a 40% or maintenance of effort match for Section 105 air pollution control programs. However, states invest funds far beyond the statutory requirements to meet the needs of businesses and our communities.

EPA's 18 categorical grants, funded by Congress through EPA to states support regulatory and competitive grant programs, have been stagnant or declined over the past 20 years. Categorical grants were funded at $1.143B in FY2003 and $1.106B in 2025 - $37M less in real dollars before inflation. Without sufficient federal funding, states may risk losing their primacy, delegation, or authorization agreements and be subject to increasing risks from third-party claims and petitions.

One of the most important things Congress can do for state constituencies is to provide increased federal funding directly to states. Through funding partnerships, states spend federal funding to deliver legally defensible permits that further invest in our communities, assure permits are being followed, conduct modeling to safeguard air and water quality, timely respond to natural disasters that impact our residents, and provide many other necessary services to boost local and national economies.

Meeting State Capacity Needs. As ECOS President, I issued a January 3, 2025 letter detailing top ECOS priorities. At a March 24, 2025 National Governors Association-ECOS Congressional Briefing on Environmental Protection, Idaho Department of Environmental Quality Director Jess Byrne noted, "Our state is working hard to support economic development but is having a hard time keeping up. A lack of funding to competitively compensate permit writers has resulted in significant turnover. It used to take an average of 89 days for an air quality permit to construct. Now, it takes 165 days for the same permit. We are working with our Governor, stakeholders, and legislature on additional funding, but our efforts will be undone if federal categorical grant funding is reduced."

The air is cleaner due to reductions in air emissions from regulated facilities, but this may also mean a reduction in fees collected based on tons emitted – essentially cutting funding

to state environmental agency programs as a result of their success. Core, ongoing program management does not end. States incur costs to implement new regulations or repeal existing ones and to communicate the implications with community members, businesses and their trade associations, and elected officials. The federal government must remain committed to implementing the laws Congress has passed so our communities can grow, and environmental and human health protections continue.

In addition to funding the named core categorical grants at levels not less than the enacted FY24 amounts, states continue to seek flexibility so that any increase in funding for State and Local Air Quality Management Categorical Grant be provided as CAA §103 awards to avoid match requirements and allow agencies that do not have sufficient matching general funds to still obtain grants. Reducing any unnecessary federal processes, such as administrative and reporting burdens on states, supports faster, better permits to facilitate economic growth while protecting public health and the environment.

Federal Programs. Currently, my state of New Mexico is pursuing becoming the 48th state to receive National Pollutant Discharge Elimination System (NPDES) authorization. My state fully understands the importance of federal funds when taking on a new federal program. Congress continues to signal its interest in state implementation of federal programs.

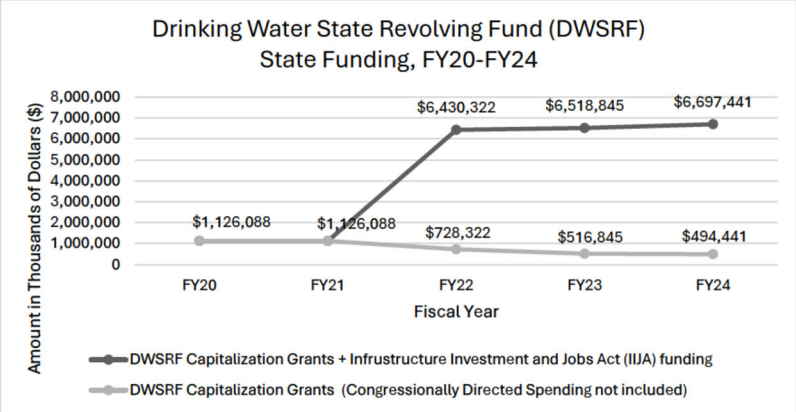
In FY21, Congress provided funding for CCR state program implementation. Congress passed the Save Our Seas 2.0 Act in December 2020 and the Infrastructure Investment and Jobs Act (IIJA) in November 2021, providing recycling infrastructure support through the Solid Waste Infrastructure for Recycling grant program. In FY24, Congress provided recycling infrastructure support through annual appropriations. In February 2025, Congress held a hearing to consider Underground Injection Control Class VI permitting for Carbon Capture, Utilization, and Storage and the potential for a new state authorized program. States appreciate and rely on new funding for new programs.

In FY24, the now-renamed Resource Recovery and Hazardous Waste Categorical Grant provided funding for CCR at $4M, Recycling at $5M, and Hazardous Waste program implementation at $92.5M – a drop to core state hazardous waste programs from $96.5M in FY20. If multiple programs are combined in a single Categorical Grant, states request that Congress provide adequate funding for each program and not at the expense of other grants. States request that Congress provide in FY26 not less than $96.5M – FY20 enacted funding level - for hazardous waste programs in addition to funding for CCR at $4M and recycling programs at $5M which are FY24 enacted levels.

Advancing Water and Energy Infrastructure. According to the Council of Infrastructure Financing Authorities, the subsidized loans offered by the CWSRF and DWSRF nationwide to build clean water and drinking water infrastructure can save communities up to 75% in interest payments. In 2022, the average interest rate was 1.25%, compared to market rates that exceeded 3% and are among the highest interest rates in decades. Lower interest rates

achieved through SRFs result in more affordable water rates, a more favorable platform for business development, and cleaner water.

IIJA SRF funding substantially increased federal investments for communities and for clean, affordable water for five years, ending in FY26. IIJA supplemental appropriations helped cover the across-the-board state capitalization grant cuts for most states due to Community Project Funding/ Congressionally Directed Spending (CPF/CDS). In FY24, CPF/CDS made up approximately half of the SRF appropriation, and a funding cliff looms after FY26 – or sooner – if Congress adjusts IIJA investments (see example chart on DWSRF state funding). States encourage Congress to support reauthorization of the CWSRF and DWSRF, which expire in 2026, and to support appropriations at authorized levels for FY26 of $3.25B each.



ECOS also continues to advocate that funding for CPF/CDS projects and project administration be kept separate from SRF funding. CPF/CDS funding should be additive, not decrease SRF funding, and allow for voluntary participation by states in its management.

INSIDEEPA.COM
an online news service from the publishers of Inside EPA

North Dakota DEQ Chief Eager To Work With EPA Amid Budget Cut Worry

June 16, 2025 Post

Dave Glatt, director of North Dakota's Department of Environmental Quality (DEQ), says he is happy to be working with the Trump EPA, which he expects will "let states run with a lot of things," though he continues to worry over the impact of dramatic proposed budget cuts from the agency for crucial state grant programs.

In a June 6 interview with *Inside EPA*, Glatt says he is extremely concerned about EPA's plan to slash state grant programs under Administrator Lee Zeldin's proposed budget, warning that the effort to zero out $1 billion in categorical grants and billions for water infrastructure will "have a very negative impact on the states," which do 90 percent of the work.

Even so, he sees a world of difference between the Trump and Biden EPAs, noting that he expects respect for state decisions from the first Trump term to carry over again. "I appreciated that. We have technical staff. We do the lion's share of the work in the field. We live here and know our own backyard. We still look to EPA for some guidance as a partner, a cooperative federalism partner."

Glatt was named DEQ chief in 2019 by then-North Dakota Gov. Doug Burgum (R), who is now Interior Secretary. Before that, he was chief of the environmental health section of the North Dakota Department of Health, a position he held since May 2002.

During the Biden administration, North Dakota sued EPA over many of its rules because, "they got too prescriptive" and were "trying to mandate states to take a certain path that didn't make sense, based on our knowledge of the state. And that's where the problems began," problems that were "manifested by challenges in court," that cost a lot of money.

Conversely, during the first few months of the Trump administration, Glatt is working with a completely different EPA. For example, the agency has already **approved the state's long-pending coal ash plan**.

It is also reconsidering its regional haze proposal, which the Biden administration partially disapproved because the state's "conclusion, at the end, was not what they thought it should be," according to Glatt.

The DEQ director says North Dakota has been trying to get its coal combustion residuals (CCR) program approved since 2002 and toward the end of the Biden administration a frustrated Glatt told EPA that it must either approve the plan or not, and if it were to issue a disapproval the state would sue, after years of hemming and hawing.

"And then, as soon as Trump got in, we got a phone call from his appointee saying, 'We looked at the program. It's good. We're going to move forward with approval.'"

Now, "I get the feeling that as long as we follow the law and the science, they'll approve it," he says.

Under Biden, "you got the feeling after a while that because you are a fossil fuel state, there was nothing we could do short of shutting down coal-fired power plants that could please the last administration," which acknowledged the state was in compliance with its federal requirements but wanted it to "do more."

"If we're in compliance, why do more? We have standards for a reason," Glatt argues.

'Too Far With Industry'

Additionally, during Trump 1.0 the state "had issues" with EPA "trying to go too far with industry, and we said no. The states have been pretty good about walking down the middle of the road and weathering the regulatory pendulums that

go back and forth. We stay in the middle and are consistent, and we made it clear to industry we're not changing because of the administration."

One example of tension in the first Trump term included when EPA tried to give too many concessions to the oil industry regarding spills. "And we said, 'No,' this is a state issue and we will handle it." After "very pointed discussions," EPA backed off, and industry was "appreciative of our approach because it means they don't have to guess."

So far during Trump 2.0, North Dakota has had minimal communications with EPA, which is "going through chaotic changes . . . and the dust really hasn't settled," Glatt says, adding this is true at both Region 8 and headquarters.

During the last administration, Glatt says headquarters made the "big decisions," while the region was often "stepped over."

On enforcement, Glatt is not worried that EPA plans to back off and **put far fewer resources** toward those efforts, noting that it should be "up to the state to decide what type of enforcement should be taken. We're fine with that. We have a very active enforcement program," with a different philosophy than the feds.

North Dakota wants companies to "get in compliance first and we'll see what the impact on the environment was, how bad noncompliance was, was it willful, was it an accident, who is impacted?"

In-state companies "self report at a pretty high level, and that is good." Some incidents are "no fault of their own. . . Things happen, so let's fix it."

'EPA Has To Change'

However, even as Glatt remains extremely concerned about Zeldin's effort to dramatically reduce state funding, he notes that even if Congress were to reinstate all of those proposed cuts, "EPA has to change. It has to interact with the states differently," along the lines of the "back-to-basics" approach Zeldin has touted.

He wants EPA to partner with states to deliver clean air, water and land without having a "top-down approach" and recognize that the agency "doesn't have all the answers. . . . If we have a cooperative relationship, things will be better. The last four years we were in 13 or 14 different lawsuits, spending millions of dollars on attorneys. Imagine if we could have used that money for environmental protection."

Glatt adds that individual EPA staffers are "nice and have good intentions," and that the political leaders have "shown some good steps forward," such as the planned approval of the state's long-pending CCR program. "But the rank-and-file are still waiting to see who is going to be here in six months, and that is what reorganization looks like. Once that settles, then we can get to the task of working on cooperative federalism, and I think we can."

The proposed dramatic reduction in EPA staff could also be a concern, depending on how personnel is reorganized. "The last several years we have not interacted with EPA that much unless it is them telling us what to do," he says.

Glatt is not opposed to a reorganization and staff reduction, noting, "I believe you have to punch reset sometimes and reorganize and sometimes have less staff." States do that all the time. "EPA needs to go through that and I think they'll do that and come out [just fine] on the other end." -- *Dawn Reeves* (**dreeves@iwpnews.com**)

250762

RELATED NEWS

- **Indiana DEM Chief Optimistic Congress Won't Cut EPA's State Grants**
- **States Emerge As Bulwark Against Trump's EPA Deregulatory Agenda**
- **ECOS Renews Warning On State Delegations Due To Trump EPA's FY26 Cuts**
- **Trump's Energy Agenda Shapes Downsizing, Restructuring Of EPA**
- **EPA Plans Major Shift In Economic Analysis To Align With Deregulatory Goals**

Inside EPA is a subscription-fee-based daily digital news service from Inside Washington Publishers.

SITE LICENSES

Economical site license packages are available to fit any size organization, from a few people at one location to company-wide access. For more information on how you can get greater access to Inside EPA.com for your office, contact Online Customer Service at 703-416-8505 or **iepa@iwpnews.com**.

STAY CONNECTED

© 2025. Inside Washington Publishers | **Contact Us**

'It's American ingenuity': TVA transforms McCracken coal ash site into innovative solar farm

- By CARLY DICK | The Sun CDICK@PADUCAHSUN.COM

  Jun 19, 2025



The Tennessee Valley Authority's solar project is under construction in McCracken County, with nearly 30,000 solar panels out of 240,000 already in place. It is expected to enter service in 2028.

A first-of-its kind solar field being built on a closed coal ash site at the Shawnee Fossil Plant in McCracken County will use innovative technology to create energy on land that would otherwise be unusable, officials with the Tennessee Valley Authority said Wednesday.

The field, called Project Phoenix, is under construction, with nearly 30,000 solar panels out of 240,000 already in place. It is expected to enter service in 2028.

TVA said Project Phoenix will meet its customers' growing demand for power while maximizing the company's assets, such as the decommissioned coal ash site.

"We can generate energy in a new way, but within the same footprint that we've occupied for decades," TVA Civil Projects Group General Manager for Strategy and Engineering Patrick Kiser said. "Part of that is capitalizing on being so close to the transmission infrastructure, so we have the plant here, and our switchyard for the plant there, and us being so close just reduces the cost that it takes for us to generate the power here and then get it on the bulk grid for distribution."

Kiser described the project as a product of American innovation, reclaiming unusable land for productivity.

"In this case, this is really the coalescence of some new technologies that allow us to make use of this landfill property that you really couldn't make much use of before," he said. "We have to maintain our regulatory requirements, but we have to do it in a way that's efficient for power production."

To maximize the solar field's energy production, TVA worked with its technology partners, who designed and developed a specialized racking system. The system allows for panels to be closer to the ground, while still receiving maximum sunlight. Other solar fields position panels at an angle and higher off of the ground to avoid shading, which reduces the number of panels that can fit in one area.

"The low profile allows us to have a high energy density there, right? That really kind of maximizes what you can generate from a smaller footprint," Kiser said.

The high-density array means the solar field will produce 1 megawatt per 3 acres, compared to other solar fields that average 1 megawatt every 10 acres. The 270-acre field will generate 100 megawatts of solar power — enough to power approximately 58,000 homes.

The coal ash site underneath the solar field is covered in synthetic turf, which TVA said minimizes groundwork costs, is lower maintenance than grass and allows TVA to continue to access the coal ash, which can be used for building materials.

"In the future, if a need arises…you could move it aside, cut the turf, roll it back, harvest for the purpose that you intend to, reshape it, roll it back, seal it back up and redeploy the solar," Kiser said.

Now that the coal ash site is closed, TVA is depositing its coal ash in a modern lined landfill on the other side of the Shawnee Fossil Plant. Kiser said the site has potential to become another solar field if desired.

“Its initial design from the start considered the long-term development of solar. So, whereas here we had to reshape the ground to optimize it for solar, we’ve kind of designed it to build it out as we go with the ash that the plant’s currently producing to optimize that solar whether we do it or not,” he explained.

Project Phoenix is a leading example of how the company could expand solar energy to its other power plants.

“We’re looking across our fleet for needs and the right fit and so we’re in the planning stages now, and as this project continues to advance and mature, and we get a better understanding, and we understand how that fits into our overall generation scheme for reliability, we’ll make those decisions,” Kiser said.

He said Project Phoenix positions TVA as a utility that is helping drive the solar industry forward.

“It’s American ingenuity. It’s American innovation that’s driving a new way of thinking and providing opportunity for us to expand the potential for solar development,” Kiser said.



Background

In 2015, the EPA issued the Coal Combustion Residuals (CCR) rule, which authorized two methods for closing a CCR unit based on site conditions, while confirming the classification of CCR as non-hazardous solid waste. EPA Administrators from both political parties acknowledged that closure methods should be determined by facility owners/operators to best meet environmental and structural standards.

The 2015 CCR Rule aimed to:

- Authorize units to Close In Place or Close by Removing/Relocating the CCR based on site conditions; The EPA acknowledged most units would close in place.
- Ensure closed CCR units would meet groundwater protection standards (GWPS).
- Ensure structural stability and public oversight.
- Honor a cooperative approach between the federal government and states, allowing states to set stricter rules for closing waste facilities (through 2016 WIIN Act).

EPA's New Rule: A Costly Shift in Policy

In 2022, the EPA for the first time stated that closure in place is prohibited when CCR is in contact with groundwater. This was seven years after the CCR rule had been in effect.

In 2024, the EPA introduced sweeping changes to CCR regulations and industry precedent interpretations, expanding regulations to historical ("legacy") CCR sites and other units which were previously excluded from regulation. For TVA, most of these newly regulated legacy sites have been safely regulated under state oversight well before the issuance of the Legacy CCR Rule.

In Contrast: Based on site-specific risk considerations, EPA routinely approves closure scenarios in hazardous and solid waste corrective action and cleanup, where waste is left in place in direct contact with groundwater and other media. CCR is the only self-implementing regulatory scheme that does not rely upon site-specific risk considerations driving closure decisions, stripping States of critical legal authority to make risk-based considerations when approving site-specific closure scenarios in their state.

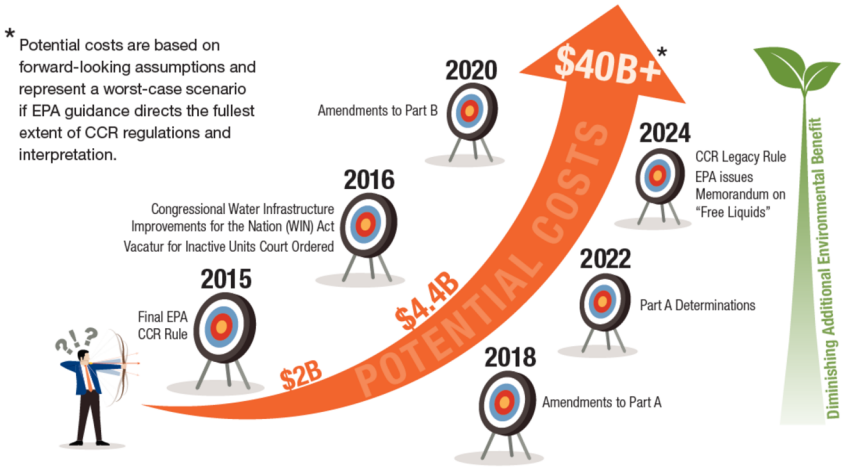
Why It Matters

Typically, site-specific risk drives cleanup and closure decisions for remediation of solid and hazardous waste. The 2015 CCR Rule interpretations and 2024 Legacy Rule depart from this approach, imposing a rigid, one-size-fits-all approach, without relying on critical science and data to inform a unit's closure standard. This new approach will have significant financial and operational consequences for utilities and the communities they serve by:

- **Forcing the re-opening of safely closed and monitored sites**.
- **Diverting critical investments** away from new energy infrastructure.
- **Multiplying closure compliance costs for utilities**, directly affecting electricity rates.
- **Providing negligible to no measurable additional improvements** to environmental or public health protections.
- **Drastically increasing truck traffic** on local roads hauling materials to landfills.
- **Extending project durations** and creating unnecessary disruption to communities.
- **Taking up limited municipal landfill space**.

The Impact of Evolving Regulations

EVOLVING REGULATIONS DRIVE UP COST WITH MINIMAL ENVIRONMENTAL IMPROVEMENTS



Graph is based on TVA facilities and may or may not be representative of other utility sites.



A Path to Build Tomorrow Out of Yesterday

OPPORTUNITY TO SUPPORT RISK REDUCTION AND UNLEASH AMERICAN ENERGY



- **Support cooperative federalism** with a framework for state regulatory autonomy.
- Utilize **site-specific data and science** to inform closure decisions through state implementation.
- Address multiple guidance documents (ex: liquids memo) regarding **CCR in contact with groundwater.**
- Provide **post-closure flexibility** supporting long term beneficial reuse and **Closure by Harvesting.**
- Exclude **historically closed CCR landfills** and **state-approved sites** from the legacy rule.
- Promote the **repurposing of closed CCR units** for new power generation.

TVA TENNESSEE VALLEY AUTHORITY

TVA Draft Programmatic Environmental Assessment for Beneficiation Facilities

April 2025

Background

The Tennessee Valley Authority (TVA) has released a draft Programmatic Environmental Assessment (PEA) to evaluate the potential environmental impacts of constructing and operating special processing facilities called Beneficiation Processing Facilities (BPFs) at one or more of our coal plant sites. This is part of TVA's innovative and industry-leading management of coal combustion residuals (CCR) and to further expand our beneficial reuse program.

This assessment complies with the National Environmental Policy Act (NEPA), which requires federal agencies to carefully consider environmental impacts before taking major actions. TVA's draft PEA outlines two possible paths forward—one where no action is taken, and one where CCR processing facilities are built and operated.

TVA beneficially reuses CCR as part of its mission of environmental stewardship to reduce the amount of material that must be stored and managed in a landfill. In the past five years, TVA has beneficially reused nearly 70% of the CCR produced.

What Is a Beneficiation Processing Facility?

A **Beneficiation Processing Facility** is a site where CCR materials—like fly ash, bottom ash, and gypsum—are processed so they can be reused rather than stored in landfills. There are two main types:

- **Thermal beneficiation** – uses heat to improve the quality of the material, often reducing carbon content so it can be used in concrete or other products.
- **Nonthermal beneficiation** – uses physical or chemical methods (not heat) to process CCR for reuse.

These facilities can transform previously unusable material into valuable resources for manufacturing industries.





Why Is This Important?

Environmental Benefits

Reusing CCR reduces the amount that needs to be stored in landfills.

Supports a Circular Economy

Beneficiation turns waste into usable materials for products like concrete, drywall, roofing shingles, and blasting abrasives.

Reduces the Need for Long-term Storage

TVA has about 236 million tons of CCR currently stored across its coal plants. Much of this material could be reused with proper processing.





What's Next?

Public Comment Period

A 30-day public comment period is to begin on **April 11, 2025**. TVA welcomes public input on the draft assessment during this time.

Sites Under Consideration

Ten TVA coal plants are included in the environmental review: Bull Run, Colbert, Cumberland, Gallatin, John Sevier, Johnsonville, Kingston, Paradise, Shawnee, and Widows Creek.

Next Steps

Following the public comment period, TVA will review feedback and determine how best to move forward with any site-specific plans for BPF construction and operation



Learn More

Visit **www.tva.com/NEPA** to learn more about the draft environmental assessment and how to submit your comments during the public comment period.

Visit **www.tva.com/coalash** to learn more about TVA's industry-leading coal ash management practices.

How Black Lung Came Roaring Back to Coal Country

Once nearly eradicated, the “old man’s disease” is back and suffocating younger miners. Federal cuts risk putting a solution further out of reach.

By Kate Morgan
Photographs by Jared Hamilton
Kate Morgan lives in Pennsylvania. She traveled across central Appalachia to visit rural clinics and miners’ homes and spoke with doctors, researchers and black lung patients for this story.

Published June 19, 2025 Updated June 20, 2025

Denver Brock and his son Aundra used to spend early mornings hunting rabbits in the wooded highlands of Harlan County, Ky. But they don’t get out there much these days. They both get too breathless trying to follow the baying hounds.

Instead, they tend a large garden alongside Denver Brock’s home. Even that can prove difficult, requiring them to work slowly and take frequent breaks.

“You get so dizzy,” Denver Brock said, “you can’t hardly stand up.”

The Brocks followed a long family tradition when they became Appalachian coal miners. For it, they both now have coal workers’ pneumoconiosis, a debilitating disease characterized by masses and scarred tissue in the chest, and better known by its colloquial name: black lung.

Mr. Brock, 73, wasn’t all that surprised when he was diagnosed in his mid-60s. In coal mining communities, black lung has long been considered an “old man’s disease,” one to be almost expected after enough years underground.

But his son was diagnosed much younger, at just 41. Like his father, he has progressive massive fibrosis, the most severe form of the disease. And today, at 48, he’s even sicker.

When he followed his father into mining, he thought he was entering a safer industry than the one prior generations had worked in. By the 1990s, safety standards and miner protections had nearly consigned the disease to history.

But now, black lung is back.

Modern miners are contracting it at younger ages and at rates not seen since the 1970s. For 20th-century miners, it could take decades to develop severe black lung. For men of Aundra Brock's generation, just a few years can be enough. Nationwide, one in 10 working miners is now estimated to have black lung. In the heart of the central Appalachian coal fields, it's one in five. Often, their disease is more severe, the progression faster. Doctors are seeing larger masses and more scarring in the lungs. Transplants, disability claims and deaths are all on the rise.

In an old industry, the reasons are modern. Centuries of extraction have altered the landscape, making the mountains more dangerous to mine, researchers say, and the men beneath them vulnerable not just to black lung, but to another lung disease called silicosis.

Experts say it should be possible to reverse the trend. "The entire thing about this whole disease is it's 100 percent preventable," said Dr. Robert Cohen, a pulmonologist at the University of Illinois Chicago who has studied the disease for decades. "It's not an act of God or an act of nature. It's not something out of our control. In a wealthy country with a wealthy economy, we should be able to do better."

From an industry perspective, miner health and safety "is always an area that can be improved," said Ashley Burke, a spokeswoman for the National Mining Association, which represents more than 250 companies. Ms. Burke said the association has supported mandatory screenings, research into technologies that could protect miners and an expedited government approval process for new equipment.

But as President Trump aims to revitalize the mining industry, doctors and researchers like Dr. Cohen also worry that federal government cuts are hampering efforts to find a solution.

A Shocking Revelation

When Dr. Brandon Crum, 50, opened his radiology clinic in Coal Run Village, Ky., in 2013, he didn't expect to encounter many grave cases of black lung.

Rates had fallen in the years after Congress passed the Coal Mine Health and Safety Act of 1969, which put limitations on acceptable levels of dust and established a federal program for black lung benefits. During the 1990s, the government documented only a few dozen cases, a low number even when accounting for the steep decline in mining jobs. Progressive massive fibrosis, the type of black lung the Brocks have, was nearly eradicated.

Dr. Crum, a Kentucky native, was well aware of the trends. Before attending medical school, he had worked at his family's mine as a teenager until the coal reserves ran out.

But quickly, Dr. Crum began seeing a shocking amount of progressive massive fibrosis: 60 cases over about 18 months. And the patients were often younger. One was just 44.

Progressive massive fibrosis occurs when dust settles in the lungs, and over time the resulting inflammation turns to hardened tissue. Eventually, patients can't get enough air to allow them to climb a set of stairs or carry groceries. Trying to eat, tying their shoes or taking a shower leaves them short of breath. Coughing can bring up mucus that might be black or bloody.

Medication can sometimes slow the disease's progression, but there is no cure. Hearts fail. People can struggle to breathe as their chests fill with fluid, a slow death by suffocation. By the time the lungs are examined at autopsy, they are often the color of coal.

In 2016, Dr. Crum attended a black lung conference in West Virginia in hopes of speaking to Scott Laney, an epidemiologist at the National Institute for Occupational Safety and Health and the chief scientist of the institute's health surveillance program for coal workers. Dr. Crum explained what he was seeing, but Dr. Laney was skeptical.

"I said, 'Slow down, cowboy,'" Dr. Laney said. "People call my desk every day and say, 'I've got this, I've got that,' and we investigate, and it's nothing."

But Dr. Crum was persuasive enough that Dr. Laney agreed to travel to the clinic in Coal Run from his home in Morgantown, W.Va. There, Dr. Laney viewed one X-ray after another of the worst black lung he had ever seen.

"I was sick to my stomach," he said. "I could not believe my eyes."

Around the same time, Dr. Cohen, the pulmonologist, noticed something was amiss, too. Since the late 1980s, Dr. Cohen's work has focused on mining safety issues. He watched as rates of black lung plunged, which was why he was so surprised when clinics began sending him a number of severe cases to review.

When Dr. Cohen and his colleagues analyzed the lung tissue of 13 miners from West Virginia, Kentucky and Pennsylvania, they were alarmed to find that only one had a classic coal-based form of black lung. The others all had a form of silicosis, a lung disease more closely associated with stonecutters.

Silicosis is caused by inhaling a mineral called crystalline silica that is typically found in sand, stone and concrete. It is a building block of the Appalachians. But in the air, it is dangerous, able to create much worse scarring in the lungs than coal dust alone. Breathing the coal and silica dust together can create a kind of hybrid disease that quickly leads to progressive massive fibrosis.

Scientists and miners alike have long understood the dangers of the rock dust. "You can tell there's silica when you see the flicker in it," said Charles Thacker, a 69-year-old former miner from Norton, Va., who now has black lung. "It looks like bits of glass flashing in the light. It's almost pretty. But that's what gets in your lungs and cuts you up."

For that reason, in 1974, the occupational health institute tried to limit miners' exposure to silica by recommending mine operators ensure that their workers weren't breathing more than 50 micrograms of silica per cubic meter of air. Instead, regulators set the exposure limit twice as high, where it remained for half a century.

Through further research, Dr. Cohen's group and others repeatedly showed that miners' lungs were filling with more silica than before. There were a number of factors that were likely to have increased silica exposure, including longer hours in the mines and the advent of powerful modern machinery that created finer silica dust that could easily penetrate the lungs.

But the experts settled on one reason as the most likely: Back when Denver Brock's career began in 1969, it was typical to be working along an underground wall of coal that reached above a miner's head. Today, many of those large coal deposits have been mined out of central Appalachia. The coal that remains is encased in thick layers of quartz and sandstone. Contemporary miners have to get through more rock, and when they drill, cut and blast it apart, that rock turns to dangerous crystalline silica dust, which is exactly what doctors found in Aundra Brock's lungs.

Legal Fights, X-rays and Dashed Dreams

St. Charles, Va., is a hollowed-out place. Boarded-up buildings loom alongside the road. Wedged between the creek and the railroad tracks sits a former hardware store that now houses the nation's largest federally funded black lung clinic.

After seeing the case files collected by Dr. Crum, Dr. Laney's team reached out to a network of federally funded black lung clinics, looking for more evidence of a growing problem. Within 48 hours, Stone Mountain Health Services, which runs the clinic, had gotten in touch. Here, federal investigators documented 416 additional cases, many in men who had first felt sick in their 30s and 40s.

At the University of Virginia, Dr. Drew Harris, a pulmonologist, read the report and wanted to help. Now, once a month, he drives the 300-plus miles from his office in Charlottesville, Va., to see patients who have black lung — or might soon.

The time he spends in St. Charles is packed with appointments. He's the only pulmonologist for Stone Mountain Health Services, which runs two black lung clinics in southwest Virginia. His patients, including Mr. Thacker and the Brocks, often drive more than an hour to see him.

Dr. Harris administers breathing tests and looks over CT scans to monitor disease progression in established patients, the sickest of whom arrive with portable oxygen units. Miners who have come for an initial exam — the first step in the process to prove they have black lung and are owed benefits — get an X-ray and a breathing test and then climb on a treadmill or an exercise bike to determine their blood oxygen level.

Dr. Harris's desire to do this work makes him a rarity. Many are unwilling to get involved, because treating the disease often requires wading into the complex and contentious benefit system. When miners are deemed eligible, one of their former employers, not the government, typically provides a monthly stipend and covers the cost of treatment. Coal companies often fight a decision that doesn't go their way, and doctors frequently have to go through depositions.

The legal fights can take years and prove arduous. Denver Brock had to appeal his own case after being initially denied federal benefits, and it was years before he saw any money. Still, he said he loved mining and would do it all again. His son would still be mining, too, if he were able. When Aundra Brock finished high school, he wanted to be a husband and a homeowner. His mining salary soon paid for a tidy house in a quiet hollow, just across the road from his parents.

But today, the masses in the younger Mr. Brock's lungs have grown so large that his doctors have begun talking about a lung transplant. Even if he gets one, and the risky procedure goes well, many black lung patients live for only a few more years. Aundra Brock is resistant. Two of his own friends had the surgery and died not long afterward, he said.

Ms. Burke of the National Mining Association said that work conditions had improved over the last decade but that the benefits had yet to be reflected in the disease data, arguing that they could take 10 years to become clear. She said strict adherence to ventilation plans and compliance with a 2014 rule that lowered the acceptable amount of airborne dust had reduced dust levels.

But more than a decade out from the rule's implementation, Dr. Laney said he had been seeing more black lung, not less.

"You don't get 30- and 40-something-year-old men on bilateral lung transplant evaluations if they aren't breathing toxic dust," Dr. Laney said. And increasingly, he added, he is concerned "that young men entering the work force as coal miners will not have the same health system afforded them that their dads and their dads' dads had."

Federal Cuts and Rule Delays

On April 1, more than 800 people at the National Institute for Occupational Safety and Health, including Dr. Laney, received notices that their jobs had been eliminated as part of broader federal cuts. After a federal judge issued an injunction, Dr. Laney and others in the coal workers' health surveillance program got their jobs back. But many other government scientists focused on solving the black lung problem did not.

Among them was the entire Pittsburgh mining research division. The division had been developing technology to monitor silica dust exposure in real time, potentially preventing miners from getting sick in the first place. "These cuts are going to endanger and kill miners in this country," said Brendan Demich, an engineer at the Pittsburgh division who represents his government colleagues as vice president of their union.

Emily Hilliard, a spokeswoman for the U.S. Department of Health and Human Services, said in a statement that the most essential services for miners would continue despite cuts at the department. “Ensuring the health and safety of our work force remains a top priority for the department,” Ms. Hilliard said.

But the cuts have had a ripple effect. For more than a decade, an agency within the Department of Labor, the Mine Safety and Health Administration, had been using the occupational health institute’s data, as well as the research of Dr. Cohen and others, to develop a case for lowering the silica exposure threshold. Last year, the agency finally issued a new standard, reducing the limit to the 50 micrograms that was recommended decades ago. It was set to go into effect this April.

But in the wake of “unforeseen NIOSH restructuring,” the agency announced it would pause implementation of the rule. The announcement came less than a week before enforcement was set to begin, and on the same day Mr. Trump signed executive orders aimed at bolstering what he called the “beautiful clean coal industry.”

Even if every coal operation in central Appalachia closed tomorrow, Dr. Crum said, miners who have taken in enough of the toxic mix of silica and coal dust would need decades of care. “Then they’ll die,” he said, “and we’ll have a lot more widows and children and grandchildren whose fathers were taken much earlier than they should have been.”

One of those widows is likely to be Denver Brock’s 67-year-old wife, Loretta. A coal miner’s daughter, she can now only watch as the health of both her husband and her son deteriorates. The breaks in the garden are longer now. On cold days, the men can barely step outside without their lungs burning.

“It’s hard to watch,” Ms. Brock said. “It takes a lot of prayer to get through this.”

Audio produced by Sarah Diamond.

Read by Kate Morgan

Kate Morgan is a journalist in central Pennsylvania and a media fellow at The Nova Institute for Health.

Radioactive Wastes From Coal-fired Power Plants

Coal is a fossil fuel used to produce power in the United States. Coal contains trace amounts of naturally-occurring radioactive elements. The process of burning coal at coal-fired power plants, called combustion, produces wastes that contain small amounts of naturally-occurring radioactive material (NORM).

On this page:

- About Radioactive Wastes From Coal-fired Power Plants
- What you can do
- Where to learn more

Radiation Facts

- The process of burning coal at coal-fired power plants, called combustion, creates wastes that contain small amounts of naturally-occurring radioactive material.

About Radioactive Wastes From Coal-fired Power Plants

Like all rocks, coal contains small amounts of radioactive elements that are found naturally in the environment. When coal is burned to create heat and steam to produce power it is called combustion. During coal combustion, natural radioactive material in coal concentrates in three main waste streams:

- **Fly ash** is a light colored, fine particle waste that resembles a powder. The majority of coal combustion wastes are fly ash.

- **Bottom ash** is a larger particle size than fly ash and is a heavier waste that resembles a mix of sand and small rocks. Just over 10% of coal combustion waste is bottom ash.
- **Boiler slag** is made when bottom ash melts under the intense heat of combustion. Boiler slag resembles the size of gravel. It makes up about 2% of coal combustion waste.



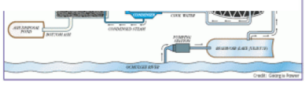
Image of different types of coal-fired power plant wastes.
Source: American Coal Ash Association

Generally, these wastes are only slightly more radioactive than the average soil in the United States. The amount of natural radiation in wastes from coal-fired power plants is so small that no precautions need to be taken.

While 99% of fly ash is captured by filters, small amounts (about 1%) can escape into the air. Government regulations require power plants to limit the amount of fly ash that escapes into the environment and to dispose of collected ash properly.

A survey by the American Coal Ash Association showed that more than 50% of all fly ash, bottom ash and boiler slag is reused in other products. Some ways that these wastes can be reused include: concrete, blended cement, to fill structures or embankments, as blasting grit or as roofing granules.

<https://epa.gov/sites/default/files/2019-02/coal fired power plants wss-wuse-thermoelectric-diagram.gif>



A diagram of how Georgia Power's Scherer Plant operates.
Source: United States Geological Survey (USGS)

What You Can Do

- **Know the regulations.** While the amount of radiation in wastes from coal-fired power plants is very small, there are other harmful emissions from power plants and industrial sources that are regulated. You can learn more about the EPA's air pollution standards by visiting the Plain English Guide to the Clean Air Act <https://epa.gov/clean-air-act-overview/plain-english-guide-clean-air-act>.

You can view air quality information for your area from any type of emission at the EPA's AirNow website <https://www.airnow.gov/>.

Where to Learn More

The U.S. Environmental Protection Agency (EPA)

The EPA develops standards for coal-fired power plants and has primary responsibility for setting federal radiation standards for exposure to naturally-occurring radioactive materials.

Clean Air Act (CAA) <https://epa.gov/clean-air-act-overview>
View an overview of the Clean Air Act and Air Pollution

Clean Water Act (CWA) <https://epa.gov/laws-regulations/summary-clean-water-act>
View a summary of the Clean Water Act.

Safe Drinking Water Act (SDWA) <https://epa.gov/sdwa>
This webpage provides information about the Safe Drinking Water Act and other drinking water standards and regulations.

Resource Conservation and Recovery Act (RCRA) <https://epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>
This webpage provides a summary of RCRA and lists links to additional information.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) <https://epa.gov/superfund/superfund-cercla-overview>
This webpage provides an overview of CERCLA, commonly known as Superfund.

The EPA also provides information about radioactivity in coal and the management and use of coal combustion wastes, or coal combustion residuals (CCR).

Coal Ash <https://epa.gov/coalash>
This webpage provides information about coal ash and coal combustion residuals (CCR).

TENORM: Coal Combustion Residuals <https://epa.gov/radiation/tenorm-coal-combustion-residuals>
This webpage provides a description of technologically enhanced naturally-occurring radioactive material (TENORM) and links to additional information.

Cleaner Power Plants <https://epa.gov/stationary-sources-air-pollution/mercury-and-air-toxics-standards>
This webpage provides information on setting standards for mercury and other toxic air emissions from power plants.

The States

Each state has one or more programs to address radiation protection, including naturally-occurring radioactive materials. Most states control public exposure to radioactive materials through programs implementing federal environmental laws such as the Clean Air Act and the Clean Water Act.

State Radiation Protection Programs <https://www.crcpd.org/mpage/map>
The Conference of Radiation Control Program Directors (CRCPD)
This webpage provides links and contact information for each state's Radiation Control Program office.

The U.S. Department of Energy (DOE)

The DOE provides grants for research on coal-fired plants and clean coal technologies.

Clean Coal Research <https://energy.gov/fe/science-innovation/clean-coal-research>
This webpage provides information on the DOE's clean coal research and development efforts.

Oak Ridge National Laboratory, UT Battelle for the U.S. Department of Energy

Oak Ridge National Laboratory is the largest US Department of Energy science and energy laboratory. ORNL conducts a broad range of research and development, primarily for the U.S. Department of Energy, but also for other federal agencies and both public and private sponsors.

Coal Combustion: Nuclear Resource or Danger (pdf) <https://www.ornl.gov/sites/default/files/ornl%20review%20v26n3-4%201993.pdf#page=26> (7.6 K)
This article discusses the radioactive pollution associated with the burning of coal.

American Coal Ash Association (ACA)

The ACA, established in 1968, is a nonprofit trade association devoted to recycling the materials created when we burn coal to generate electricity.

American Coal Ash Association (ACCA) Coal Combustion Production (CCP) & Use 2019 Survey Report <https://epa.gov//acaa-usa.org/wp-content/uploads/coal-combustion-products-use/2019-survey-results.pdf>
This chart contains the results of a survey of coal combustion companies about the amount of combustion residuals produced and the amount reused.

Last updated on June 24, 2025

AMERICAN PUBLIC POWER ASSOCIATION
Powering Strong Communities

June 26, 2025

The Honorable Brett Guthrie
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Frank Pallone Jr.
Ranking Member
Committee on Energy & Commerce
U.S. House of Representatives
2322A Rayburn House Office Building
Washington, D.C. 20515

The Honorable Morgan Griffith
Chairman
Subcommittee on Environment
Committee on Energy & Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Paul Tonko
Ranking Member
Subcommittee on Environment
Committee on Energy & Commerce
U.S. House of Representatives
2322A Rayburn House Office Building
Washington, D.C. 20515

Dear Chairmen Guthrie and Griffith and Ranking Members Pallone and Tonko:

The American Public Power Association (APPA) appreciates the opportunity to submit a statement for the record for the House Energy & Commerce Committee's Subcommittee on Environment's hearing, "A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash." We applaud the subcommittee reviewing the implementation of the Environmental Protection Agency's (EPA) 2015 Coal Combustion Residuals (CCR) rule and subsequent CCR regulations.

APPA is the national trade organization representing the nation's 2,000 not-for-profit, community-owned electric utilities. Public power utilities are in every state except Hawaii. They collectively serve over 55 million people in 49 states and five U.S. territories. Public power utilities are load-serving entities, with the primary goal of providing their communities with safe, reliable electric service at the lowest reasonable costs, consistent with good environmental stewardship. While public power utilities serve some of the nation's largest cities, nearly 1,600 of the 2,000 in operation serve rural communities.

EPA's 2015 CCR rule established minimum standards for the disposal of CCR in existing and new landfills and surface impoundments. The rule applies directly to facilities, requiring utilities to implement the rule without the benefit of federal or state permit programs to demonstrate and ensure compliance. This self-implementing program has proven to be unworkable for many public power utilities. Since 2015, EPA has issued six rulemakings that have only further inhibited regulatory compliance and broadened the scope of federal CCR regulations. Further, a change in EPA's interpretation of key terms such as "contains liquids" and "beneficial use" in the federal CCR regulations has complicated compliance and injects uncertainty as our members plan projects.

In 2016, Congress passed the Water Infrastructure Improvements for the Nation (WIIN) Act (P.L. 114-322). The legislation requires EPA to approve state CCR permit programs that achieve compliance with the federal CCR rule or are as protective as those criteria. APPA was actively engaged in the development and passage of the WIIN Act, which had bipartisan support in the House and Senate. Specifically, we strongly supported the provisions allowing states to implement the federal CCR rule and consider site-specific factors and risks in these state permits. At the time of enactment, we believed that establishing a federal and state permit program would resolve many of our concerns with the self-implementing regulations.

To date, EPA has only approved three state permit programs (Oklahoma, Georgia, and Texas), disapproved one (Alabama), and is proposing to approve North Dakota's permit program. The state of Wyoming filed a petition in the United States District Court for the District of Wyoming seeking to compel EPA action on its state CCR permit program application under the WIIN Act. The Wyoming Department of Environmental Quality submitted its state CCR permit application to EPA for approval on February 6, 2023. Under the WIIN Act, EPA is directed to decide on state CCR permit program applications within 180 days of submission (42 U.S.C. § 6945(d)(1)(B)). To resolve the lawsuit, we understand EPA is preparing to issue a decision on Wyoming's permit application soon. Several other states have shown interest in obtaining approval for their own permit programs under the WIIN Act, which would use a risk-based approach tailored to specific sites. Unfortunately, EPA's slow approval process for state permits, combined with repeated changes to the 2015 CCR rule, has effectively stalled the implementation of the WIIN Act. As a result, the CCR rule remains self-implementing and impractical for most regulated facilities. It would be improper—and inconsistent with Congressional intent—for EPA to proceed with developing further self-implementing CCR regulations.

The WIIN Act requires the EPA to develop a federal CCR permit program in collaboration with Congress. To date, Congress has appropriated $50 million for the agency to establish the program. EPA issued a proposed federal permit rule in 2020 but has yet to issue a final rule, nine years after the passage of the WIIN Act.

EPA's shifting interpretations and successive rulemakings have added complexity to the CCR program, increasing compliance costs without offering substantive guidance to ensure facilities can dispose of CCR consistent with EPA's requirements. Public power utilities operate as not-for-profit entities and do not have the capital budget for the considerably higher compliance costs that come with a one-size-fits-all approach that does not allow for site-specific considerations.

APPA welcomes the committee's review of EPA's CCR program. The current regulations impose substantial regulatory burdens on public power utilities and broaden the regulatory scope to include activities that exceed EPA's statutory authority and have traditionally been regulated by states. The combination of EPA's sluggish state permit approval process and an unstable regulatory environment has hindered effective WIIN Act implementation. EPA should focus its efforts and resources on proposing a new federal permitting program that fulfills the WIIN Act's requirements and facilitates the development and approval of state permit programs.

Sincerely,



Desmarie Waterhouse
Senior Vice President of Advocacy and Communications & General Counsel

Subcommittee on Environment
Hearing on
"A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash"
June 26, 2025

Michelle Freeark
Executive Director of Regulatory Affairs and Corporate Services
Arizona Electric Power Cooperative (AEPCO)

Additional Questions for the Record

To The Honorable Morgan Griffith (R-VA):

1. Under the 2024 Coal Combustion Residuals Rule, the Environmental Protection Agency (EPA) created a category of regulated sites referred to as Coal Combustion Residual Management Units (CCRMU). In your opinion, what would be the least intrusive way to minimize any risk at these sites?

The 2024 Coal Combustion Residuals Rule (2024 CCR Rule) created a new, very broad category of units, known as Coal Combustion Residual Management Units (CCRMUs), that includes "any area of land on which any noncontainerized accumulation of CCR is received, is placed, or is otherwise managed," that is not already regulated under the CCR Rule as a CCR unit. 40 CFR § 257.53. The 2024 CCR Rule regulates these new areas, which range from 1 ton and greater, regardless of whether the disposal area is already closed under state oversight. 40 CFR § 257.50(d)(2). Setting aside the burden associated with determining where CCRMUs of 1 ton or greater have been placed, the large swath of CCRMUs comprise a hodge-podge of disposal areas of various sizes and volumes, regulatory involvement, site characteristics, hydrogeology, and terrain. Predictably, CCRMUs range vastly in risk – some of which pose no risk whatsoever.

For CCR as a solid waste, Congress's charge to EPA is to promulgate regulations containing criteria for determining which facilities can be "sanitary landfills" and not "open dumps" by ensuring that, at a minimum, such criteria shall provide that "there is no reasonable probability of adverse effects on health or the environment from disposal of solid waste at such facility." 42 U.S.C. § 6944(a). The standard is known as the RCRA protectiveness standard. To the extent EPA relies on a risk assessment as a basis for regulation, it would be arbitrary and capricious to impose limitations or requirements beyond those shown by the risk assessment to be necessary to protect health and the environment. The risk assessment EPA relied upon for the 2024 rule did not account for the entire category of regulated units, in this case, CCRMUs, and took an unreasonable approach to what is acceptable risk. At present, "CCRMUs" should be reconsidered because these crucial prefatory steps have not occurred to allow EPA to properly regulate the CCRMU potpourri. Further compounding the problem, EPA did not omit beneficial use of CCR (not solid waste) that also should not be regulated as a CCRMU.

The least intrusive way to minimize risks posed by CCR disposal areas should be determined in a process that is not a one-size-fits-all, overly inclusive approach. Rather, the individual characteristics of the disposal area must be considered because the area may already pose little or no risk. EPA has the authority to establish such flexibility for states through regulation. States have specialized knowledge and experience from working with regional and local hydrogeology and terrain. States, through a state CCR program, are in the best position to assess the risks for a disposal area. That assessment would be tailored

to the unique attributes of the disposal area and other site-specific characteristics. Therefore, the owner/operator of the disposal area, together with the state regulatory agency, could craft a CCR management solution for the disposal area at issue, thereby assuring compliance with the RCRA protectiveness standard in an unintrusive manner. It is important to recognize that many areas now defined as CCRMUs were regulatorily closed *because the state already determined the site did not pose an unacceptable risk*.

Given current restraints on EPA's resources and the small number of states with EPA approval for CCR permitting programs, EPA may consider mechanisms to expedite the important work of a site-specific risk assessment to proceed in the interim in states that have demonstrable capacity to review risk assessments. For instance, states with current hazardous waste or municipal solid waste approval determinations have the expertise to implement EPA's risk assessment guidance, irrespective of an approved CCR permit program. Alternatively, the 2015 CCR Rule allows for licensed professional engineers to certify compliance documents, and EPA has used licensed professionals in the RCRA context in the past to reduce the paperwork burden that RCRA requirements impose on the states, EPA, and the regulated community. EPA found that state licensing board can investigate any complaints of negligence or incompetence, supporting the credibility of these licensed professionals. 71 Fed. Reg. 16,862,16,868 (Apr. 4, 2006). Finally, in establishing a Federal permitting program, as instructed in the WIIN Act of 2016, EPA could establish a clear process by which states can receive primacy over CCR permitting and make clear that they have the necessary authority to establish site-specific and risk-based considerations into their permits.

2. The EPA announced on March 12th, 2025, that it would attempt to complete a revised CCR Rule within a year. In subsequent court filings, EPA has committed to decide on the scope of rulemaking reconsideration by August 12th, 2025. In considering EPA's ongoing rulemaking, what are your thoughts on how EPA could establish nationwide minimum criteria for CCR unit closures?

Nationwide minimum criteria for closures must start with appropriately defining the disposal areas subject to the CCR Rule in the first place. EPA must conduct a new risk assessment to appropriately characterize the risks that may result from the current disposal practices for CCR and to provide a scientific basis for the development of regulations necessary to protect human health and the environment under the Resource Conservation and Recovery Act (RCRA). Without this finding, EPA has no foundation for adopting any measures, including closure and post-closure care requirements at the end of the life cycle of a disposal unit. Stated differently, EPA would be imposing limits or requirements lacking a basis to know whether they are needed to avoid any "reasonable probability of adverse effects on health or the environment," which is the statutory prerequisite for agency action. Therefore, the first step is for EPA to develop a risk assessment that encompasses all of the CCR disposal areas that EPA regulates, as described in response to Question 1.

EPA should not set closure criteria that dictate a certain type of methodology. Rather, closure criteria should be developed on a site-specific basis with the state regulatory agency through a state CCR permitting program. That agency would ensure that the closure plan is sufficiently protective based on the risk profile of the disposal area and site-specific characteristics. This would result in a closure plan that is supported by the groundwater monitoring data, the site conceptual model, and closure design options. Allowances should be made for beneficially used CCR to be removed from the disposal area because it is not a solid waste subject to regulation. This approach offers maximum flexibility for the owner/operator and the regulator to design a closure approach that is sufficiently protective and consistent with the RCRA solid waste regulations. This is consistent with EPA's longstanding policy to set high-level

goals that fulfill the statutory obligation of protectiveness, while allowing facilities flexibility to address highly variable site-specific conditions:

> The degree of investigation and subsequent corrective action necessary to protect human health and the environment varies significantly across these facilities. . . . To account for the variety of corrective action facilities and site-specific circumstances, EPA has emphasized a flexible, facility-specific approach to corrective action. Few cleanups will follow exactly the same course; therefore, program implementors and facility owners/operators must be allowed significant latitude to structure the corrective action process, develop cleanup objectives, and select remedies appropriate to facility-specific circumstances.

61 Fed. Reg. 19,432, 19,440 (May 1, 1996); *see also Am. Petroleum Inst. v. EPA,* 862 F.3d 50, 55, 60 (D.C. Cir. 2017) (invalidating RCRA regulations set "without regard to whether any incremental contaminants are significant in terms of health and environmental risks").

NORTH Dakota | Environmental Quality
Be Legendary.™

August 14, 2025

Calvin Huggins
Legislative Clerk
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 25015

RE: Hearing Entitled: "A Decade Later: A Review of Congressional Action, Environmental Protection Rules, and Beneficial Use Opportunities for Coal Ash"

Dear Mr. Huggins,

In response to a question provided after the above reference congressional hearing I provide the following for the record.

Member Providing Question: The Honorable Buddy Carter (R-GA)

Question: "You briefly mentioned some of the steps North Dakota takes to ensure beneficial use of coal ash does not pose an undue environmental risk. Is there anything that you think North Dakota does especially well to facilitate safe beneficial use?"

Response: Prior to approving the beneficial use of any coal ash, the NDDEQ requires the applicant to identify the proposed use; coal ash source (i.e boiler, generators name etc.…) and characteristics of the coal ash to include a complete chemical analysis, as well as identification of storage and handling practices. In addition, due to the variability of coal sources and changing environmental emission controls North Dakota requires that coal ash used for beneficial uses be retested at a minimum of once every five years.

Attached to this letter is the North Dakota Department of Environmental Quality publication "Guideline 11- Ash Utilization for Soil Stabilization, Filler Materials and other Engineering Uses". Guideline 11 outlines the steps necessary to gain approval of specific coal ashes for beneficial use.

If you have any additional questions relating to this matter, please contact our office.

Sincerely,

L. David Glatt, P.E.
Director
North Dakota Department of Environmental Quality
Cell: 701-220-3102
Office: 701-328-5152

Responses to Questions for the Record from Lisa Evans, Senior Counsel, Earthjustice pertaining to the hearing entitled "A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash."

Submitted August 8, 2025

The Honorable Troy Carter (D-LA)

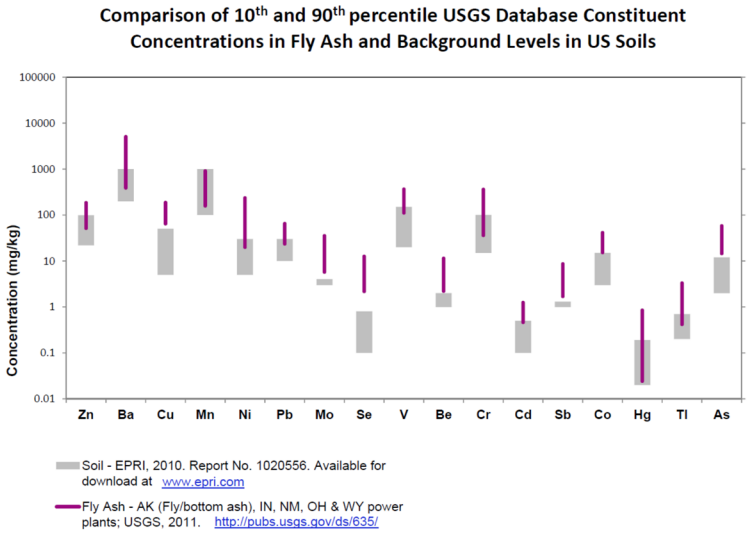
During the Subcommittee hearing, I asked Tom Adams, the Executive Director of the American Coal Ash Association, "Would you use coal ash to plant vegetables in your own backyard?" Mr. Adams said, "No."

a. **Mr. Adams references a 2012 study based on U.S. Geological Survey data that concluded that metals found in coal ash are at levels similar to the levels in ordinary soils. Do you agree with this assessment and have there been more recent scientific assessments that have found either higher levels of metals or higher toxicity of the existing metals?**

Mr. Adams is incorrect, and his statements are grossly misleading. The 2012 study based on USGS data in fact shows that metals found in coal ash are consistently **above** the levels in ordinary soils. The coal ash data evaluated in this report is from a small sample size of just five power plants with particularly low concentrations of Arsenic, Beryllium, Molybdenum, and Thallium.

The 2012 study presents the following graph.[1] Wherever the red line (coal ash metal levels) extends above the gray box (soil metals levels), this indicates that metal concentrations in coal ash exceed the levels found in soil.

[1] ACAA, *Coal Ash Material Safety: A Health Risk-Based Evaluation of USGS Coal Ash Data from Five US Power Plants* (June 2012) at Figure 18 PDF 130, https://acaa-usa.org/wp-content/uploads/free-publications/ACAA_CoalAshMaterialSafety_June2012.pdf.



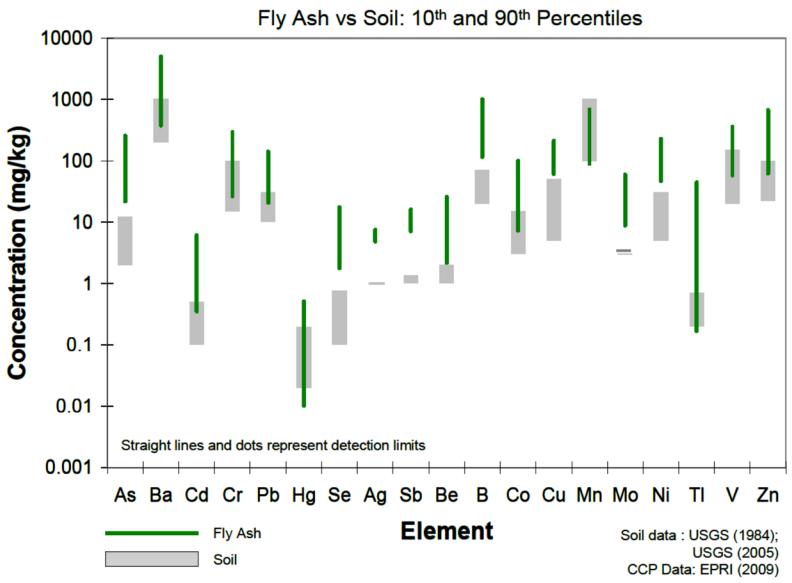
The raw data[2] from this graph reveal that the mean concentration of each of these metals is **2 to 20 times higher in fly ash than in soil**. There is only one metal where this is not the case (Manganese). To claim that soil and coal ash have "similar levels" of metals when one is consistently 2 to 20 times higher than the other, is not only inaccurate, but woefully dangerous. Notably, the fly ash data evaluated in this report is taken from a mere five power plants.

In contrast, a 2010 Electric Power Research Institute (EPRI) report evaluated fly ash from more than 60 power plants. Not all metals were evaluated at every power plant, but most metals evaluated had a sample size of at least 30. Their analysis produced a very similar graph:[3]

---

[2] ACAA, *Coal Ash Material Safety: A Health Risk-Based Evaluation of USGS Coal Ash Data from Five US Power Plants* (June 2012) at Table 11 PDF 76, https://acaa-usa.org/wp-content/uploads/free-publications/ACAA_CoalAshMaterialSafety_June2012.pdf.

[3] EPRI, *Comparison of Coal Combustion Products to Other Common Materials, Chemical Characteristics 1020556* (September 2010) at Figure 4-5 PDF 32, https://www.epri.com/research/products/000000000001020556.



Again, the raw data[4] show that mean heavy metal concentrations in fly ash are consistently at least twice as high as soil (with the exception of Manganese). The much larger sample size of the EPRI study shows that Arsenic, Beryllium, Molybdenum, and Thallium are found at higher levels when more than five power plants are evaluated, which may indicate some "cherry picking" of data by the ACAA. For example, while the 2012 study relied upon by ACAA showed an average Arsenic concentration in fly ash that was 3.6 times higher than the average in soil, the EPRI study presents an average Arsenic concentration in fly ash that is **12.2 times higher than the average in soil**.

Not only is Mr. Adams' characterization of this study inaccurate, and the study itself based on a miniscule sample size with lower-than-average Arsenic concentrations - new data have been released,

[4] EPRI, *Comparison of Coal Combustion Products to Other Common Materials, Chemical Characteristics 1020556* (September 2010) at Table 2-1 PDF 19, https://www.epri.com/research/products/000000000001020556.

illustrating that Arsenic is even more toxic than previously established. EPA's Integrated Risk Information System (IRIS) Toxicological Review of Inorganic Arsenic, finalized on January 13, 2025, raised the cancer potency of Arsenic by 21 times.[5] In addition, the toxicological review found increased risk of heart disease and diabetes from Arsenic ingestion and recommended that the safe, daily lifetime dose be 5 times lower than the current value.

Lastly, Mr. Adams' discussion notably omits a recent study that indicates significantly elevated levels of Radium in coal ash compared with soil. Although neither the EPRI report nor the USGS study evaluated the Radium content of coal ash and soil, there have been several recent studies that demonstrate how coal ash is enriched with Radium and radioactivity. For example, a study from 2015 finds that Radium activity in coal ash is about 3-5 times higher than Radium activity in average US soils.[6] The EPA assessed the risk when coal ash is mixed with clean surface soil in residential areas and found that even a small amount of coal ash can result in elevated cancer risk. If the coal ash has average concentrations of Radionuclides, a 1 in 10,000 cancer risk is estimated to occur at 21 percent mixing.[7]

b. If coal ash can "safely" be used as soil fill in neighborhoods across the nation as Mr. Adams says in his testimony, for the purpose of "beneficial reuse", why would the Executive Director of the American Coal Ash Association not want his family to consume vegetables that were grown using soil mixed with coal ash?

First, coal ash cannot "safely" be used as soil in residential areas. Placing fly ash in residential areas has led to them being designated as Superfund Sites where EPA has required the removal of fly ash from private yards, public playgrounds, and gardens. An example of this dangerous, "beneficial use" occurred in Town of Pines, Indiana, where coal ash was used as fill and led to significant contamination of the town's drinking water and soil. EPA found unsafe levels of Arsenic, Boron, and

---

[5] https://iris.epa.gov/document/&deid=363892

[6] Lauer, N. E., Hower, J. C., Hsu-Kim, H., Taggart, R. K., & Vengosh, A., Naturally Occurring Radioactive Materials in Coals and Coal Combustion Residuals in the United States, *Environmental Science & Technology*, *49*(18) (2015) at 11227, https://doi.org/10.1021/acs.est.5b01978.

[7] US EPA, Risk Assessment of Coal Combustion Residuals: Legacy Impoundments and CCR Management Units (April 2024) at 6-18, https://www.regulations.gov/document/EPA-HQ-OLEM-2020-0107-1075.

Molybdenum in well water and dangerous levels of Arsenic and Thallium in playgrounds and residential soil. The EPA declared Town of Pines a Superfund site in 2001. Cleanup is still ongoing 24 years later.[8]

Secondly, Mr. Adams is correct that his family **should not** consume vegetables grown in soil mixed with coal ash. The heavy metals in coal ash can be taken up by vegetables grown in contaminated soil. As an example, one study concluded that Arsenic and Thallium can exceed potentially toxic levels in basil and zucchini when grown in mixtures of fly ash and soil.[9] Other adverse impacts on vegetables include elevated Barium and Cadmium concentrations in tomatoes, as well as elevated Nickel concentrations in basil grown in fly ash-contaminated soil.[10] Furthermore, gardeners, children, and vulnerable individuals can be exposed to hazardous chemicals like Arsenic and Thallium (rat poison) by ingesting soil particles that contain coal ash, handling contaminated soil, or breathing in contaminated soil particles.

In sum, garden soil mixed with coal ash is far from safe. Taking into consideration the threat of exposure to hazardous heavy metals through ingestion, inhalation and direct contact, Duke University Superfund Research Center created a "Garden and Soil Contaminant Fact Sheet Collection" that quantifies threats from numerous coal ash pollutants.[11] For Arsenic, the researchers found that soil containing more than 16 parts per million (ppm) of Arsenic should not be used for gardens.[12] As explained above, the 2010 EPRI Report found a mean concentration of Arsenic in fly ash of 70 ppm, which is more than 4 times the risk level for garden soil. Consequently, one can easily conclude that

---

[8] *See* USEPA, Superfund Site:Town of Pines Groundwater Plume. Town of Pines, IN, available at https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0508071

[9] Brake, S.S., Jensen, R.R. & Mattox, J.M. Effects of coal fly ash amended soils on trace element uptake in plants. *Env Geol* **45**, 680–689 (2004). https://doi.org/10.1007/s00254-003-0921-z

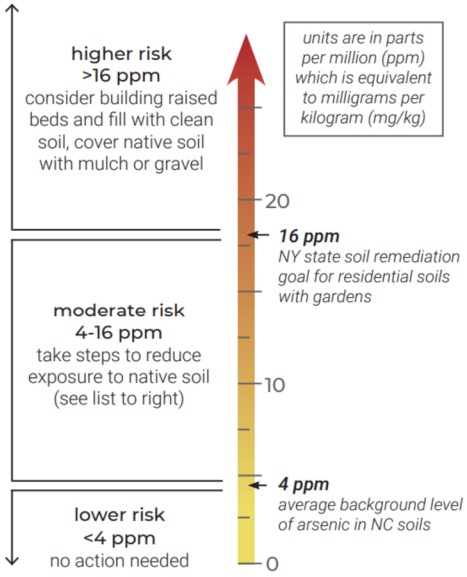
[10] *Id.*

[11] Duke University Superfund Research Center, Garden and Soil Contaminant Factsheet Collection, (Jan. 2020), available at https://sites.nicholas.duke.edu/superfundcec/files/2020/09/Garden-factsheet-collection.pdf

[12] *Id.*

fly ash should never be used in a garden. And vegetables grown in fly ash and soil should never be eaten.

The graphic on the Duke University fact sheet is replicated below:



c. What does Mr. Adam's response demonstrate about the coal industry's awareness of the threats posed by coal ash?

Mr. Adams stated that he would not live next to a coal ash dump and would not eat food grown in soil mixed with coal ash. These statements reveal that he is, in fact, acutely aware of the threats to human health posed by the hazardous pollutants in coal ash. However, Mr. Adams' public pronouncements and those of the ACAA contradict the opinions he expressed to the Committee.

Fact sheets posted on the ACAA website routinely minimize the hazardous pollutants in coal ash.[13] In one fact sheet, which has been posted on the ACAA website since 2010, the lobbying group falsely states, "the constituents in coal fly ash fall within the typical ranges of those in soils found across the U.S." Strikingly, the fact sheet maintains that the median arsenic content of fly ash is 4.6 parts per million. As indicated by the USGS Study data (on which Mr. Adams' testimony relies) and the 2010 EPRI Report described above, the median arsenic content of fly ash is **10 to 15 times this amount**. Yet, the ACAA repeatedly asserts that the hazardous pollutants in coal ash are no more dangerous than those in ordinary soil. This myth is not limited to the ACAA. The Tennessee Valley Authority and the Utility Solid Waste Activities Group (USWAG)[14] make the same claims, most notably for arsenic and radium.

This gaslighting of the public – claiming that coal ash is harmless when scientific data clearly indicate it is not – has harmed public health and resulted in the loss of life. The widespread use of coal ash as a substitute for soil has caused illness in several communities where exposure to contaminated soil and drinking water was rampant. One of the most tragic examples is the death of more than 60 workers who cleaned up the Tennessee Valley Authority Kingston coal ash spill, where more than 1 billion gallons of toxic coal ash sludge burst from the plant's enormous coal ash pond, sweeping away homes and flooding two rivers. Jacobs Engineering, the contractor in charge of cleanup, falsely claimed that the ash was benign and prohibited its workers from wearing respirators to protect themselves. Hundreds still remain sick from the exposure to the hazardous chemicals in the ash. Since 1999, EPA has considered coal ash to be a hazardous substance under the Superfund law due to the hazardous metals it contains, including arsenic, lead, mercury, radium, thallium and more.

---

[13] *See* ACAA Fact Sheet, "Coal Combustion Products: Not a Hazardous Waste", March 10, 2009, available at https://acaa-usa.org/wp-content/uploads/free-publications/CCP_Fact_Sheet_2_Safe_and_Not_Hazardous.pdf

[14] The Utilities Solid Waste Utility Group is an industry trade lobbying organization formed in 1978. USWAG members include more 130 utility operating companies, energy companies, and industry associations, including the National Rural Electric Cooperative Association (NRECA), the American Public Power Association (APPA), and the American Gas Association (AGA). *See* www.uswag.org

It is not only dishonest, but dangerous and reckless, for the coal industry to claim that this toxic waste is benign. The utility and reuse industries have known for decades that this is patently false. Their own data indicate it is both toxic and radioactive. The fact that Mr. Adams, Executive Director of the ACAA since 2009, openly admits that he would not himself eat, nor have his own family eat, food grown in this waste is indicative of the hypocrisy and reckless disregard for human health shared by the coal industry.

A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash

U.S. House Committee on Energy & Commerce
Environment Subcommittee
June 26, 2025

Responses to Additional Questions for the Record

Thomas H. Adams, Executive Director
American Coal Ash Association

The Honorable Morgan Griffith (R-VA)

1. *The Environmental Protection Agency (EPA) announced on March 12th, 2025, that it would attempt to complete a revised Coal Combustion Residuals (CCR) Rule within a year. In subsequent court filings, EPA has committed to decide on the scope of rulemaking reconsideration by August 12th, 2025. In considering EPA's ongoing rulemaking, do you see any potential benefits of extending closure timelines to enable and improve increased CCR beneficial reuse efforts?*

   EPA on August 12, 2025, received court approval to continue holding litigation over the 2024 "Legacy" CCR rule in abeyance at least through December 15, 2025, as the agency continues to determine the scope of its CCR rulemaking reconsideration. Inasmuch as EPA has also committed to conduct the reconsideration through notice and comment rulemaking, this effectively pushes permanent changes to CCR regulations to late 2026 or beyond.

   ACAA supports EPA's efforts to ensure that revisions to CCR regulations are "doable and durable" – able to withstand inevitable future legal challenges. In the interim, however, extending closure timelines is essential to reduce regulatory uncertainty created by the reconsideration process and to avoid unnecessary expenses for compliance with regulations that are likely to change. Furthermore, EPA should act in the interim to encourage coal ash beneficial use as a primary strategy for closure of disposal units. Extending closure timelines is a key element of achieving this goal by allowing sufficient time for establishing beneficial use operations and for markets to absorb the resulting material.

2. *As EPA reexamines the 2024 CCR Rule, what is the best approach for the agency to use to encourage the beneficial use of CCR from more CCR units?*

   EPA should extend closure deadlines for units actively harvesting materials for beneficial use and units with proven potential to initiate harvesting activities by 2040. EPA should also ensure that CCR regulations do not create barriers to staging harvested materials for beneficial use.

3. *For over 50 years, coal ash has reduced costs and increased the performance of concrete mixes. As production of this material decreases, U.S. reliance on foreign cement grows. This problem is aggravated by restrictive specifications in over 40 state departments of transportation (DOTs) that arbitrarily limit the use of coal ash. States can avoid these requirements by using performance specifications that evaluate materials based on their performance for a particular construction project instead of a prerequisite chemical composition. How can shifting to performance specifications increase the beneficial use of coal ash and reduce imports of cement?*

   Performance specifications enable the customization of blending and processing to create products that meet DOT requirements over an extended period. With the emerging materials that can be blended with coal ash to increase the durability of infrastructure while reducing CO2 emissions, specifications must recognize the importance of performance in lieu of prescriptive specifications. Adoption of performance specifications therefore can help achieve four vital objectives simultaneously: 1) Improve the resilience of American infrastructure; 2) Reduce American dependence on imported cement; 3) Reduce the carbon footprint of concrete production; and 4) Increase the utilization of harvested coal ash, effectively removing it from a disposal setting permanently.

4. *How can the federal government support state DOTs in shifting to using performance specifications to maximize the market for coal ash?*

   Project awards can give preference to proposals that include performance standards that rely on inclusion of harvested materials. Federal agencies can also return to a posture of actively encouraging coal ash beneficial use and removing barriers to the practice.

5. *In my district, Southwest Resources, LLC provides tons of coal ash to various cement and road paving customers. The company also separates rare earth element from coal ash. Are there any federal policy changes that you believe would encourage domestic users of rare earths to purchase these materials from domestic coal ash sites?*

   Rare earth element recovery is a promising new coal ash beneficial use that could further reduce America's dependence on foreign supply of critical materials. To encourage further development of this potential, all federal policies should adopt the primary view that previously disposed coal ash is a versatile and strategic domestic resource to be utilized, not a waste to be locked away permanently as quickly as possible.

The Honorable Buddy Carter (R-GA)

1. *How crucial is it for the United States to foster innovation in extracting critical minerals from coal ash to reduce dependency on China and other countries?*

   Coal ash represents a vast untapped domestic resource for critical mineral production. As methods continue to be developed for the extraction of these materials, care should be taken to preserve the ability for the remaining coal ash to continue to be used in applications like concrete production, which further reduces America's reliance on imported materials.

2. *If more time is allotted for the closure of coal ash storage locations, would this expand the beneficial use of coal ash?*

   Development of coal ash harvesting operations requires significant capital investments that need to be recovered over time. Markets for coal ash harvested from large disposal units also need time to absorb the volumes of material that can be produced. Longer closure timelines facilitate larger investments in facilities capable of beneficially using larger volumes of material.

XXX