

August 6, 2021

Illinois Pollution Control Board 1021 N Grand Ave E Springfield, IL 62702

Via Electronic Submission to: Don Brown - Clerk of the Board (<u>don.brown@illinois.gov</u>)

Attention: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed New 35 III. Adm. Code 845, R20-19 (Feb. 4, 2021) -- Sub-docket A

Re: Historic, unconsolidated coal ash fills in the State and the use of temporary storage piles of coal ash, including time and volume limits.

The American Coal Ash Association ("ACAA") respectfully submits the following comments regarding the Illinois Pollution Control Board's ("IPCB") further consideration of four issues identified in Sub-docket A of the Board's coal combustion residuals disposal standards. Specifically, ACAA addresses the first two issues identified by the Board related to historic, unconsolidated coal ash fills in the State and the use of temporary storage piles of coal ash.

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. CCP 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" to refer to the same materials in a beneficial use setting.

Summary

There are many proven reasons to consider CCP as a valuable mineral resource, rather than a waste. Beneficial use of CCP conserves natural resources, saves energy, and reduces greenhouse gas emissions. In many cases, products made with CCP perform better than products made without it. Decades of study and rulemaking by federal and state environmental regulators have consistently determined CCP beneficial use is exempt from regulation and should be encouraged. Any movement toward placing unjustified restrictions or cumbersome reporting requirements on CCP beneficial use will only serve to erect barriers that reduce or eliminate the substantial environmental benefits achieved by utilizing a valuable resource rather than placing it in landfills.

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Background

Coal Combustion Products Beneficial Use Overview

Coal remains the fuel source for a significant share of electricity generation in the United States and produces large volumes of solid coal combustion products — primarily ash and synthetic gypsum from emissions control devices.

There are many proven reasons to consider CCP as a valuable mineral resource, rather than a waste. Beneficial use 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 12.5 million tons in 2019 alone. Major uses of CCP include concrete, cement kiln feed for clinker and finish grinding, gypsum wallboard, blasting grit, roofing granules, and a variety of geotechnical and agricultural applications.

ACAA has conducted a survey quantifying the production and use of CCP in the United States each year since 1966. 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 EPA and the U.S. Geological Survey ("USGS").

According to ACAA's most recent survey¹, 52 percent of the CCP produced during 2019 was beneficially used – marking the fifth consecutive year that more than half of the coal ash produced in the United States was beneficially used rather than disposed.

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 study², the American Road and Transportation Builders Association ("ARTBA") 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.

A second ARTBA study³ in 2015 provided a historical market analysis of production and use of coal combustion products in the United States, analyzing the full range of CCP types and use applications. A recent edition of ACAA's magazine *ASH at Work*⁴ provides an accessible "Coal Ash 101" introduction to the full spectrum of CCP beneficial uses.

¹ American Coal Ash Association, 2019 Coal Combustion Products Production and Use Survey, December 2020, <u>https://acaa-usa.org/wp-content/uploads/coal-combustion-products-use/ACAA-Brochure-Web.pdf</u>

² American Road and Transportation Builders Association Transportation Development Foundation, "The Economic Impacts of Prohibiting Coal Fly Ash Use in Transportation Infrastructure Construction," September 2011, <u>https://acaa-usa.org/wp-content/uploads/2021/05/2011FlyAshStudy_lowres-FINAL.pdf</u>

³ American Road and Transportation Builders Association, "Production and Use of Coal Combustion Products – Historical Market Analysis," May 2015, <u>https://acaa-usa.org/wp-content/uploads/free-publications/ARTBA-final-historical.compressed.pdf</u>

⁴ American Coal Ash Association, ASH at Work, Issue 2 2020, <u>https://acaa-usa.org/wp-content/uploads/ash-at-work/ASH02-2020.pdf</u>

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As the transformation of energy infrastructure in the United States has led to steadily decreasing use of coal to generate electricity, users of CCP have begun developing alternative strategies for sourcing the materials they have grown to depend on. Prominent among these strategies is the practice of "harvesting" CCP that was previously disposed.

Harvesting previously disposed CCP is rapidly becoming a viable commercial activity. The consensus standards organization ASTM International in 2019 published a guide⁵ for harvesting activities and additional standards development is now under way to help guide materials 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 do not require beneficiation of the CCP are now in commercial operation in Pennsylvania, Virginia, Kentucky, Florida, Arkansas, and Louisiana. Numerous additional harvesting projects are under consideration nationwide.

Impact of CCR Disposal Regulations on Beneficial Use

Although CCR beneficial use is exempt from federal regulation, CCR disposal regulations can be instrumental in either encouraging or creating barriers to beneficial use.

Decades of EPA activities under both Democrat and Republican administrations – including Reports to Congress in 1988 and 1999; Regulatory Determinations in 1993 and 2000; and EPA's 2015 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. ARTBA's historical analysis of CCP production and use trends (see footnote 3) 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.

Initiatives by environmental regulatory bodies 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,

⁵ ASTM E3183-19, "Standard Guide for Harvesting Coal Combustion Products Stored in Active and Inactive Storage Areas for Beneficial Use," <u>https://www.astm.org/Standards/E3183.htm</u>

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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 aforementioned CCR disposal rulemaking.

A Voluminous Regulatory 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 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."6

Decades of Beneficial Use Experience Demonstrates Environmental Safety

CCP beneficial use activities have been conducted in the United States for decades. For example, ACAA production and use survey data shows that more than 200 million tons of CCPs have been placed in structural fill applications since 1980. This large volume of projects has not resulted in damage cases precisely for the reasons EPA noted in its 2015 Final Rule. States already oversee these types of beneficial uses and consensus-based engineering standards are in place to establish best practices.

More than a decade of relentless environmental activist publicity concerning "toxic coal ash" has created a stigma that obscures two facts: First, that CCR materials are relatively low in toxicity,

⁶ <u>https://www.epa.gov/coalash/coal-ash-reuse</u>

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containing only trace quantities of metals of potential concern; and second, that the materials CCP replaces in beneficial use settings are hardly benign.

A 2012 study commissioned by ACAA⁷ utilized USGS data on the constituents of coal ash collected from five power plants in Alaska, Indiana, New Mexico, Ohio, and Wyoming. The data represented a broad spectrum of coal types and environmental conditions. The data showing what metals are present in coal ash were then evaluated using scientifically accepted methods for determining human health risks and were compared to residential soil screening levels established by EPA. The study concluded that the concentrations of metals in the material, with few exceptions, are below environmental screening levels for residential soils and are similar in concentration to common dirt.

In those cases where scientific analysis has occurred, risk evaluations of specific CCP beneficial use applications have consistently validated the safety of beneficial use practices. EPA created a "Methodology for Evaluating Beneficial Uses of Industrial Non-Hazardous Secondary Materials"⁸ and applied that methodology in a study of two of the largest volume CCP beneficial uses, fly ash concrete and FGD gypsum wallboard.⁹ EPA's study concluded:

"Based on the analysis set forth in this document, the evaluation concludes that environmental releases of constituents of potential concern (COPCs) from CCR fly ash concrete and FGD gypsum wallboard during use by the consumer are comparable to or lower than those from analogous non-CCR products, or are at or below relevant regulatory and health-based benchmarks for human and ecological receptors.

The beneficial use of CCRs, when conducted in an environmentally sound manner, can contribute significant environmental and economic benefits. Environmental benefits can include reduced greenhouse gas emissions, reduced need for disposing of CCRs in landfills, and reduced use of virgin resources. Economic benefits can include job creation in the beneficial use industry, reduced costs associated with CCR disposal, increased revenue from the sale of CCRs, and savings from using CCRs in place of other more costly materials.

Based on the conclusion of the analysis in this document stated above, and the available environmental and economic benefits, EPA supports the beneficial use of coal fly ash in concrete and FGD gypsum in wallboard. The Agency believes that these beneficial uses provide significant opportunities to advance Sustainable Materials Management (SMM)."

⁷ AECOM Environment, "Coal Ash Material Safety: A Health Risk-Based Evaluation of USGS Coal Ash Data from Five U.S. Power Plants," June 2012, <u>https://acaa-usa.org/wp-content/uploads/free-publications/ACAA CoalAshMaterialSafety June2012.pdf</u>

⁸ U.S. Environmental Protection Agency, Methodology for Evaluating Beneficial Uses of Industrial Non-Hazardous Secondary Materials, April 2016, <u>https://www.epa.gov/smm/methodology-evaluating-beneficial-uses-industrial-non-hazardous-secondary-materials-and</u>

⁹ U.S. Environmental Protection Agency, Coal Combustion Residual Beneficial Use Evaluation: Fly Ash Concrete and FGD Gypsum Wallboard, February 2014, <u>https://www.epa.gov/coalash/coal-combustion-residual-beneficial-use-evaluation-fly-ash-concrete-and-fgd-gypsum-wallboard</u>

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ACAA recently completed a risk evaluation using EPA's methodology of another key CCP beneficial use application; fly ash controlled low-strength material ("CLSM"), also known as flowable fill.¹⁰ The evaluation concludes:

"The excavation and disposal of post use CLSM, does not pose a risk concern. This conclusion is based on a worker excavating and disposing of CLSM 20 days a year (i.e., 4 weeks a year). While, based on typical COPC concentration in fly ash (e.g., 50th percentile) it is unlikely that longer work periods would pose a risk concern, it is advisable to conduct a project and/or CLSMspecific evaluation to assess risk potential for CLSM excavation work conducted for >20 days a year for 10 years.

The use of CLSM in conduit trenches does not pose a drinking water risk, even for a well as close as 25 ft. downgradient from the edge of the conduit trench. This conclusion is based on a conduit trench 20 ft. wide and 1 mile long. It is noteworthy that longer trenches are also unlikely be associated with a risk concern. For trenches significantly wider than 20 ft. and less than 100 ft. from a potential drinking water well, it is advisable to conduct a project and/or CLSM-specific evaluation to assess risk potential.

The use of CLSM in embankments 100 ft. by 100 ft. without a nearby surface water body has the potential to pose a drinking water risk (for arsenic and molybdenum), if a drinking water well is within 100 ft. Based on this, it is advisable to confirm CLSM leachates are below the health-protective levels or conduct project/site-specific modeling. If a well is 1,000 ft. or more away from the downgradient end of the impoundment, a risk concern is less likely. It is advisable to conduct a project and/or CLSM-specific leachate assessment for larger embankments (300 ft. by 300 ft. or more) that will be located within 1,000 ft. of a drinking water well.

The use of CLSM in embankments (up to 300 ft. by 300 ft.) with a nearby surface water body does not pose a drinking water risk, even for a surface water body as close as 25 ft. downgradient from the edge of the embankment. This is applicable to embankments near medium and large surface water bodies.

The use of CLSM in embankments (up to 300 ft. by 300 ft.) with a nearby surface water body does not pose a risk to aquatic ecological receptors, even for a surface water body as close as 25 ft. downgradient from the edge of the embankment. This is applicable to embankments near small, medium, and large surface water bodies. The one exception is for selenium and cadmium in high-end leachate concentrations (e.g., those consistent with measured 90th percentile pore water leachate concentrations), which can exceed health-protective benchmarks when discharging to a small water body 25 ft. from the edge of the embankment. It is noteworthy, however, that more typical (50th percentile) leachate concentrations of selenium and cadmium do not pose a risk."

¹⁰ Gradient Corporation, "Risk Evaluation of Fly Ash Based Controlled Low Strength Material," February 2021, <u>https://acaa-usa.org/wp-content/uploads/2021/03/CLSM-Evaluationpdf.pdf</u>

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Any Regulation of "Historic, Unconsolidated Coal Ash Fills" Should Clearly Exclude Valid Beneficial Uses

While historic, large quantity, indiscriminate placement of coal ash may be a potential concern for environmental regulators, caution should be exercised to prevent directly or indirectly placing unwarranted regulatory restrictions on beneficial uses like those described in previous sections.

Some environmental activists are currently promoting a narrative that all "unencapsulated" beneficial uses should be prohibited. This narrative completely disregards the decades of state and federal regulatory scrutiny, scientific evidence of the low toxicity of CCP in beneficial use settings, and the presence of well-developed consensus-based standards for guiding beneficial use projects.

More information on the range and safety of "unencapsulated" beneficial use applications can be found in the Issue 2 2019¹¹ and Issue 1 2021¹² editions of ACAA's *ASH at Work* magazine.

Unwarranted Regulation of Temporary Storage Would Create Barriers to Beneficial Use

The presumed regulatory objective of addressing "temporary storage piles" is to prevent disposal activities from masquerading as beneficial use or to prevent excessive quantities of CCPs from being speculatively stored for beneficial use. However, the voluminous rulemaking records at the federal and state levels contain no damage cases or scientific analysis to justify a regulatory concern related to the practice of staging CCPs for beneficial use.

Storage is an integral step in a beneficial use value chain. End users will not utilize CCPs unless they are confident that adequate supplies will be available when they need them. Therefore, the goal of CCP storage is to ensure uninterrupted supply for users. The need for adequate CCP storage is only increasing as CCP production by coal-fueled power plants becomes more sporadic in the face of changing electricity dispatch trends.

Some regulatory venues have contemplated over-reaching reporting requirements such as requiring copies of purchase orders to document that storage piles are being used. Not only are such reporting requirements impractical (most cement, concrete, and synthetic gypsum markets do not operate on purchase order systems), they create new barriers to beneficial use. CCP users will be less likely to incorporate the products in their projects if they are required to share proprietary business information or take on time-consuming paperwork.

Reporting requirements would not only disincentivize the beneficial user of the CCP from taking the material, it would also disincentivize the producer of the CCP, either newly produced or harvested from a landfill or impoundment, from making the CCP available, as there would be a real or perceived potential liability to the producer for how the CCP is stored, handled, and used by the beneficial user. If the producer of the CCP cannot have some level of assurance that they are not going to have the liability of ash storage at a beneficial use site, they may likely choose to dispose of the material in a new CCR landfill at a much greater expense, that will likely be passed on to electrical rate payers, than to take on the potential liability for a different site. This would be contradictory to some state laws that require

¹¹ American Coal Ash Association, *ASH at Work*, Issue 2 2019, <u>https://acaa-usa.org/wp-content/uploads/ash-at-work/ASH02-2019.pdf</u>

¹² American Coal Ash Association, *ASH at Work*, Issue 1 2021, <u>https://acaa-usa.org/wp-content/uploads/2021/07/ASH-2021-1-7-12-21.pdf</u>

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utilities that are closing or removing older CCR landfills or impoundments to make the recovered materials available for beneficial use.

Furthermore, any requirements for beneficial use storage and reporting would create an added layer of regulation for storage facilities that are already subject to water and air permit requirements of state and local authorities. These existing permit requirements provide the necessary environmental protection for CCP handling, just as they do for analogous construction materials.

ACAA recommends a categorical exemption of reporting requirements for storage that is containerized, not in direct contact with the ground, or located on properties already subject to other regulatory controls such as NPDES and facility air permits.

Verifying a storage site's status as an active, working facility can be demonstrated by its proximity to working end-use locations such as cement kilns, concrete plants, wallboard manufacturing plants, or other manufacturing facilities. For storage sites not located in the immediate proximity of the end use, record-keeping should be limited to minimally burdensome reporting requirements documenting gross annual receipts and shipments of CCPs.

IPCB Should Adopt a "Resource Conservation and Recovery" Paradigm

ACAA strongly encourages IPCB to adopt a paradigm that views CCP as a potential resource. The rulemaking implications of adopting a "resource perspective" for CCR management were explored in detail in a 2020 report¹³ by the National Association of Regulatory Utility Commissioners ("NARUC"). Among the issues identified by NARUC was the importance of regulatory structures that allow adequate time for harvesting and beneficial use to take place.

Deadlines for final closure of disposal sites illustrate an example of a well-intended provision of EPA's 2015 CCR Final Rule that has created a disincentive for beneficial use. While the CCR rule does provide temporary extensions for closure deadlines to allow for beneficial use, the total time allowed for closure is only 15 years – even with the maximum number of extensions. There is a robust demand for coal ash in the marketplace, but end-use customers can only consume it at a rate that matches their business practices. Additionally, sources of harvested CCP may not be geographically located to be immediately cost efficient to the demands for its use, requiring time for the development of logistics capabilities for moving CCP to markets. Therefore, this time limitation creates disincentives for beneficial use of harvested ash – especially for the sites with the largest volumes. Ultimately, having all of the ash removed and beneficially used provides superior benefits for the environment over building new disposal units. It would be more cost-effective to match the rate of excavation to the demand for the harvested product by the customer – even if it takes more than 15 years to finish removal and closure. The costs to remove ash after final closure may be prohibitive. From the NARUC report at page 4:

"End-use [CCP] customers are concerned about maintaining access to byproduct supplies with the annual production rate of coal ash declining as existing coal-fired power plants are modified, repowered or decommissioned. Utilities and IPPs are under a time deadline to comply with

¹³ National Association of Regulatory Utility Commissioners, "A Comprehensive Survey of Coal Ash Law and Commercialization: Its Environmental Risks, Disposal Regulation, and Beneficial Use Markets," January 2020, <u>https://acaa-usa.org/wp-content/uploads/2021/05/NARUC CoalAsh rev FINAL 061220 RLD SRB.pdf</u>

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environmental regulations that will certainly result in even more constrained supplies while the market demand for 'homegrown fly ash' increases, particularly by the cement industry. The commercial beneficial use markets thus are adversely affected by the regulatory pressure to close coal ash facilities. Consequently, public and private partnerships interested in the commercial value of coal ash are working to develop methodologies for harvesting needed coal ash products from the mixed contents of older CCR units. This may require, in turn, flexibility in utility regulatory models to allow utilities to position themselves to take advantage of additional revenue streams associated with these markets, which could partially offset clean-up and compliance costs under EPA's Final Rule."

Later in the NARUC report, at page 71, its authors proposed a partial solution to address closure deadline issues as follows:

"A response to EPA's closure policies has been the development of capabilities to harvest from utilities' legacy coal ash ponds desirable CCR content that can be further processed for purposes of beneficiation to meet future beneficial use markets. ACAA calculated that there are over 1.5 billion tons of previously disposed coal ash in both landfills and surface impoundments, based on production and use surveys it conducted. Harvesting and beneficiation of these ash deposits 'provides a potential avenue for recouping some of the expenses associated with such closures.' However, to meet EPA's deadlines for required closure of CCR units under its rule, utilities and IPPs need a clear regulatory pathway to transfer the excavated CCR to alternative storage facilities offering the capability to harvest CCPs for eventual beneficiation. **EPA's concept of temporary storage piles needs to be extended to long-term storage facilities offering services above and beyond landfill disposal**." (Emphasis added.)

The NARUC report enumerated how regulatory actions may become barriers to beneficial use with the following observations:

"Restricting coal ash management to a choice between only two options: (i) immediate, realtime reuse/beneficiation, and (ii) disposal, ignores the current state of beneficial use markets. ... [I]t is apparent that although current successful methods of beneficiation offer a long-term solution to the CCR management dilemma, the availability of real-time beneficiation falls far short of satisfying the total demand necessitated by short-term closures, as well as current production. However, over time current methods of beneficiation could play a large role in managing the volume of ash produced and stored in this country, subject to the status of the economy, proximity of ash to market, and the quality of stored CCR." (page 69)

"What EPA and states do in response to the environmental threat of these aging coal ash units will impact the fly ash market, which "will be felt for decades to come." Policy outcomes prioritizing closure and disposal could slow investments in beneficiation facilities and detrimentally hamper the growth of fly ash use, as an example of one unintended outcome." (page 71)

On page 72, the NARUC report's authors went on to advocate particular public policies that could complement regulatory actions:

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"[P]ublic policy consideration of regulatory and financial incentives under Subchapter VIII of RCRA would advantage the development of environmentally secure storage and incentivize utilities' decision-making, away from disposal, to either transfer excavated CCR to storage or convert on-site CCR units into qualifying storage facilities, qualifying as used and useful facilities under regulated rate-making principles. Utilities/IPPs ... would make decisions on coal ash management that would maximize beneficial use value and potentially reduce costs for closure and post-closure care, while complying with EPA's Final Rule. Storage ... on or off site would allow utilities to offset conversion costs with potential earnings from CCPs markets. Policies supporting public/private partnership's investment in beneficiation storage and harvesting align with the conservation mission of RCRA." (italics and bold text added for emphasis)

Conclusion

CCP beneficial use enjoys a decades-long track record of safe, large scale utilization in a wide variety of applications. Regulatory scrutiny at the state and federal levels has consistently validated the safety and benefits of CCP beneficial use. CCR disposal regulation can inadvertently erect barriers to beneficial use, however. Regulators must be careful not to use too broad of a brush in defining the practices being regulated and must avoid placing unjustified restrictions or cumbersome reporting requirements on CCP beneficial use.

If the IPCB directly or indirectly imposes restrictions or onerous reporting requirements on CCP beneficial use, the state will see:

- More CCR disposed.
- More natural resources consumed.
- More water, fossil fuels, electricity, and other resources consumed as virgin natural resources are extracted.
- Increased greenhouse gas emissions from manufactured products that CCP replaces.
- Increased manufacturing costs for users of CCP.

Any environmental benefits to be achieved by erecting barriers to beneficial use are at best speculative, non-quantifiable, and more likely, simply non-existent.

ACAA thanks the IPCB for the opportunity to comment on this matter and strongly encourages the agency to adopt a "resource perspective" that actively encourages the beneficial use of CCP.

Respectfully submitted,

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