

U.S. Coal Ash Industry Outlook



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BORAL ANALYST MEETING
SEPTEMBER 19, 2019

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Predicting the Next Year's Headlines

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- Coal Ash Regulatory Drivers
- Environmental Group Activity
- Evolving Supply and Demand Dynamics

Coal Ash 101 – A Quick Review

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- Coal fly ash has evolved in the United States from a waste material to a valued building product. But circumstances related to coal ash production and use create market conditions that are unique in comparison to other materials.



Six Facts About Fly Ash Marketing

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- Coal Fly Ash is a Product
- But Fly Ash is a Different Kind of Product
 - Complicated supply and demand profile
 - Does not fit the classic definition of a commodity
- Logistics and Technology Play Key Roles
- Markets Function Locally and Regionally
- Marketers Match Supply to Economic Opportunities
 - Geographically
 - Between different product applications
- Several Types of Marketers Compete

Headlines Like These Can Cause Confusion

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TRUMP EPA REMOVES MORE CRITICAL TOXIC COAL ASH PROTECTIONS

The Trump EPA weakens safeguards for coal ash piles and sites where coal ash is placed on or beneath the ground



“

The Trump EPA, led by Andrew Wheeler is doing everything in its power to gut essential public health protections from toxic coal ash in the 2015 rule.

—Lisa Evans
Senior Counsel, Earthjustice

Q. When Is a Rollback Not a Rollback?

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- **A. When it pertains to EPA coal ash disposal regulations**
- The “critical toxic coal ash protections removed” in the latest proposed rule revision are really EPA complying with court orders to fix:
 - A math error in the definition of beneficial use (which is exempt from regulation)
 - A disparity in how material stockpiled for beneficial use is viewed by the regulation
- EPA’s proposal to fix the beneficial use definition (out for public comment now) may be problematic for “unencapsulated” uses
- Publicity around Georgia setting up a CCR permit program is not a “state seizing control” – but rather compliance with a Congressional mandate to shift enforcement from citizen lawsuits to professional state regulators
- *EPA’s 2015 Coal Combustion Residuals rule is not among the regulations EPA is “rolling back” from Obama era over-reach*
 - Compliance deadlines remain largely intact
 - Utilities moving forward with pond closures and other compliance activities

A Very Long Regulatory History

- **1980 Bevill Amendment to Resource Conservation and Recovery Act**
 - Instructed EPA to "conduct a detailed and comprehensive study and submit a report" to Congress on the "adverse effects on human health and the environment, if any, of the disposal and utilization" of coal ash
- **1988 and 1999 EPA Reports to Congress**
 - Recommended coal ash disposal regulation as non-hazardous waste
- **1993 EPA Regulatory Determination**
 - Found regulation as a hazardous waste "unwarranted"
- **2000 EPA Final Regulatory Determination**
 - Concluded coal ash materials "do not warrant regulation [as hazardous waste]" and that "the regulatory infrastructure is generally in place at the state level to ensure adequate management of these wastes"
- *December 2008 – Kingston coal ash spill*
- **January 2009 – EPA initiates formal rulemaking for coal ash disposal regulations under RCRA**
- **October 2015 – EPA completes Final Rule for Disposal of Coal Combustion Residuals**

Alphabet Soup

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- **Solid waste** federal regulation is under the Resource Conservation and Recovery Act (RCRA)
 - RCRA Subtitle C pertains to hazardous wastes
 - ✦ Rules developed by federal EPA
 - ✦ Rules enforced by federal EPA
 - RCRA Subtitle D pertains to municipal and industrial wastes
 - ✦ Rules developed by federal EPA
 - ✦ Rules enforced by citizen lawsuits (states can act as citizens)
- All of EPA's proposed regulations utilized “non-hazardous” engineering standards
 - EPA never proposed to regulate coal ash as “hazardous” based on the material's toxicity. Coal ash contains only trace levels of metals
 - EPA did express a desire for direct federal enforcement of coal ash regulations, which triggered the “C vs. D” debate

EPA Final Rule Summary



- **Subtitle D, self-implementing, citizen suit enforcement**
- **One size fits all** disposal regulations including:
 - Closure of surface impoundments and landfills that fail to meet engineering and structural standards and will no longer receive coal ash
 - Regular inspections of the structural safety of surface impoundments
 - Restrictions on the location of new surface impoundments and landfills so that they cannot be built in sensitive areas such as wetlands and earthquake zones
 - Groundwater monitoring with requirements for immediate cleanup of contamination, and closure of unlined surface impoundments that are polluting groundwater
 - Fugitive dust controls to reduce windblown coal ash dust
 - Liner barrier requirements for new units and proper closure of surface impoundments and landfills that will no longer receive CCRs
- **Beneficial use exempt from regulation**
- Beneficial use defined according to “legitimacy criteria”
- Regulation effective October 19, 2015 – ***Lawsuits Commenced Immediately***

EPA CCR Rule Litigation



- August 21, 2018 - U.S. Court of Appeals for the D.C. Circuit – after *lengthy* deliberations – ruled that the Obama-era CCR disposal rule was not stringent enough
 - Essentially set a new standard of ‘if it might leak then treat it like it’s leaking.’ (I bought a lottery ticket yesterday, so I am now potential millionaire)
 - Expanded number of “legacy site” facilities that may now fall under regulation
 - Ruling perhaps not surprising given that the record was initially constructed by EPA to try to justify Subtitle C “hazardous waste” regulation
 - Disappointing adoption of ENGO “toxic ash” terminology throughout 72-page decision

Impact of DC Court Coal Ash Decision



- Court remanded numerous issues to EPA for further rulemaking, many of which EPA was already reconsidering
- Imposed additional conditions EPA will need to satisfy in the rule reconsideration process that was already under way
- EPA coal ash rule reconsideration process – which was moving along at a record pace (for EPA) – now extending well into 2020
- A pesky election thing: *What presidential administration will be in place to defend the inevitable legal challenges to the reconsidered rule?*

Trump EPA Reconsideration Issues



- EPA Regulation of Inactive Surface Impoundments
- The Criteria for Determining Whether Activities Constitute Beneficial Use or Disposal
- Use of Risk-Based Alternative Standards for Remediating Constituents Without an MCL
- The Criteria for Determining Whether a Pile will be Regulated as a Landfill or as Beneficial Use
- Regulatory Procedures Used to Remediate Certain Non-Groundwater Releases
- Requirements for Slope Protection on Surface Impoundments, Including the Use of Vegetation
- Whether to Allow Continued Use of Surface Impoundments Subject to Mandated Closure If No Capacity for Non-CCR Wastestreams
- Regulation of Inactive Surface Impoundments, including Legacy Ponds
- Remediation and Post-Closure Requirements for Inactive Surface Impoundment that Close by April 17, 2018
- Addition of Boron to the List of Constituents that Trigger Corrective Action
- Whether to Allow Modification of the Corrective Action Remedy
- Whether to Suspend Groundwater Monitoring Requirements Where “No Migration” Demonstration is Made
- Whether to Allow Alternate Period of Time to Determine Remediation is Complete
- Whether to Allow Modification of the Post-Closure Care Period
- Whether to Allow CCR to be Used to Close Surface Impoundments Subject to Mandated Closure
- Clarify Placement of CCR in Clay Mines

The Litigation Spiral



- (aka “It’s a good time to be a RCRA attorney”)
 - ENGOs suing over EPA Phase 1 Part 1 CCR Rule revisions
 - ENGOs suing over EPA approval of Oklahoma state permit program
 - On-going pleadings over fallout of DC Circuit Court decision
 - Clean Water Act “connection to groundwater issue” at U.S. Supreme Court
 - Eventual litigation over each reconsidered rule element
- Practical effects?
 - Coal ash **compliance deadlines remain in place**
 - Most utilities moving forward with compliance plans
 - By the time the regulatory action all spins down, much of the cake will be baked

More CCR News Pegs to Come



- October 2 EPA public hearing on the proposed revision just announced, then publish a Final Rule
- At least four more proposed revisions expected over the next year:
 - Revision of Cease Receipt of Waste Deadline for CCR Surface Impoundments; Response to Court (*Received 8-6-19 by OMB for inter-agency review*)
 - Federal Coal Combustion Residuals Permitting Program (*Received 9-6-19 by OMB for inter-agency review*)
 - Request for Comment on Legacy Units; Response to Court Part B.
 - Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category
- Additional states may seek approval of their permit programs, as encouraged by Congress

What We Are Really Up Against

If an industry-crushing hazardous waste designation is off the table, ENGOs prefer citizen lawsuit enforcement...



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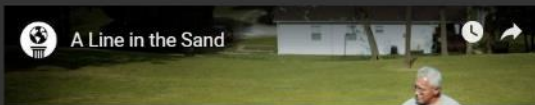
Advocacy Campaign

COAL ASH CONTAMINATES OUR LIVES

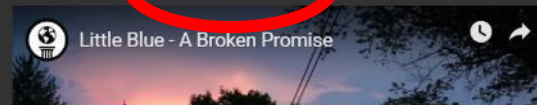
Latest News: More than 550 coal ash units — at 265 coal plants — have reported groundwater monitoring data, following transparency requirements imposed by federal coal ash regulations. Based on that data, 91% of these plants are contaminating groundwater with toxic substances at levels exceeding federal safe standards. [See map and data.](#)

And the drumbeat of "Toxic" publicity will continue

The people of La Belle, Pennsylvania, are fighting to clean up coal ash pollution in their neighborhood:



A small community was promised a recreational dream. Instead, they got a toxic nightmare of coal ash:



Shameless Self-Promotion



- Coming soon to an Internet near you...

CoalAshSanity.org

COAL ASH SANITY

RECYCLING DISPOSAL Q&A CONTACT

Coal ash is not "toxic."

Coal ash Those metals Millions of tons

Meanwhile, ENGO Schism Potential?



- As federal regulatory action grinds on, state level activity increasing
 - State legislation mandating beneficial use in North Carolina and Virginia
 - State legislation in Illinois modified to protect beneficial use
- While national environmental groups remain dedicated to using “toxic coal ash” as an anti-coal tool, some local environmental groups looking to beneficial use to get ash “out of their backyards”

And Positive Headlines Do Exist!



- World of Coal Ash 2019 record attendance
 - All-time record 1,075 registrants
 - More than 100 exhibitors
- American Coal Ash Association on-going discussions with state environmental and transportation officials
- Increasing cooperation with standard setting organizations ASTM and ACI
- American Road and Transportation Builders Association forthcoming update to ash supply forecast

Fly Ash Supply is Changing, Not Declining



- While the changing role for coal in the U.S. energy mix is informative, it does not tell the whole story for ash utilization
- Ash production is a direct result of coal consumption
- U.S. Energy Information Administration projects 643 million (worst case) to 850 million tons coal consumption **in 2040**
- Peak coal consumption was approx. 1 billion tons on 2005
- U.S. only recently consumed half of the ash it produced
- Most ash beneficially used goes to lower value applications
- Wet to dry ash handling conversions are bringing new sources to high value markets
- Harvesting of previously disposed ash (more than 1.0 billion tons) emerging as option for addressing regional dislocations

Conclusions



- Federal and state regulatory activity during final year of Trump administration first term is likely to continue triggering misleading headlines as environmental groups continue to use coal ash to attack coal
- Beneficial use of coal fly ash will remain exempt from regulation and encouraged by government policy makers
- Demand for coal fly ash in high value applications will remain strong as users continue to adapt to shifting supply strategies

About John Ward



- More than 20 years waste management and energy industry experience
 - Former marketing director, ECDC Environmental (later a unit of Laidlaw Environmental Services)
 - Former Vice President, Marketing & Government Affairs, Headwaters Inc.
 - Former Senior Vice President, Communications & Marketing, EnergySolutions Inc.
 - Former Director and Past President, American Coal Council
 - Former Member, National Coal Council (as appointed by U.S. Secretary of Energy)
 - Executive Director, National Coal Transportation Association
 - Director and Government Relations Committee Chairman, American Coal Ash Association
 - Chairman, Citizens for Recycling First

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