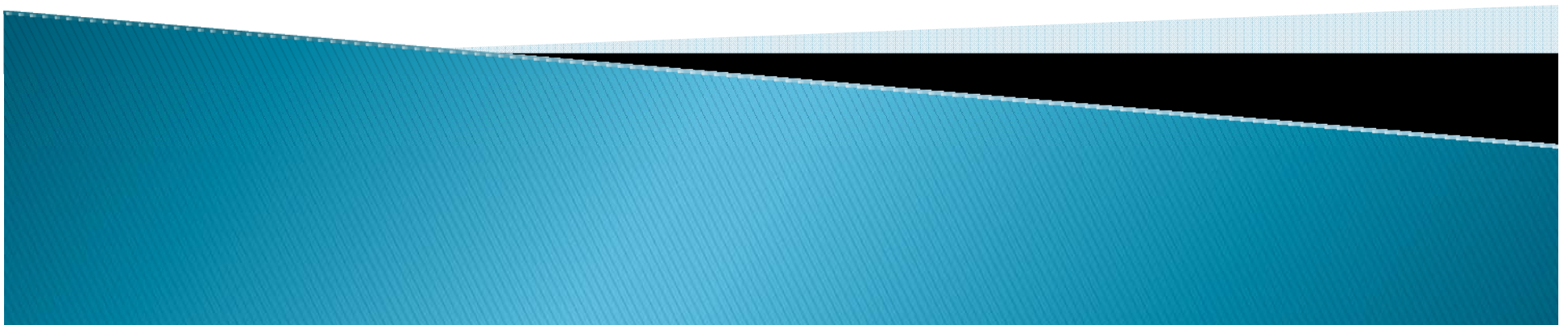


# Coal Combustion By-Product Overview RCRA – CWA

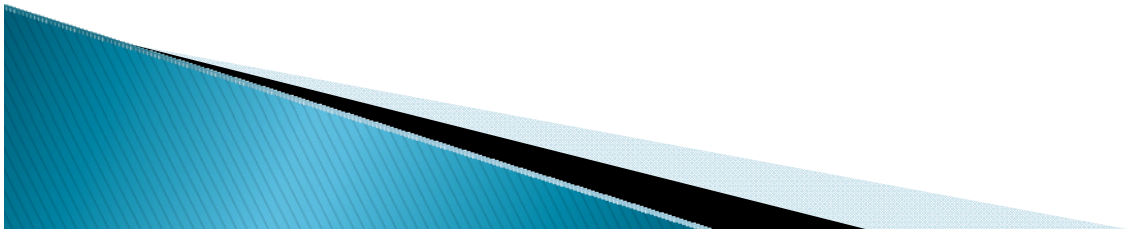
Presentation  
CIBO Energy Environment and Technical Committee Meeting  
June 11-12, 2013  
Arlington, VA



# Coal Combustion Residuals

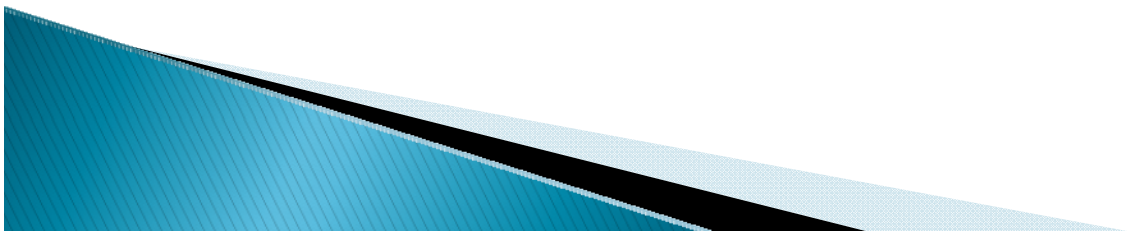
## ▶ Basic Concerns

- The Proposed Rules (Effluent Guidelines–CWA and CCRs –RCRA) are directed at Electric Generation Utility Industry and not the Non–Electric Generation Utility Industries
- The probability that Non EGU Industries will be caught up in these efforts most likely at the State Level and most probable with legislation.
- These points must be continuously pointed out and comments made on the various proposed rules.
- The ELG (for EGUs at this point) proposed rule will provide EPA with leverage on controlling coal combustion residuals outside of the scope of RCRA or Federal Coal Ash Legislation.
  - A critical outcome will be the elimination of wet handling systems, use of liners, and structural integrity of dams/impoundments
- From an Industrial perspective, the questions is how has your State been managing coal ash? How does the State address impoundments and dams from a liner and a structural integrity position.



# EGUs vs Non-EGUs

- ▶ EPA has not addressed the issue dealing with the impact of coal ash management on the Non-EGU Industrial Sectors.
- ▶ EPA's rules addressing Coal Combustion Residuals are been directed at the Utility Industry.
- ▶ EPA has side stepped the issue by going after Utility Sector but recognizing that the States would regulate coal combustion residuals no matter the source which can be seen by looking at existing State Programs regulating coal ash.
- ▶ Legislation is designed to manage all coal ash.
- ▶ If past, EPA need not complete the economic analysis as Congress will have dictated the basic regulatory program.

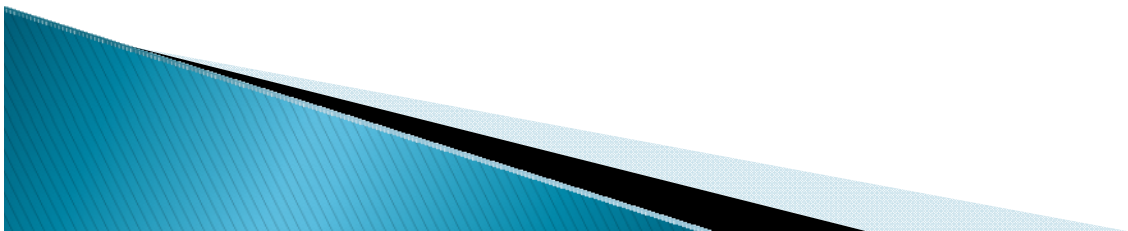


# Environmental Community

# Environmental Activity Focus Coal Ash Efforts on Litigation

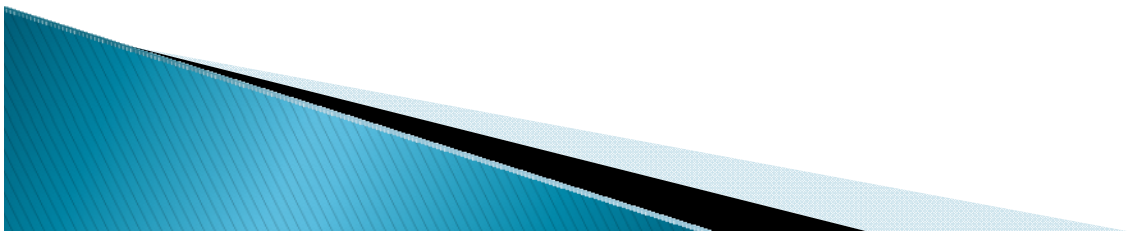
## Cases:

- ▶ In North Carolina, groups have sued the state, Duke Energy and Progress Energy over ash disposal operations in 14 locations.
- ▶ A South Carolina judge ruled that a lawsuit against Santee Cooper over coal ash disposal can proceed.
- ▶ Southern Company is being sued in Georgia over ash disposal operations at its Plant Scherer.
- ▶ Tennessee Valley Authority is being threatened with a lawsuit over ash disposal operations at its Colbert Plant.
- ▶ GenOn has agreed to fines and a clean-up plan related to coal ash disposal operations in Maryland.
- ▶ FirstEnergy announced plans to close its Little Blue Run coal ash disposal impoundment on the West Virginia/Pennsylvania border.
- ▶ Its plan to barge ash to another Pennsylvania disposal site is now drawing fire.



# Environmental Community

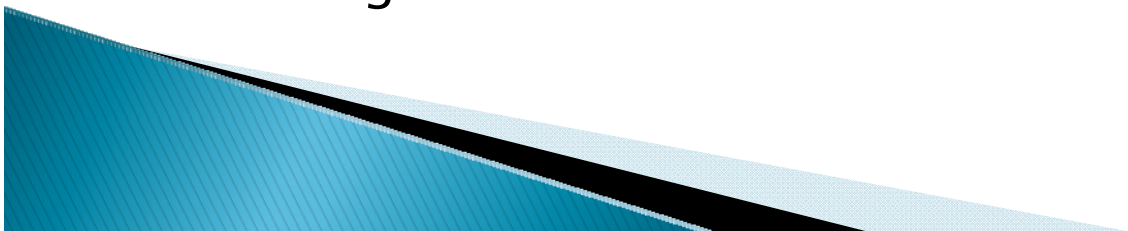
- ▶ Continue to push for rules under RCRA and continued to push their lawsuit.
- ▶ While not a Subtitle C Rule, the Legislation offers up all Industrial Sector Coal Ash (EGUs and Non-EGUs).



EPA Proposes Effluent  
Limitation Guidelines  
and  
Will Be Issuing a Notice of Data  
Availability for CCR Proposed  
Rule

# EPA Proposed Effluent Limitation Guideline for Steam Electric Generating Units

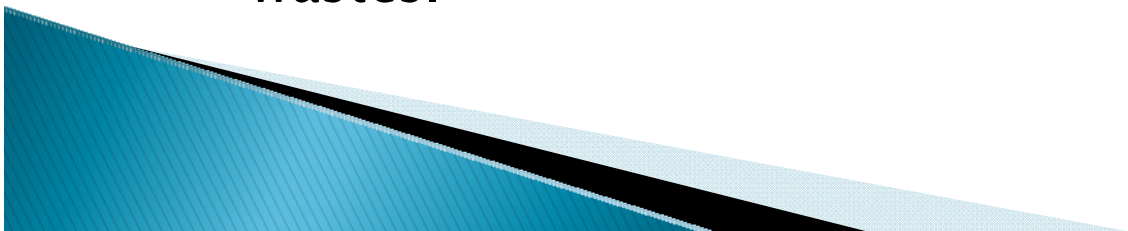
- ▶ Proposed April 19, 2014
- ▶ Pursuant to Section 304(b) of CWA
- ▶ The proposed rule would apply to facilities with the following characteristics:
  - The plants generate electricity from a process utilizing fossil or nuclear fuel in conjunction with a thermal cycle employing the steam/water system as the thermodynamic medium;
  - The facility generates more than 50 megawatts of power; and
  - The facility discharges waste from one or more of the following seven waste-streams: **flue gas desulfurization (FGD), fly ash, bottom ash, flue gas mercury control (FGMC), combustion residual leachate from landfills and surface impoundments, nonchemical metal cleaning wastes, and gasification of fuels such as coal and petroleum coke.**





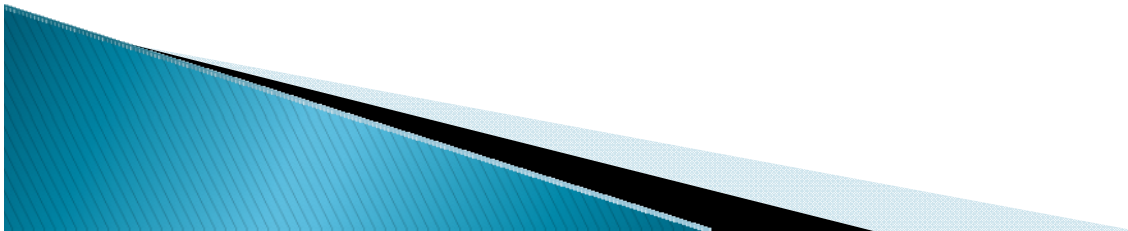
# Impacts on Coal Ash Management

- ▶ Under the leading option, on which EPA based the draft regulatory text, (referred to as Option 4a in the proposed rule), EPA would establish numeric performance standards for existing EGUs based on the following technologies:
  - Chemical precipitation and biological treatment for FGD wastewater;
  - Dry handling of the fly ash, bottom ash (at units above 400 megawatts (MW)), and waste from FGMC systems, thereby imposing a “zero discharge” effluent limit for all pollutants from these three waste streams;
  - Impoundment of combustion residual leachate;
  - Vapor–compression evaporation system for wastewater from gasification processes; and
  - Chemical precipitation for nonchemical metal cleaning wastes.



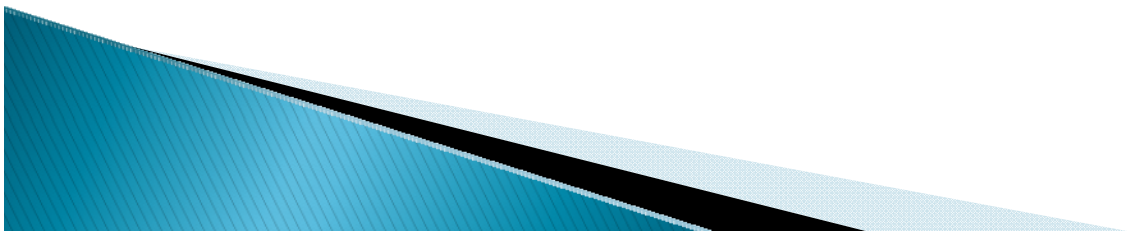
# FGD Waste Water

- ▶ EPA identified six pollutants for potential regulation for FGD wastewater:
  - oil and grease
  - total suspended solids (TSS)
  - arsenic
  - mercury
  - nitrate/nitrite
  - selenium



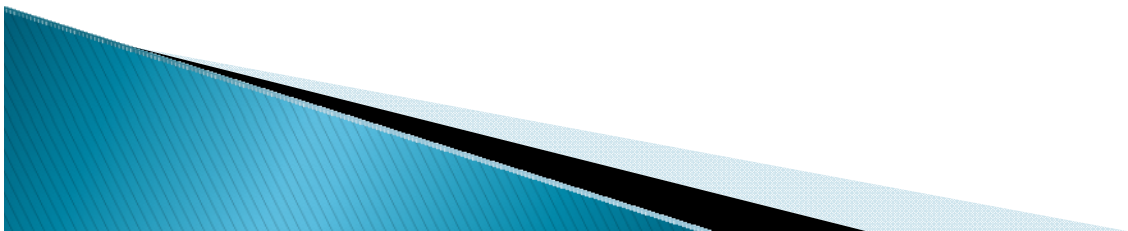
# Leachate

- ▶ For leachate, EPA identified four potential pollutants for regulation:
  - oil and grease
  - TSS
  - arsenic
  - mercury



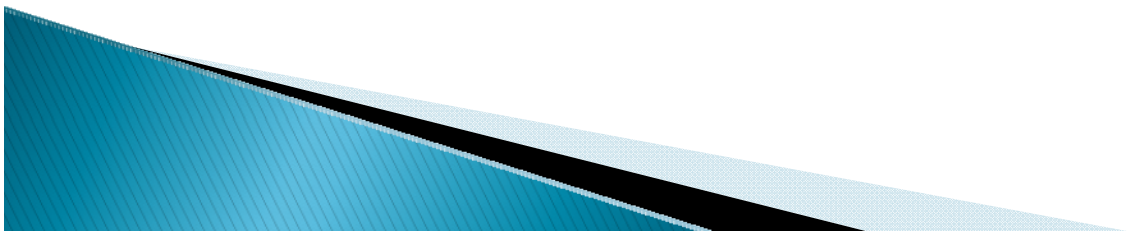
# Elimination of Wet Handling Systems

- ▶ For fly ash discharges, bottom ash, and FGMC wastewater, under some of the proposed alternatives, EPA is proposing to establish zero discharge limitations, which would in effect directly control all pollutants of concern.
- ▶ For other proposed options that would not require zero pollutant discharge, EPA identified two potential pollutants for regulation:
  - oil and grease
  - TSS.



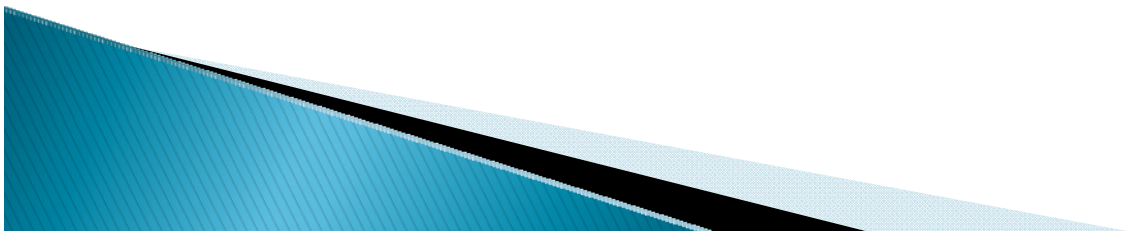
# Coordinated Requirements for Surface Impoundments Containing Coal Combustion Residuals

- ▶ In 2010, the EPA issued a proposed rule to regulate coal combustion residuals (CCR) from coal-fired power plants (Coal Ash Rule).
- ▶ The ELG proposed rule seeks comment on how to harmonize the two rules in order to effectively streamline the compliance process for regulated facilities subject to both rules
  - (1) through coordinating the design of any final substantive CCR regulatory requirements; and
  - (2) through coordination of the timing and implementation of final rule requirements to provide facilities with a reasonable timeline for implementation that allows for coordinated planning and protects electricity reliability for consumers



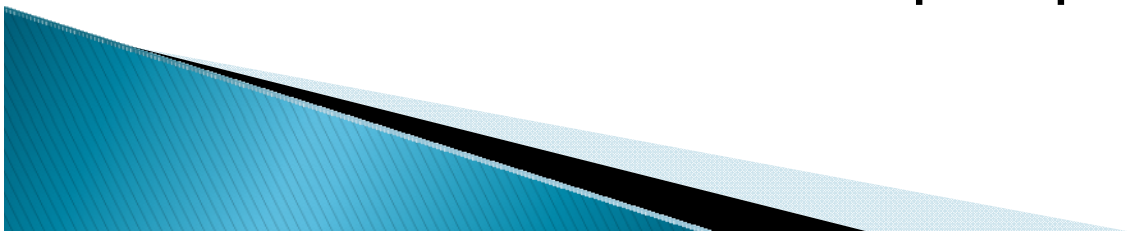
# Elimination of Impoundments and Wet Handling Systems – Incentives

- ▶ The proposed rule also establishes a voluntary incentive program, whereby existing EGUs would be granted two additional years to comply with the new ELG requirements, if they also dewater, close and cap all CCR surface impoundments at the facility (except combustion residual leachate impoundments), including those surface impoundments located on non-adjointing property that receive CCRs from the facility.
- ▶ Additionally, any power plant that eliminates discharges of all process wastewater to surface waters, with the exception of cooling water discharges, would be granted five additional years to comply.



# OSW CCR-NODA

- ▶ EPA submitted a Notice of Data Availability on its proposed Coal Combustion Residuals rule to the Office of Management and Budget for review.
- ▶ The NODA is expected to bring information gathered during the development of proposed Effluent Limitation Guidelines (see above) into the record for the rulemaking under the Resource Conservation and Recovery Act
- ▶ The lawsuit filed last year seeking to compel a deadline for EPA to act on the 2010 rulemaking remains stalled...now postponed until July 26.

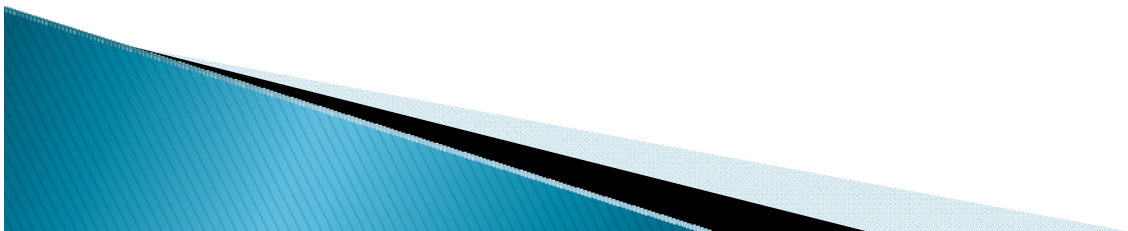


# Legislation



# LEGISLATION

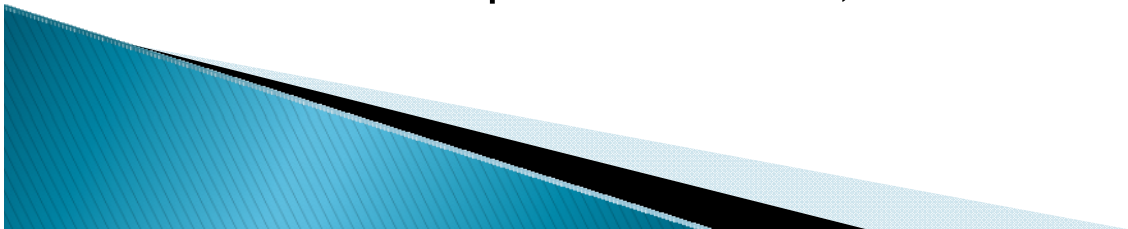
- ▶ Rep. McKinley (WV) introduces H.R. 2218 the Coal Ash Recycling and Oversight Act of 2013 to regulate coal ash



# H.R 221 8 Will Strengthen State Programs, Support Recycling and Protect American Jobs

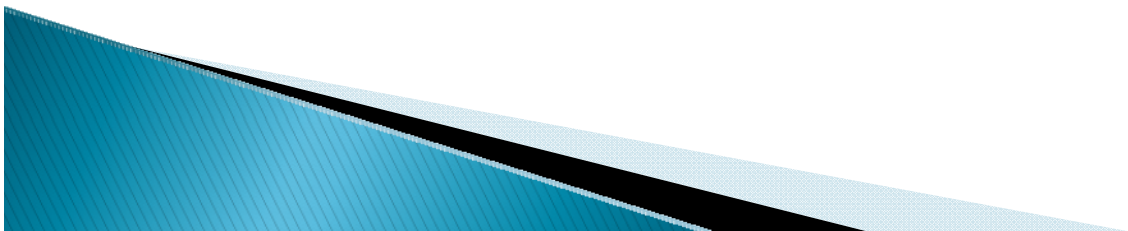
## Critical Aspects Identified by EEI and Coal Ash Coalition

- ▶ Ensures that coal ash disposal units are subject to enforceable permits under a state-administered coal residuals permit program that meets minimum federal requirements, and it ensures greater transparency and specificity in how the state permit programs should operate;
- ▶ Establishes a federal floor for state regulation of coal ash disposal by applying the controls already in place for municipal solid waste landfills (Part 258 criteria), which EPA itself has said is an appropriate comprehensive framework for regulating all aspects of coal ash disposal in land-based units and “would be expected to address the risks presented by the constituents in CCR wastes”;
- ▶ Ensures impoundment safety by establishing structural integrity standards for surface impoundments, including certification and inspection requirements, and by establishing groundwater monitoring and closure requirements targeted specifically for coal ash disposal facilities;



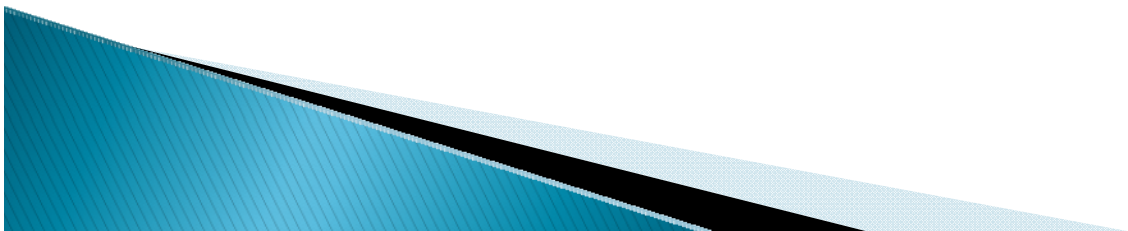
# Critical Aspects (Continued)

- ▶ Ensures permits will incorporate standards for facility design, structural integrity, groundwater monitoring/protection, corrective action, closure, and financial assurance;
- ▶ Provides a statutory deadline for the issuance of permits, as well as a statutory deadline for interim controls that must be met prior to permit issuance, including:
  - groundwater monitoring controls for all coal ash disposal facilities;
  - surface impoundment structural integrity inspections by independent professional engineers;
  - wind dispersal controls;
  - air quality and surface water discharge controls; and
  - run-on and run-off controls.
- ▶ Ensures that unlined surface impoundments that have impacted groundwater undertake corrective action within a specified time period to come into compliance or cease operation and close;



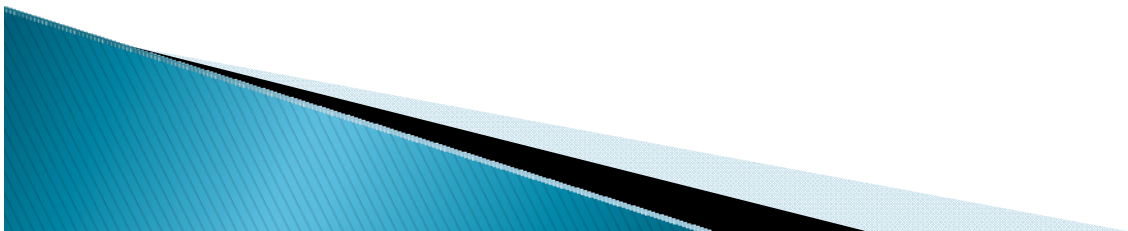
# Critical Aspects (Continued)

- ▶ Gives EPA the authority to enforce compliance with the standards if a state does not establish a coal residuals permit program or the state's program does not conform to the requirements. The bill preserves a state's prerogative to regulate more stringently than the federal floor;
- ▶ Preserves the beneficial uses of coal ash on which many good American jobs depend; and
- ▶ Prevents Administrator from developing rules using coal ash in mine land reclamation.



# The APPROACH

The approach reflected in H.R. 2218 has earned the support of state regulators, ash recyclers, the utility industry, and the business community. Virtually every state and several state associations, including the Environmental Council of the States (ECOS) and the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), as well as the U.S. Conference of Mayors, oppose regulating coal ash as a hazardous waste.



# Questions

- ▶ What is the position of the Non-EGU Industrial Sector who are and will continue to use coal as a fuel?
- ▶ Actions to be considered:
  - Comment on Effluent Limitation Guidelines for EGUs
  - Suggest language requiring EPA to complete a study and report to Congress on the impact of managing coal ash on the Non-EGU Industrial Sector before EPA can address coal ash management as required by the bill.

