

Worldwide Pollution Control Association

WPCA-Southern Company
Wastewater Treatment
Seminar

April 16 & 17, 2013

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WPCA/Southern Company WWT Seminar

April 16-17, 2013

COAL COMBUSTION
BYPRODUCTS (CCB)
REGULATORY UPDATE

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Presentation Overview

- Background
- EPA's CCB Regulatory Proposal
- Subtitle C
- Subtitle D
- Beneficial Uses
- Current Status

Background

- **1980 Bevill Amendment**
 - EPA excluded fossil fuel combustion wastes from hazardous waste regulation until they could be studied and report to Congress their adverse affects, if any
- **1993 EPA Determination**
 - High volume / low toxicity wastes (fly ash, bottom ash, boiler slag, and flue gas desulfurization material)
- **2000 EPA Determination**
 - Low volume / remaining wastes co-managed with the high volume wastes

Background

- **August 2007 EPA Notice of Data Availability**
 - EPA Damage Cases
 - EPA Revised Cancer Risk Assessment
 - Industry data on the management of coal combustion byproducts (CCBs)

- **December 2008 TVA Dam Breach / Failure**
 - 5.4 million cubic yards of ash released into Emory and Clinch Rivers (Kingston, TN)
 - TVA under EPA consent order for cleanup

CCB Regulatory Proposal

- **July 2010:** EPA proposed two approaches for regulating the disposal of CCBs generated by electric utilities and independent power producers in landfills and surface impoundments
 - EPA's proposal does not include CCBs that are beneficially used or in mine filling operations
- EPA's Regulatory Options:
 - RCRA Subtitle C (Hazardous Waste)
 - RCRA Subtitle D (Non-Hazardous Waste)

Overview

- Technical requirements of each proposal are very similar
 - Liners, leachate collection, ground water monitoring
- Differences lie in the enforcement and implementation
 - State vs. Federal enforcement, permit programs
- The Bevill exemption remains for beneficial uses
- Mine filling operations will be covered by the Office of Surface Mining

EPA's Proposal Components

Requirement	Subtitle C	Subtitle D
Effective Date	State adopts	6mo.
Enforcement	Federal	Citizen Suits
Permitting	State	Not required
Financial Assurance	Yes	CERCLA 108(b) rulemaking
Siting	Yes	No
Structural Stability	Yes	Yes
Liner and Leachate Collection	Single Composite	Single Composite
Closure / Post Closure Care	Yes	Yes
Groundwater Monitoring	1 yr after effective date	1 yr after effective date
Secondary Containment	Yes	No
Land Disposal Restrictions	Yes	No

Subtitle C (Hazardous)

- States adopt the rule and implement
- Reverses Bevill Regulatory Exclusion for Disposal
- Federally enforced
- Federally required permits issued by states
- Operational requirements:
 - Financial assurance, structural stability inspections, meet Land Disposal Restrictions and Universal Treatment Standards (solids removal), fugitive dust controls, closure and post closure care, siting restrictions
- Design requirements:
 - Secondary containment, groundwater monitoring, single composite liner for new and existing ponds and new landfills meeting LDRs, leachate collection
- Facilities not meeting requirements:
 - 5 years to begin closure, additional 2 years to complete closure

Subtitle C (Hazardous) Timeline

State Adopts Rule

- Timeframe varies from state to state

Groundwater Monitoring

- 1 year after state adopts the rule

Begin Closure

- Must begin within 5 years of state adopting the rule

Complete Closure

- Additional two years to complete closure (7 years total)

Subtitle D (Non-Hazardous)

- Effective 6 months after final rule
- Minimum criteria set forth that are self implementing
- Enforced through citizen suits
- Operational requirements:
 - Financial assurance through CERCLA 108(b) rulemaking, structural stability inspections, fugitive dust controls, closure and post closure care, siting restrictions
- Design requirements:
 - Groundwater monitoring, single composite liner for new and existing ponds and new landfills, leachate collection
- Facilities not meeting requirements:
 - 5 years to retrofit with liner or cease receiving ash and complete closure

Subtitle D (Non-Hazardous) Timeline

Effective Date

- 180 days (6 mo.) after final rule

Groundwater Monitoring

- Within 1 year of effective date

Pond Retrofit or Closure

- Within 5 years of effective date***

Beneficial Uses

- EPA supports beneficial uses of CCBs
- Requirements in EPA's Proposal
 - ▣ Provides functional benefit, replaces the use of virgin or other alternative material, meets relevant product specs and regulatory standards, where applicable
- Potential loss of uses due to “stigma” associated with hazardous designation
- EPA to consider risks associated with unencapsulated uses, but generally support encapsulated uses (*i.e. concrete, cement*)

Current Status

- **November 2010**: Proposed rule comment period ended, EPA reviewing 450,000+ public comments
- **October 2011**: EPA issued NODA seeking comment on additional technical data
- **April 2012**: Environmental activists filed a lawsuit later joined by coal ash recyclers to force EPA to issue a final rule siting RCRA 2002(b) to review and revise, as necessary, coal ash regulations every three years
 - EPA has stated they need additional time
 - Court will hold a status conference (April 2013)

Current Status

- Additional NODA to be issued by EPA containing new data gathered since the closure of the comment period for the proposed CCB rule
- Guidance documents to be issued by EPA on beneficial uses of CCBs
- Final rule estimated to be issued in 2014

