

Guidance For Preparing Comments to EPA's CCB Regulatory Effort

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Environmental Protection Agency

- 40 CFR Parts 257, 261, 264 et al.
- **Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities; Proposed Rule**

Proposals

- Subtitle C
- Subtitle C - Special Waste
- Subtitle D
- Subtitle D - Prime

CERCLA (The Unreferenced Proposal)

- EPA is also proposing to amend Part 302 of its regulations regarding Designation Reportable Quantities, and Notification
- This is not clearly noticed in the Preamble to the rule.
- CCRs from EGUs would be listed as a hazardous substance.
- IF EPA classifies a waste as hazardous, it becomes a reportable substance under CERCLA.

Issues for Discussion/Direction

- Subtitle C versus Subtitle D
- Federal Enforceability (The Driver) vs State Enforceability
- Applicability
- Use of Leaching Data
- Performance Standards
 - Landfills
 - Impoundments/Dam
 - Beneficial Use
 - Minefilling
 - Monitoring
 - Air Quality
- STIGMA

CIBO POSITION SUPPORT? FIGHT? OR PROPOSED ANOTHER ALTERNATIVE

- WHAT DOES CIBO SUPPORT?
- SUBTITLE C RULE?
- SUBTITLE C SPECIAL WASTE RULE?
- SUBTITLE D RULE?
- SUBTITLE D PRIME RULE?

Applicability

APPLICABILITY

- The Preamble states that the proposed rule is applicable to Coal Combustion Residuals From Electric Utilities
- The Preamble suggests that the proposed rule is not applicable to
 - Beneficial Use of Coal Combustion Products
 - Minefilling of Coal Combustion Residuals
 - Industrial Facilities that are not classified as Electric Utilities

Subtitle C Applicability

- The language in Subtitle C version of the rule, specifically Part 261.4 Exclusions (b)(4)(ii) and (iii) which reads:

“(ii) Fly ash, bottom ash, boiler slag, and flue gas emission control wastes generated primarily from the combustion of coal for the purpose of generating electricity by facilities outside of the electric power sector (i.e., not included in NAICS code 221112).

(iii) Fly ash, bottom ash, boiler slag, and flue gas emission control wastes, generated primarily from the combustion of fossil fuels other than coal, for the purpose of generating electricity, except as provide”.

Subtitle D

- The language in Subtitle D version of the rule, specifically Part 257.1 Scope and Purpose and Part 257.40 Applicability does not exclude any source of CCRs but capture CCRs from most all sources. Thus, the language in Subtitle D would be applicable to Industrial Facilities.

Applicable or Not Applicable

- The language related to the Subtitle C approaches provides for the exclusions identified in the Preamble
- The language related to the Subtitle D approaches does not provide exclusions for beneficial use, minefilling, and industrial facilities.

THE DRIVER

- EPA HAS STAKED OUT THE POSITION THAT ANY CCB REGULATION SHOULD BE FEDERALLY ENFORCEABLE -- OR BY ANY OTHER NAME A SUBTITLE C RULE
- THEY IMPLY THAT THE STATES DO NOT ADEUQATELY ENFORCE THUS SUBTITLE D IS DOOM TO FAILURE – EPA’S VERSION OF STIGMA!!!!
- THE STATES HAVE FILLED THE VOID AS A RESULT OF EPA’S FAILURE. EPA SHOULD DO WHAT THEY REPORTED TO CONGRESS THAT THEY WOULD DO
 - WORK WITH THE STATES AND LEARN FROM THE STATES RATHER THAN REINVENT THE WHEEL!!!!

EPA's "The Enforcer"

- **Federal Enforceability**
- Under a "C" Approach, EPA has enforcement capability
- Under a "D" Approach, EPA claims it has no enforcement capability
 - Suggests citizens suits to comply compliance
 - Not stated is that EPA's approach is to identify how the CCRs must be managed and if not managed per the rule, EPA classifies these sites as "open dumps" which represents an unlawful activity.
- Provides Citizens with a very simple case, if they initiate legal action
- However, this gives EPA enforcement capability under RCRA as it relates to unlawful activities
- By not calling out exclusions for beneficial use, minefilling and not being applicable to industrial under Subtitle D, all CCR management activities are susceptible for enforcement as an "Open Dump"

EPA PAST ACTIONS

Fossil Fuel Combustion Wastes (CCBs, CCRs, CCWs)

- Fossil fuel combustion (FFC) wastes are the wastes produced from the burning of fossil fuels (i.e., coal, oil, natural gas).
- In addressing the regulatory status of FFC wastes, EPA divided the wastes into two categories:
- Large-volume coal combustion wastes generated at electric utility and independent power producing facilities that are managed separately.
- All remaining FFC wastes, including:
 - Large-volume coal combustion waste generated at electric utility and independent power producing facilities that are co-managed with certain other coal combustion wastes (referred to as "comanaged wastes").
 - Coal combustion wastes generated at non-utilities.
 - Coal combustion wastes generated at facilities with fluidized bed combustion technology.
 - Petroleum coke combustion wastes.
 - Waste from the combustion of mixtures of coal and other fuels.
 - Waste from the combustion of oil.
 - Waste from the combustion of natural gas.

States

- Unlike EPA, the States have developed regulatory program for coal combustion byproducts, coal combustion residuals, or fossil fuel combustion wastes. These rules apply to all Industrial Facilities that utilize coal.
- The State Programs have evolved to address waste management issues under state law. These efforts result from EPA's rules on solid waste and on residual waste (Subtitle D Regulations). The most recent changes made by the States were to address concerns set forth in EPA's reports to Congress dealing with "Fossil Fuel Combustion Wastes" and the NAS Study on coal ash and minefilling.

EPA

- NOT EPA!!!! According to EPA (in the preamble), the proposed rules to regulate coal combustion residuals is directed only at the Electric Generation Units and not non-electric generating units. (As such, EPA has severely limited their economic analysis to only the EGU Sector even though EPA is fully aware that the States are regulating CCBs from coal combustion byproducts from all industrial sectors.)

CIBO Member Implications

- CIBO has members that are classified as electric generating facilities and would be covered by the regulations
- CIBO has members that are not classified as electric generating facilities and would not be covered by the regulations based on the **PREAMBLE**

FOR CIBO's Consideration

- Basic Comments???? “CCRs need to be regulated under Subtitle D not Subtitle C”
- The final rule must be clear regarding the “exclusions and applicability” issues
- For the Industrials, the belief that the rule is not applicable to your facilities is misleading as it is believe that they will most likely be captured by the STATES if and when they modify their regulatory programs.

Potential CIBO's Concerns

- The State will implement the final EPA rules on CCRs no matter what Sector generates them as they have already done.
- Since CCRs are generating by burning coal, how does EPA provide one set of regulations for one sector (EGUs) and potentially a different set of regulations for another sector (Industrials).
- It is believed that EPA has excluded Industrial from its the Regulatory Impact Analysis including its Economic Analysis. If the proposed Regulations were applied to the Industrial Sector, it would demonstrate a significant impact on those Sectors.
- By circumventing this analysis, EPA has clearly chosen a means to regulate CCRs for the non-EGU Sectors through default. (This occurs by the fact that the States have regulated CCRs from all sources and will continue to do so based on EPA's final rules (not the applicability of the rule).)
- Prior to and after its May 2000 Regulatory Determination on managing Coal Combustion Residuals, EPA was analyzing the impacts on the Industrial Sector. At that time, EPA recognized that any rules developed to regulate the management of CCRs would have a significant impact on the Industrial Sector.

THE QUESTIONS or CONSIDERATIONS

- When EPA finalized its rule regarding coal combustion residuals for the electric generating units, what will the States do?
- The States will most likely apply the rule to all industrial sectors so that they will not be accused of back sliding!!!
- WITH THIS POTENTIAL RESULT! SHOULD CIBO BE RECOMMENDING THAT EPA GO BACK AND COMPLETE A COMPREHENSIVE ECONOMIC ANALYSIS OF THE IMPACT OF THE PROPOSED RULES ON THE ALL INDUSTRIAL SECTORS UTILIZING COAL BEFORE TAKING AN ACTION TO FINALIZE THE RULE?

Use of Leaching Tests

CCB Leaching

- The States have used leaching test to determine the potential impact of CCBs
- In addition, the leaching results establishes a blueprint on how the CCBs can be managed.

Comments Related to Leaching Tests

- CCP leachates do not exhibit hazardous waste characteristics
 - CCPs do not exceed EPA hazardous waste test limits (TCLP)
 - CCP leachate is similar to non-hazardous inorganic wastes
 - CCP leachate risks several orders of magnitude less than municipal solid waste leachate
- Other Risk Considerations
 - Identified damage cases typically pre-1980, unlined; only 3 off-site exceedances of a Maximum Contaminant Level
 - Mercury in fly ash is not readily released; radioactivity levels are similar to rocks and other building materials

Leaching Analysis

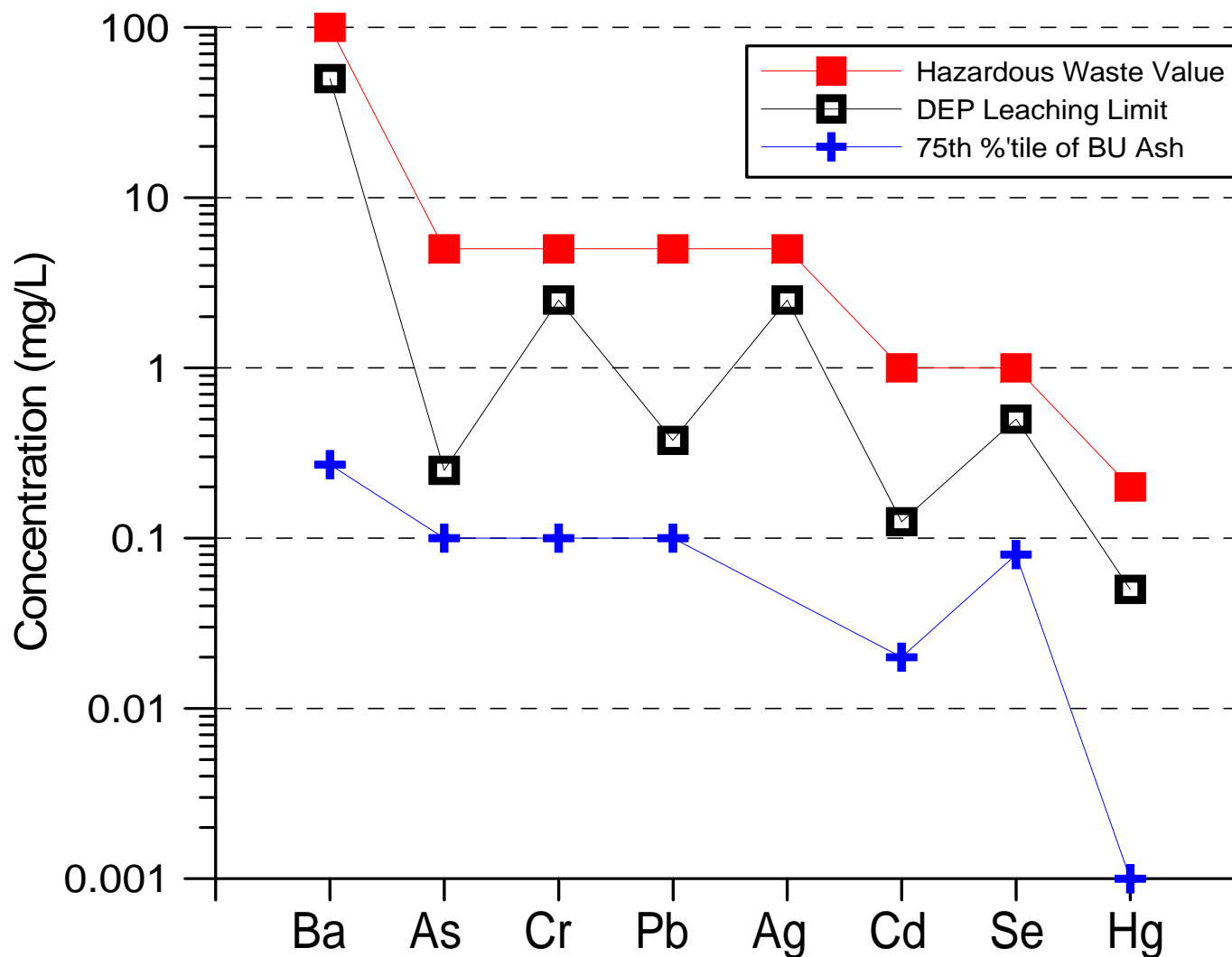
- Should CIBO support a regulatory program where leaching analysis is a critical component of determining how the CCBs are managed?
- (Note-State Programs are already designed with based on this concept.)

A Comparison of Numbers

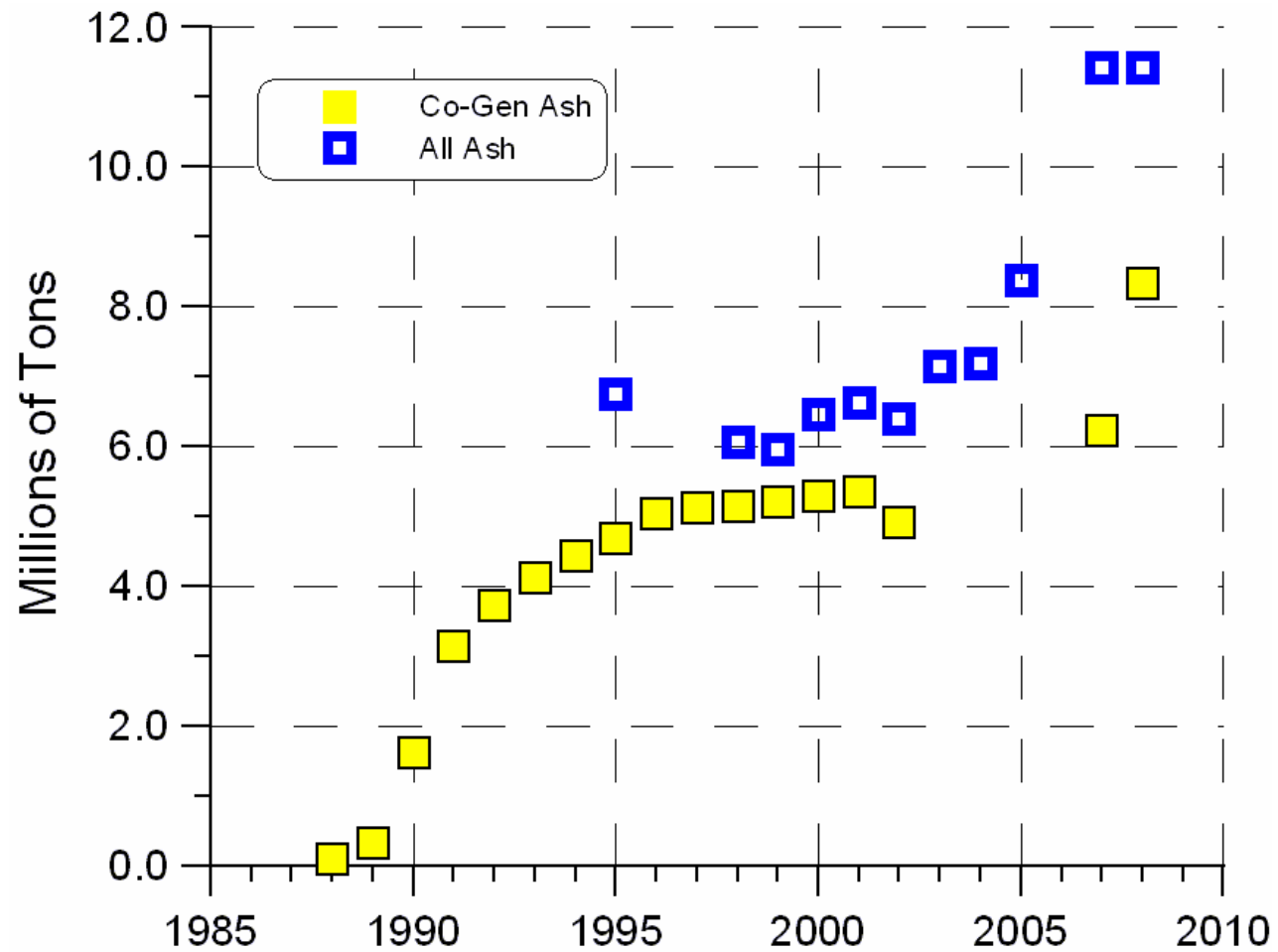
Parameter	Hazardous	DEP	75 Percentile		
	TLCP	SPLP	PC	A-FB	B-FB
Arsenic	5.0	0.25	0.10	0.05	0.05
Barium	100.0	50.0	0.25	0.26	0.27
Cadmium	1.0	0.125	0.005	0.02	0.02
Chromium	5.0	2.5	0.08	0.10	0.08
Lead	5.0	0.375	0.05	0.1	0.1
Mercury	0.2	0.05	0.0002	0.0004	0.0001
Selenium	1.0	0.5	0.08	0.05	0.06

Is Beneficially Used Ash Toxic? The answer is NO.

Coal ash is more than an order of magnitude less than "toxic" values



CCBs from Waste Coal (aka Co-Gen Ash)



Summary

- ▶ There has been no evidence that the leaching of CCBs would result in a classification of CCBs as hazardous waste.

Leaching Tests

- Used to determine how CCBs are managed
- Establish criteria for
 - Requiring liners
 - To be used as structural fills
 - Minefilling

The State Regulatory Approach

- The States developed regulatory programs to manage hazardous, residual, and solid waste produced or disposed of in their states.
- This simplistic approach was developed and implemented at the State level by establishing criteria based the quality of the leachate how that particular waste would be managed.
- The States applied this concept to managing CCBs.

State Approaches

- The States established criteria that determine which CCBs can be utilized in structural fills; in mine land reclamation; or for agricultural purposes. (Note-The States have included certain design standards for these uses.) This criteria is several orders of magnitude less than what is used to classify wastes as hazardous.
- Unless, the CCB is being utilized in manufacturing, cement additive/extender, concrete, or in construction, the State has imposed site restrictions and based on leachate tests whether a liner is required.

General Statements

- CCRs classification should be tied to utilizing EPA methodologies (leaching test protocols) and standards for determining if a waste/byproduct should be classified as hazardous or as a residual waste.
- Using this criteria, there has been no evidence to support a Subtitle C Classification.

CIBO

- Would CIBO's Non-EGU Sectors support a concept of using leaching tests to determine how CCBs are managed?
- Based on leachate quality, CCBs could be disposed in a lined landfill, used as a structural fill (under specific end-use criteria), and in mine filling and mine land reclamation.

Performance Standards

Residual Waste/Solid Waste Management

- Issues dealing with monitoring, assessment evaluations, remediation plans, and closure are similar to existing rules for solid waste, residual waste and hazardous waste.

Water Quality Monitoring

- Design of monitoring network
- IF a significant change in water quality monitoring data triggers
 - Evaluation and assessment
 - Development of an abatement/remediation plan
 - Implementation of the abatement/remediation plan

UNDER SUBTITLE D PRIME APPROACH, A WATER QUALITY PROBLEM WILL LEAD TO THE INSTALLATION OF LINERS

Dams and Impoundments

- NEW AREA
- Was included as an area to be addresses in EPA's Federal Notice on Determinations related to coal combustion byproducts or fossil fuel combustion wastes

AIR QUALITY

- EPA Proposed:
- **§ 264.1308 Air requirements.**
- (a) CCR surface impoundments and CCR landfills must be managed in a
- manner that fugitive dusts do not exceed 35 $\mu\text{g}/\text{m}^3$, unless an alternative standard has been established by the Regional Administrator.
- (b) CCR surface impoundments must be managed to control wind dispersal of dusts consistent with the standard in paragraph (a) of this section unless an alternative standard has been established by the Regional
- Administrator.
- (c) CCR landfills must be managed to control wind dispersal of dusts consistent with the standard in paragraph (a) of this section unless an alternative standard has been established by the Regional Administrator. CCRs placed in landfills as wet conditioned CCRs shall not result in the formation of free liquids.
- (d) Tanks, containers, buildings and pads used for the storage must be managed to control the dispersal of
- dust. Pads must have wind protection that will ensure comparable levels of control.
- (e) CCRs transported in trucks or other vehicles must be covered or otherwise managed to control the wind dispersal of dust consistent with the standard in paragraph (a) of this section unless an alternative standard has been established by the Regional Administrator.

Comments

- What is CIBO's position regarding:

The Proposal: “Fugitive dusts does not exceed $35 \mu\text{g}/\text{m}^3$ ”

Other issues

- Financial Assurances/ Bonding/ Bonding for Water Treatment
- Increase costs associated with potential additional fees to the states and municipalities (HOST FEES)
- State changes to their solid and possibly hazardous waste management plans.

STIGMA

- EPA's has identified this as a critical issue
- EPA has taken the position that a Subtitle C classification for coal combustion residuals will actually in beneficial use whereas Industry has been arguing the opposite
- EPA identified situations where a waste determined to be hazardous is now being utilized in a beneficial manner
 - EPA points to the following as a demonstration that a "Subtitle C" approach will not create a stigma:
 - K061 Dust
 - Electroplating wastewater sludge
 - Hardrock Mine Superfund where the source of the contamination was used in highway construction

Do we have examples where STIGMA is a problem?

- EXAMPLES???????

Comment Game Plan

- Starting Week of Oct 25
 - Initial Draft (Presently over 30 pages and growing!!)
 - Commenting and reviewing changing drafts
 - A conference call if needed the week before comment are due!!
 - Comments due on Nov. 19, 2010