

## **CIBO**

### **COAL COMBUSTION BYPRODUCT (CCB) REGULATION**

#### **CCB REGULATION WILL AFFECT ALL COAL-COMBUSTION SOURCES**

Coal is a viable energy source that competitively and affordably maintains the industrial and institutional productive capacity of the country. All coal users produce CCBs, including:

- Industrial/Manufacturing
- District Steam Heat
- Military Bases
- Schools
- Veterans hospitals
- Government Buildings
- Colleges and Universities
- Hospitals

CCB regulation will affect all producers of CCBs. A hazardous classification of CCBs triggers disposal, cost, liability and other ramifications regardless of the particular coal-combustion source.

#### **SUBTITLE C LISTING IS CONTRARY TO NATIONAL ENERGY AND CONSERVATION GOALS**

The USA will not be moving as a nation away from coal anytime soon; it will necessarily remain part of our fuel portfolio for the foreseeable future. As a result, efficient use of coal should not be discouraged.

Many industrial facilities utilize cogeneration (combined heat and power or CHP) which is one of the most efficient ways to use coal. CHP is the most efficient use of energy resources. Subtitle C listing will discourage CHP development.

Congress adopted RCRA to establish nationwide practices for resource conservation and recovery of value from those resources. Congress directs the federal government in every energy-related law to conserve energy and exploit alternative energy sources. EPA and industry have worked together to develop environmentally safe beneficial use options for CCBs. Subtitle C listing will end those efforts and the recovery of the energy value in CCBs.

#### **SCIENCE**

Though all coal fired units produce CCBs, not all CCBs are the same. There are vast chemical differences among CCBs. These chemical differences should be dictating whether or not a material is a hazardous waste.

To call all CCBs hazardous waste is to negate the science behind classification and subsequent management of true hazardous waste and to undermine the potential replacement of virgin materials with a recyclable material.

Chemical and leaching test results would not lead to classifying CCBs as RCRA Subtitle C hazardous waste. In 2000, after a decade of study, EPA came to the conclusion that CCBs can be adequately regulated under Subtitle D.

### **POTENTIAL LIABILITY AND PUBLIC PERCEPTION WILL DRIVE OUTCOMES**

If CCBs are reclassified as hazardous waste, multiple avenues of potential liability under RCRA and common-law will force producers to abandon beneficial uses of the materials and return to traditional hazardous waste disposal methods. Liability concerns raised by a Subtitle C listing include, for example:

- Liability for production of a hazardous waste.
- Liability and corrective action for past beneficial uses of now-hazardous waste.
- Transporters and haulers will need to meet standards for transporting hazardous waste; manifests, reporting and multiple other handling measures will be required.
- Repair of boilers and equipment associated with the generation and management of CCBs will need to be conducted using additional protective gear and clothing.

Public-service providers and other entities will abandon beneficial uses rather than risk an assault on their reputations for alleged improper disposal of hazardous materials.

### **DISPOSAL COSTS**

- Hazardous waste disposal costs for reclassified CCBs will be prohibitive. Cost impact on electricity providers (the only cost EPA acknowledges) is one small fraction of true cost impact.
- The industrial and commercial sectors, which utilize energy to produce goods, must absorb these costs. Examples of estimated disposal cost impact on two CIBO members:
  - **University member**  
Current cost (structural fill): \$225K/year (\$9/ton)  
Subtitle D cost: \$930K/year (\$38/ton)  
Subtitle C cost: \$2.31M to \$3.6M/year (\$96-144/ton only for 20 years until the Subtitle C landfill is full)
  - **Industrial member**  
Current cost (beneficial reuse): ≤\$12 per ton  
Subtitle D cost: ≤\$20/ton  
Subtitle C cost: \$113 per ton
- Citizens ultimately bear the cost impact (unaccounted for by EPA), in the form of increased cost for goods and services, including, for example:
  - Education - public and private schools, child care, colleges and universities
  - Health Care - care and pharmaceutical products
  - Government - local, county, state, and federal
  - Municipal services - water, sewage, police, fire, medical emergency
  - Consumer products - food, shelter, clothing, etc.

## **CCB DISPOSAL IS AND SHOULD CONTINUE TO BE REGULATED BY STATES**

There is an existing, effective structure for CCB regulation. This permits continuing flexibility and adaptability to local conditions. Additional disposal requirements can be developed for nationwide application without reclassifying CCBs as Subtitle C waste.

## **DAMAGE CASES MUST BE VIEWED FROM MULTIPLE PERSPECTIVES**

Reports of damage from CCB placement must be fully analyzed and viewed in the context of location, use, applicable regulatory program, and other factors including:

- What was the applicable regulatory program for CCB management?
- Did the type of disposal operation demonstrate a consistent problem (for example, disposal in sand and gravel operations, sluicing of CCBs in to the site, co-mixing pyrite from ball mills)?
- If wetlands were involved, was this being done at the time when the US Public Health Service and Army Corps of Engineers were working to eliminate wetlands as vector sources?
- Was the site where a problem was occurring, part of a waste water treatment system?
- In the case of dams and impoundments, did they meet national standards for dam safety when impounding liquids or semi-solids?

## **LACK OF DISPOSAL SITE AVAILABILITY**

- There are very few hazardous waste landfills in country.
- If CCB becomes subject to Subtitle C, existing hazardous waste landfills will fill up quickly. One new haz waste landfill in Indiana would be filled up in 10 years with CCB from one area industrial manufacturer. Utilities would swamp available space.
- Subtitle C landfill permitting is very difficult and time consuming.
- History has shown NIMBYs will delay or prevent new landfill development.

## **IMPACT ON SMALL ENTITIES**

Obviously, the higher cost of CCB disposal will force users away from coal, especially smaller users. That is the apparent intent of the regulation. Changing from coal to natural gas or oil as an energy source will drive up demand and energy cost for these small users. Many of these, such as schools, universities and government institutions can ill afford drastic increases in energy prices as they are currently cash-strapped. Institutions without dual fuel capability may have to replace or add boilers. States also cannot afford huge capital programs at the present.

## **IMPACT ON BOILER OPERATIONS**

Under a Subtitle C classification, a major concern is exactly "when" in normal boiler operations, does the CCB substance become hazardous? Broad Subtitle C classification could easily result in many boiler units becoming a "hazardous waste storage sites" somewhere in or slightly out of the combustion chamber. This can have tremendous impact on operational and maintenance practices and drastically increase costs.