

## **Coal Combustion Byproduct Regulation**

### **Legislative and Regulatory Background**

With the passage of the Resources Conservation and Reclamation Act (RCRA), P.L. 94-580 and enacted October 17, 1976, the EPA was required to develop regulations regarding the identification and management of hazardous waste. In December of 1978, EPA published its first proposed regulations regarding hazardous waste management. The notices included a proposal to exempt six categories of “special waste”, including combustion wastes from fossil fuels, from the RCRA Subtitle C regulations until further studies could be completed.

On October 12, 1980, Congress enacted the the Solid Waste Disposal Act Amendments of 1980 (Public Law 96-482) which amends RCRA. Among the amendments, Section 3001(b)(3)(A)(i-iii)—frequently referred to as the Bevill Amendment—temporarily exempts three special wastes from hazardous waste regulation until further study can be completed. Section(b)(3)(A)(iii) specifically exempts "fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels." At the same time Section 8002(n) requires EPA to study these wastes and submit a Report to Congress evaluating the adverse effects on human health and the environment, if any, from the disposal and utilization of these wastes by October 1982. EPA is also required to make a regulatory determination (within six months of the completing the Report to Congress) as to whether FFC wastes warrant regulation under RCRA Subtitle C or some other set of regulations.

EPA promulgates interim final amendments to the hazardous waste regulations in the Federal Register (45 FR 76618) on November 11, 1980. This FR notice includes an exclusion for fossil fuel combustion wastes from the definition of hazardous waste (§261.4(b)(4)).

EPA failed to submit its report to Congress by October 31, 1982, but it managed to submit its report to Congress in February of 1988 on Wastes from the Combustion of Coal by Electric Utility Power Plants (EPA530-SW-88-002). The report only addresses wastes generated from the combustion of coal by electric utility power plants, and fails to address co-managed utility coal combustion wastes, other fossil fuel combustion wastes, and wastes from non-utility boilers.

On August 9, 1993 EPA finally published is first regulatory determination after missing deadlines and being sued. The Part I Regulatory Determination for large-volume utility coal combustion wastes in the Federal Register (58 FR 42466). EPA determines that fly ash, bottom ash, boiler slag, and flue gas emission control dust from coal burning utilities do not warrant regulation under Subtitle C and remain excluded from the definition of hazardous waste under RCRA §261.4(b)(4).

As part of the Part I Regulatory Determination, EPA decided it requires more time to research the remaining wastes associated with coal combustion to make an appropriate determination. On March 31, 1999 EPA submits a Report to Congress on Wastes from the Combustion of Fossils Fuels which addresses the remaining wastes not addressed in the February 1988 Report to Congress and the Part I Regulatory Determination.

On May 22, 2000 EPA publishes a Regulatory Determination on Wastes from the Combustion of Fossil Fuels in the Federal Register. EPA concludes that the remaining fossil fuel combustion wastes do not warrant regulation as hazardous waste under Subtitle C of RCRA and is retaining

the hazardous waste exemption for these wastes. However, EPA determines that national non-hazardous waste regulations under RCRA Subtitle D are needed for coal combustion wastes disposed in surface impoundments and landfills and used as fill in surface or underground mines (minefill). EPA further determines that beneficial uses of these wastes, other than for minefilling, pose no significant risk and no additional national regulations are needed.

No effort has been made by EPA to propose regulations pursuant to their 2000 Regulatory Determination. Further the determination was appealed by environmental groups and dismissed based on ripeness. There have been petitions filed to cause rule making.

Congress, in response to concerns raised by environmental groups requested that the National Academy of Science conduct a study on the placement of coal combustion wastes in mines. On March 1, 2006 the National Academy of Sciences (NAS) issues a report on the placement of CCRs in coal mines. NAS Committee concluded that although the Federal Surface Mining and Reclamation Act of 1977 (SMCRA) does not specifically regulate CCR placement at a mine site its scope is broad enough to encompass such regulation during reclamation activities.

While the Federal Office of Surface Mining and Reclamation was developing a regulatory program for the management of CCRs in coal mines, EPA had not move forward in issuing its regulations as indicated its Regulatory Determination. However, EPA did file a notice of data availability and solicited comments in August 24, 2007.

In the interim, the States have move forward to promulgate regulations regarding the management of CCBs. In doing so, the State have attempted to address issues and concerns as set forth in EPA's Regulatory Determinations as well and the NAS Study.

### **Recent Events**

On December 19, 2008 a group of environmental organizations sent a letter to President Elect Obama regarding the regulation of coal combustion wastes and the need for regulations especially in coal mines. This included their concerns regarding the OSM regulations being finalized. (Note-These regulations were returned to the Department of the Interior for review by the next Administration prior to going forward.)

In December 22, 2008 there was a collapse of a Tennessee Valley Authority (TVA) Kingston Fossil Fuel Plant (Harriman, TN) retention pond (dam) releasing an estimated 3.1 million cubic yards of mud and ash into the local environ and the Tennessee River

On Jan. 9, 2009, TVA confirmed a spill occurred on at their Widow's Creek Fossil Plant in northeastern Alabama, approximately 10,000 gallons of gypsum slurry and runoff escaped from the scrubber sludge impoundment.

On Jan. 14, 2009 Earthjustice released a report entitled "WASTE DEEP: Filling Mines with Coal Ash is Profit for Industry and Poison for People". (See: [www.earthjustice.org/library/reports/earthjustice\\_waste\\_deep.pdf](http://www.earthjustice.org/library/reports/earthjustice_waste_deep.pdf) for a copy)

As a result of these "dam failures" Congressman Nick Rahall (D-WV, 3<sup>rd</sup> District) introduced legislation to have OSM become responsible for permitting the dams. Other members of the Congress and the Senate have expressed concern and the need for new legislation.

“Inside EPA” reported that an EPA official gave a Feb. 10 presentation to the Board of Scientific Counselors, an outside group of science advisors that provides advice to the agency on its research programs, on a July report that looked at the concentrations of metals in fly ash and scrubber sludge in coal waste. The report, *Characterization of Coal Combustion Residues from Electric Utilities Using Wet Scrubbers for Multi-Pollutant Control*, is the second in a series of four that the agency is working on to address risk issues associated with the waste. (The report raises the possibility of increased chromium leaching, which would boost the levels of chromium in coal waste. According to the presentation, the report also found that post-combustion NOx controls “may be a factor in the release of chromium and another metals from fly ash, scrubber sludge and fixated scrubber sludge”).

On a conference call with OSM, it was revealed that both EPA and OSM will be proposing rules this year regarding CCBs and the management of CCBs.

(See Following Websites for additional insights into the issues:

<http://www.publicintegrity.org/blog/entry/1191/>

<http://www.publicintegrity.org/blog/entry/1174/>

<http://www.publicintegrity.org/blog/entry/1169/>)