

**International Workshop on
Environmental Aspects of Coal Ash Utilization**

Tel Aviv, Israel
December 15th – 16th 2009

**Update On The U.S. Environmental Protection Agency's Attitude
Toward Coal Ash Utilization and It's Environmental Implications**

Robert B. Finkelman,
University of Texas at Dallas, Richardson, TX, USA

Abstract

The U.S. Environmental Protection Agency (EPA) has debated the status of coal combustion residues for the past 30 years. The 1980 Belvill Exemption, an amendment to the 1976 Resource Conservation and Recovery Act (RCRA), forged the EPA's attitude towards coal combustion wastes. The amendment exempted fossil fuel combustion residues from regulation as a hazardous waste. It classified these materials as 'solid wastes,' provided that they passed a standardized leaching protocol, thus leaving it up to the individual states to regulate disposal of this material as they see fit. The leaching protocol was changed in 1990 and a new protocol will soon be announced.

The EPA reviewed their attitude towards coal ash in 1988 and in 1993 and decreed that the high-volume coal combustion byproducts are non-hazardous again leaving disposal regulation to the states. In 1997 a contractor report to the EPA described the human and ecological risk assessment of coal combustion waste management practices. They found risk at the 90 percentile to exceed the criteria for cancer (10-5 excess cancers risks) and noncancer risks for arsenic, and under certain circumstances noncancer risks for boron, cadmium, and molybdenum. The type of liner used was a critical factor in affecting infiltration rates. Composite liners effectively reduced risks for all pathways and constituents.

The EPA is once again reviewing their attitude towards coal ash and a regulatory proposal with regard to labeling coal ash a hazardous waste is expected in December of 2009, though a delay is likely due to the review process. Attention has once again been focused on coal combustion byproducts following the December 22, 2008 collapse of an ash pond dike in Kingston, TN releasing 5.4 million cubic yards (~ 1 billion gallons) of coal ash sludge. The EPA is checking all dikes constructed of coal combustion byproducts and will be developing policies to deal with this issue. The EPA was also considering regulations with respect to the placement of coal combustion products in surface and underground mines but action on this issue has been delayed.