Coal Combustion Products: Creating Economic Sustainability

Construction project managers across America are learning that recycled-content construction products are cost-effective, reliable, easy to obtain, and environmentally friendly.

- Coal combustion products contribute a direct economic impact to the U.S. of over $2.2 billion annually and a total (direct and indirect) economic impact of nearly $4.5 billion annually. (American Coal Council, 2005)
- Green building rating systems encourage the use of materials locally available, with recycled content that contribute to innovation and reduction of the consumption of other resources such as water. (US Green Building Council, Leadership in Energy & Environmental Design (LEED) and Green Building Initiative Green Building Assessment Protocol for Commercial Buildings.)
- Organizations such as the Collaborative for High Performance Schools (CHPS) support the use of concrete containing fly ash in building construction. (California CHPS, November 2008; Texas CHPS, November, 2008; and Colorado CHPS February 2009)

The Federal government has taken a leadership role in encouraging and supporting sustainable practices through the use of industrial byproducts, such as coal ash, in its construction processes.

- Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management" requires federal agencies to purchase green products and services, including recycled content products and environmentally preferable products and services.
- Federal Comprehensive Procurement Guidelines (CPGs) and Environmentally Preferable Purchasing (EPP) encourage and assist federal agencies in purchasing environmentally preferable products and services. The Ronald Reagan Building is cited as a case study which used fly ash in concrete for the construction of this facility. (US EPA http://www.epa.gov/epp/)
- Federal concrete projects used an estimated 5.3 million metric tons of coal fly ash in 2004 and 2005 combined. This substitution yields a number of environmental benefits, including avoided energy use of approximately. 25 billion megajoules; avoided water consumption of two billion liters; and avoided carbon dioxide equivalent emissions of 3.8 million metric tons. Energy and water savings represent two significant impacts that can be monetized using market prices. Results indicate that the beneficial use of coal fly ash in 2004 and 2005 resulted in energy savings valued at approximately $0.7 billion, and water savings valued at approximately $1.2 million." (US EPA Report to Congress Study, June 3, 2008).
- The US Army Corp of Engineers has specifications for concrete containing fly ash (www.usace.army.mil) and the Federal Aviation Administration supports the use of fly ash in many construction applications. (http://www.faa.gov/search/?q=fly+ash&x=33&y=14)
- States such as Wisconsin, Texas, Pennsylvania, Illinois, Iowa, Minnesota and others have state guidance pertaining to the use of coal combustion products in construction and transportation activities. Cites such as Denver, Seattle, New York City, Columbus (Ohio), and San Diego support green construction practices, including the use of coal combustion products. (American Coal Ash Association, 2008)

For more information, please visit www.coalashfacts.org

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To classify coal ash as a hazardous waste would be contrary to proven science and would result in significant job losses and shut down a multi-billion dollar industry that supports sustainable practices.