



Arizona Department of Transportation
Intermodal Transportation Division

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janice K. Brewer
Governor

John S. Halikowski
Director

Floyd Roehrich Jr.
State Engineer

August 4, 2009

The Honorable Lisa Jackson
Administrator, Environmental Protection Agency
Room 3000, Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Ms Jackson:

It has recently been brought to our attention, by the American Coal Ash Association (ACAA), that the Environmental Protection Agency (EPA) is considering new environmental regulations for coal combustion by-products, specifically fly ash. This has occurred as a result of the failure of a wet ash impoundment at the Tennessee Valley Authority's Kingston, Tennessee facility.

In previous determinations by the EPA (1993 and 2000) these coal combustion by-products, including fly ash, did not warrant regulation as hazardous waste materials. Reclassification of these by-products as hazardous waste materials could put the Arizona Department of Transportation (ADOT) as well as other DOT's throughout the United States in a very precarious position with the EPA, the United States Department of Transportation (USDOT), and Federal Highway Administration (FHWA) all of whom have been strongly advocating the use of fly ash not only in concrete but in a wide variety of other uses for highway and bridge construction since the early 1970's.

A publication titled "Fly Ash Facts for Highway Engineers" provides valuable information regarding the many uses of fly ash. This publication is sponsored by the USDOT through the FHWA, in cooperation with the ACAA and the EPA. The second paragraph in the preface of this publication states, "*Fly ash has been used in roadways and interstate highways since the early 1950's. In 1974, the Federal Highway Administration encouraged the use of fly ash in concrete pavement with 'Notice N-5080.4', which urged states to allow partial substitution of fly ash for cement whenever feasible. In addition, in January 1983, the Environmental Protection Agency published federal comprehensive procurement guidelines for cement and concrete containing fly ash to encourage the utilization of fly ash and establish compliance deadlines*".

The benefits of mixing fly ash in concrete are many, including abating alkali-silica reactivity (ASR), providing a higher ultimate strength without adding more cement, improving workability, increasing resistance to sulfate attack, reducing permeability, increasing durability which leads to a longer life for the concrete structure, helping to reduce shrinkage, and resulting in lower costs for concrete structures and products.

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The use of fly ash in concrete, earth stabilization, structural and embankment fills, base course stabilization, flowable fills, asphalt pavements, grouts, etc provides a substantial reduction in greenhouse gases such as carbon dioxide (CO₂).

If the DOT's are not allowed to use fly ash in highway and bridge construction, CO₂ emissions from the production of cement and other products will increase greatly since more cement and other cementitious materials will be required to meet the strength, durability, ASR abatement, and reduced permeability requirements of the concrete used in our highways, bridges, and other related concrete structures.

In addition, cement (and ultimately concrete) costs will escalate due to the need for more cement in the concrete to meet the strength requirements. Since more cement will be needed and produced, more CO₂ gases will also be emitted.

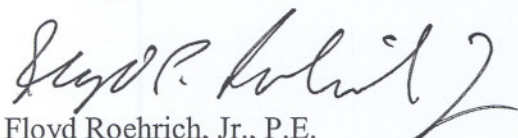
The Cholla Electric Generating Station in Arizona recycles over 90% of the fly ash that it generates for use in a variety of applications. Several other generating stations in Arizona also recycle a very high percentage of their fly ash. This high percentage use of recycled fly ash helps to reduce the need for more fly ash storage ponds and ultimately contributes to lower electrical costs for the consumer.

The failure of the wet ash impoundment at the Tennessee Valley Authority's Kingston, Tennessee facility is really a safety issue and does not make fly ash a hazardous material. To use this incident as a reason to reclassify fly ash as a hazardous material would be a monumental disservice to coal fired power plants, DOT's in the US, cement manufacturers, concrete suppliers, and the construction industry that uses cement and concrete in their construction activities.

ADOT respectfully requests that the EPA does not regulate or reclassify coal combustion by-products as hazardous materials under Subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976 or a hybrid approach of regulations under Subtitle C or any other section of the RCRA.

We thank you for your attention and consideration to this matter. Please feel free to contact our offices should you have any questions or comments.

Sincerely,


Floyd Roehrich, Jr., P.E.
State Engineer