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Ash from coal plants has uses

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The very interesting series on the hazards of ash pollution by Tony Bartelme did a real public service. Your readers might be interested to know there is a solution to this problem that is already in the possession of the state. South Carolina, through Clemson University, owns 50 percent of a patented process that can convert toxic fly ash into useful and valuable products used for insulation and building panels.

Alan Hawes
The Post and Courier

Every year, coal-burning power plants put about 2.3 billion tons of ash waste in ponds and landfills. Pictured is an SCE&G site near Knightsville.

The process, a form of vitrification, was developed during the environmental cleanup following the closure of the Charleston Navy Base. Clemson University assisted two other shipyard environmental engineers and myself in developing the process. Clemson was also instrumental in helping former U.S. Sen. Fritz Hollings in getting a half-million dollar grant from the Department of Energy (DOE) to test and prove the process. The full details of the process and the grant are given on the Web site (http://juniorhistory.com/enterprises.html).

This process could complement the fly-ash recycling efforts already under way at Santee Cooper. It would not be a small job, but if a sufficient number of facilities using this process were established, future ash could be converted into something useful with value. In addition, the existing ash piles could be "mined" and, over a period of time, could be converted and the hazard to nearby rivers and groundwater eliminated.

In addition to the potential problems caused by fly ash produced by coal generating plants, it should be noted there are thousands of tons of contaminated incinerator ash buried in Dorchester County. This ash was produced by the Charleston County trash incinerator over the years. In a hurricane and earthquake-prone area such as the Lowcountry, this buried ash will pose a serious threat to our water and groundwater for centuries to come. This buried ash could also be mined and converted into a useful product by the process.

The most promising potential product to be made from the ash by the process is mineral

wool or rock wool. This is a valuable product and, if successful, there is a possibility that the profits from the mineral wool could even pay for the cleanup.

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