



News Release

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U.S. Environmental Protection Agency (EPA)

Ash to Cash: Coal Waste Becomes Viable Product

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(Washington, D.C.-May 20, 2005) Ten organizations have been recognized for their leading roles in helping to convert a source of solid waste -- coal ash -- into a useful component in a growing number of consumer and industrial products. The ash is what's left from coal burned primarily at power plants.

The U.S. Environmental Protection Agency lauded the organizations both for their contributions to waste reduction and recent innovations that will help boost the ash recycling rate to 45 percent by 2008, up from 38 percent in 2003. The awards were presented at the World of Coal Ash Conference, on April 13th, in Lexington, Ky. The award ceremony was sponsored by the Coal Combustion Products Partnership.

The nearly 125 million tons of coal ash generated annually is used to make high-strength concrete, especially for highways; to de-ice roads; and to make grouting, paint, bowling balls, and other products. Demand has become so strong that some power plants are selling all the ash they produce and more that they recover from landfills, formerly the last resting place for the residue.

Thomas P. Dunne, Acting Assistant Administrator for EPA's Office of Solid Waste and Emergency Response, in addressing the Kentucky conference, said, "The coal combustion industry is finding new, environmentally beneficial ways of reusing materials once considered wastes. Congratulations to everyone involved for their spirit of innovation."

The Coal Combustion Products Partnership, part of EPA's Resource Conservation Challenge, is working to meet national waste-reduction goals. Altogether, the award recipients reduced total greenhouse gas emissions by several hundred thousand tons; increased coal ash recycling rates by as much as 100 percent in some cases; educated the public about the environmental and economic benefits of coal ash reuse; and demonstrated ways to reduce construction costs using coal ash and the need for raw materials.

The organizations cited include:

Great River Energy, first place Environmental Achievement, Elk River, MN, spent more than \$27 million for reclamation of coal ash at two plants in North Dakota. It also developed an energy-efficient, aerated concrete product that will be used for building construction at Bismarck State College. Since 2003, the company's has sold enough high quality fly ash as a replacement for Portland cement to reduce total greenhouse gas emissions by an estimated 525,000 tons.

Charah Environmental Inc., Louisville, KY, first place in the Innovation category. They cited for finding new ways to bring recycled bottom ash back to the consumer. Instead of using dusty paper concrete bags, the company sells its lightweight, bottom-ash concrete mix in two-handled plastic bags. This innovation helped the company win an agreement with Home Depot, which will purchase 41 million bags of Charah's concrete over the next three years--reusing 1.3 million tons of bottom ash and 160,000 tons of fly ash.

Pittsburgh Mineral and Technology, New Brighton, PA, honorable mention in the Innovation category. It has developed a technology to build brick pavers that use high loss-of-ignition coal ash as a substitute for Portland Cement. PMET is currently building a new plant that will make 13.6 million pavers per year and use 67 to 90 percent less energy than modern high-efficiency brick kilns.

The Lower Colorado River Authority, Austin, TX, Fayette Power Project won first place for Enhanced Utilization. It recycles more than 100 percent of its coal ash by digging up its old stockpiles of combustion products to meet market demand for the ash.

XCEL Energy's Harrington (Amarillo, TX) and Tolk (Muleshoe, TX) Stations, and Lafarge North America (Herndon, VA), won honorable mention for Enhanced Utilization, for recycling 100 percent of their coal ash at these two powerplants. They recycled a combined total of 500,000 tons last year.

Lewis and Clark Fort Mandan Foundation, Washburn, ND, first place for Communications and Outreach. Their visitors center is America's premier demonstration project for coal combustion products. The Foundation educates the public about the environmental and economic benefits of coal ash reuse. The structure of the Foundation's Visitors Center is a demonstration of the flexibility of coal combustion products--they are incorporated into nearly all of its major building components.

Association of Canadian Industries Recycling Coal Ash (CIRCA), Montreal, Quebec, won honorable mention for Communications and Outreach. CIRCA has developed educational materials describing the environmental benefits of coal ash in a variety of applications, including use in concrete. CIRCA's materials are being used extensively throughout Canada, Europe, Australia, and the United States.

Kansas City Power and Light; Jackson County, Missouri; Lafarge NA, University of Missouri, Kansas City, won the first place for Partnership Award. They partnered on a project demonstrating the viability of full-depth, in-place, cold recycling of asphalt. Nearly 2½ miles of existing asphalt pavement and base materials were ground up, mixed with 700 tons coal ash, and relaid in place. This technique reduced the cost of road repairs by 33 percent, saving on the cost of hauling away the old pavement.

University of North Dakota's Energy and Environmental Research Center won the first place award for Research. The center conducted research on coal combustion products for more than 20 years. The program helped expand the uses of coal ash for many commercial applications. The center's web site, <http://www.undeerc.org/carrc>, is seen as a useful technical resource on coal ash.

WE Energies (Wisconsin Electric Power Company), Milwaukee, won the biggest award of the evening, for Overall Achievement. In 1980, WE Industries land-disposed 95 percent of its coal ash. Thanks to the new methods it developed, WE Industries now recycles 98 percent of its coal ash. The technologies the company utilizes to reuse coal ash have been so successful that it is now digging up its old coal ash to be re-burned and then sold as a product for making concrete.