The Performance of Ash Recovered from Ponds and Landfills.

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The closing of coal-fired power plants has made the recovery of coal ash from ponds and landfills an increasingly attractive proposition. However, the performance characteristics of the recovered ash needs to be addressed. To this end EPRI has supported the examination of ash recovered from both landfills and inactive ponds along with marketed ash collected from ready mix plants. Both U.S. (ASTM C-618) and European (EN-450) methods were used in the testing. In addition, the direct measurement of pozzolanic activity via thermal gravimetric analysis and resistivity monitoring was performed. The objective of the effort was to resolve two questions: does recovered ash perform on par with run of plant ash, and are the current specifications and standards adequate to address the needs of recovered ash? The answer to both is a qualified yes. Fresh and recovered ash with the same particle size and loss on ignition were found to have the same performance base on a multitude of measurements. However, recovered Class C ash was not tested. Also, some samples of the recovered ash were found to have contamination with coarse plant debris as well as bottom ash. As this could easily be removed by coarse screening (i.e. +50 mesh), an additional top size specification may be desirable and worth considering.