Bottom Ash Use in Utility Joint Trench Operation

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Abstract

The use of Bottom ash in backfilling utility joint trenches is the combined efforts of several departments working together to solve two different problems. First problem, find a cheaper alternative to sand; second problem, find cheaper disposal means for bottom ash.

The electric distribution arm of The Cincinnati Gas & Electric Co (CG&E), subsidiary of Cinergy Corp., has used sand for years in backfilling joint trench utilities of gas, electric, telephone, and CATV. New regulations were going to require more sand to be used increasing the cost of the joint trench operation.

The By-Products arm of CG&E is always looking for lower cost disposal of its bottom ash.

These two groups have been working on other projects together for years and at an erosion control meeting the two groups were talking about sand when the idea was created, why not use bottom ash in place of sand?

After much testing, discussion and a few trials, it was determined bottom ash was a safe and cheaper alternative to sand in the use in utility joint trenching saving over \$7/ton versus using sand.

This project was compiled as part of an initiative to investigate the beneficial use of bottom ash as a replacement for sand. The principal sponsors of the bottom ash initiative were Rick Mack, Operations Services & Applied Technology; Dave Fries, Joint Trench Operations; Dave Beck, Bill Kraemer, & Dave Thiem, By-Products Management; Randy Born, Environmental Water Quality and Waste. The research and compilation of this report were done by the following departments -- Joint Trench Operations, By-Products Management, Engineering Standards and Support, Water Quality and Waste, Operational Services, and Applied Technologies. Without each department's hard work and support this effort would not have been possible.

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