

Ninevah Acid Mine Pollution Abatement Project

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ABSTRACT

The Valley No. 2 mine discharges the very acidic water from the Ninevah borehole at Seward, Pennsylvania. A Project Team investigated the feasibility of abating the acid mine drainage problem by injecting alkaline coal ash into the mine. Coal ash would be generated at the Conemaugh Power Generating Station and the Seward Power Station.

The Pennsylvania Department of Environmental Protection (PaDEP) and the CTC Foundation are coordinating the project.

Potential strategies were analyzed to find the best cost benefit ratio using alkaline coal ash as a: 1) grout to encapsulate acid-forming materials; 2) grout to form seals to divert water away from acid-producing zones within the abandoned mine; and 3) non-cement slurry to neutralize the mine-water acidity. The technical solution of using non-cemented slurry followed by a passive treatment system was selected. The project design is starting in August 2004, and will be completed in the spring of 2005. This paper will discuss the findings to date and the future construction plans for the project.

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