

AMD REMEDIATION AT THE SUPERIOR C.C. #4 MINE IN ILLINOIS

L.L. Lewis² and P. T. Behum

Abstract. In 1988, the Abandoned Mined Lands Division of the Office of Mines and Minerals, Illinois Department of Natural Resources, (AMLR), formerly the Illinois Abandoned Mined Lands Reclamation Council, agreed to address potential public hazards and acid mine drainage problems from an abandoned coal mine site located near Wilsonville, in Macoupin County. The site was unique in that a 30 acre barren mine refuse pile was immediately adjacent to a landfill, containing toxic waste material that remained, despite a \$40 million cleanup effort conducted previously by the Illinois Environmental Protection Agency, (IEPA). Because of this, special consideration had to be included in the design to limit the flow of acid seepage from the pile.

This paper reports how the design, construction, and follow-up maintenance of the site all contributed to produce an end product worthy of the name of the site – “Superior.” The compacted soil cap used over the pile in this project ultimately became the program’s design standard for remediating mine refuse piles throughout the state and is still effectively employed today.

Additional Key Words: Coal Refuse mitigation

¹ Paper presented at the 2012 National Meeting of the American Society of Mining and Reclamation, Tupelo, MS *Sustainable Reclamation* June 8 - 15, 2012. R.I. Barnhisel (Ed.) Published by ASMR, 3134 Montavesta Rd., Lexington, KY 40502.

² Lawrence L. Lewis, P. E., Supervisor of Engineering, AMLR Division of the Illinois Department of Natural Resources, One Natural Resources Way, Springfield, IL 62702-1271 Paul T. Behum, Sr. Hydrologist, Office of Surface Mining, Mid-Continent Region, 501 Belle Street, Alton, IL 62002-6169.