

## **Management and Control of Abandoned Mine Pool Discharges Pennsylvania Case Studies**

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### **ABSTRACT**

Abandoned underground mine pools and associated AMD discharges in Pennsylvania frequently present substantial challenges in terms of both mitigation of environmental damage and alleviating health and safety impacts to residents and public infrastructure. Mine blow-outs are a constant concern in many areas. Over the years, the Pennsylvania Department of Environmental Protection's, Bureau of Abandoned Mine Reclamation, has employed a variety of methods to address these problems. This presentation will highlight several Pennsylvania case studies signifying various approaches. Topics to be discussed include; drilling technology for controlling mine pool hydraulic head and/or relocating discharges; conveyance structures to combine and/or redirect discharges; hydrogeologic investigations of mine pool response; property acquisition for treatment facility construction; consultant design management; and public/private partnership arrangements for treatment and/or reuse of mine pool waters.

Several Pennsylvania mine pool case studies were presented at the 29<sup>th</sup> Annual NAAML P Conference in Bloomington, Indiana in October 2007 and the 30<sup>th</sup> Annual NAAML P Conference in Durango, Colorado in October 2008. They were both well attended significant question and answer periods and insightful discussions ensued among the attendees and presenters. This presentation will follow-up and build upon the discussions by presenting several additional Pennsylvania case studies.