

PROJECT PROFILE

ENVIRONMENTAL ASSESSMENT OF THE BLACKWOOD MINE SITE

The Pennsylvania Department of the Military Affairs (PADMA) was considering acquisition of all or part of a 7,000-acre site in Schuylkill County, Pennsylvania. D'Appolonia was retained to perform an environmental site assessment according to specifications and directions of PADMA, which generally follow the American Society for Testing and Materials (ASTM), Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-93).

The scope of services provided to PADMA by D'Appolonia encompassed five phases performed sequentially in the following order:

- Records Review,
- Interviews,
- Site Reconnaissance,
- Report Preparation, and
- Phase II Recommendations.

Site reconnaissance activities were conducted both on the ground and from a helicopter because of the size of the site and the difficult access conditions associated with large portions of the site.

A substantial portion of the environmental assessment focused on problems associated with past and current mining activities at the site. The topography

had been significantly altered as a result of site activities, with numerous strip mine highwalls, open and water-filled pits, culm piles, discarded or abandoned equipment and buildings, and deep mine openings.

Mine maps associated with permit applications indicated the locations of openings associated with previous mining. Fifteen open shafts were identified on the National Abandoned Lands Inventory System (NALIS) maps, but this list was not believed to be complete.

Acid mine drainage (AMD) was another important environmental issue associated with the Blackwood site. The NALIS database showed 37 AMD locations at the site, but more may have been present. Surface water quality was highly variable.

Although past mining activities were found to be the most significant environmental issue, small areas of soil contaminated with petroleum products



Aerial view of the Blackwood Mine Site at the time of the study. The building is an abandoned coal breaker. The square concrete pad in the foreground covers a deep ventilation shaft to the mine, but the sides of the pad partially collapsed, requiring further remediation.

were observed, and other areas were identified for subsequent sampling to evaluate whether there were hazardous substances at the site. Visual evidence of hazardous substance disposal on a scale that would cause this site to be included on the NPL was not observed.

Subsequently, in 2003, D'Appolonia was retained by the Bureau of Abandoned Mine Reclamation (BAMR) of the Pennsylvania Department of Environmental Protection (PADEP) to prepare a reclamation design for the Blackwood property. The scope of work for this project included permanent sealing of the deep ventilation shaft. The reclamation plan has been under regulatory review, and we anticipate that construction work associated with reclamation of the Blackwood property will commence in 2006.



Organic sludge spilled on the ground surface near the breaker building at the abandoned Blackwood Mine site.