



## **BERNIER CONSTRUCTION, INCORPORATED PROJECT SUMMARY**

**Project Title:** Mary D East Abandoned Mine Reclamation Project Site 3695

**Location:** Village of Mary D, Schuylkill Township, Schuylkill County, PA

**Scope:** Provide labor, materials, equipment, and supervision to construct settling ponds and wetland area to improve the acid mine drainage water quality from the abandoned strip pits

Berner Construction, Inc. was contracted by the PA Department of Environmental Protection, Bureau of Abandoned Mine Reclamation to eliminate a public health and safety hazard by limiting access to a flooded mine opening, improving the water quality of existing acid mine drainage and by excavating, backfilling and grading abandoned strip pits in Schuylkill Township, Schuylkill County, PA.



**Constructing the Cut-Off Trench**

The project includes mobilization; clearing and grubbing; excavating, grading, and backfilling strip pits; installing chain link fence around the mine opening; constructing embankments around the wetlands area; constructing settling ponds; installing weirs; and final restoration including wetland plantings and seeding.

Settling ponds were created by first excavating, backfilling, and compacting cut-off trenches constructed using imported impervious soil. The cutoff trenches were then built up using native screened soil to create the embankments and pond walls. Rock-lined drainage ditches, piping, valve configurations, weirs, and water level control structures were installed to manage and convey the acid mine drainage from the coal-stripped areas to the settling ponds and to the wetland area.

The wetland area was completed with wetland planting consisting of common cattails and soft rushes. The remainder of the site was restored by fertilizing, seeding, and mulching the graded areas, embankments, and remaining disturbed areas. Finally, a chain-link fencing was installed surrounding an active deep mine opening to prevent unauthorized access.



**Settling Pond with Inlet Aerators**