



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

**Project Title:** Dents Run Acid Mine Drainage (AMD) Project Site 3895

**Location:** Benezette Township, Elk County, PA

**Scope:** Provide labor, materials, equipment, and supervision to construct a passive AMD treatment system

Berner Construction was awarded a contract from the U.S. Army Corps of Engineers – Baltimore District for the construction of a passive acid mine drainage treatment system at the Dents Run AMD Project site located in Benezette Township, Elk County, PA. The site is located primarily on the PA Game Commission's State Game Lands #311 (SGL311). The site serves as an elk wildlife habitat. This ecosystem restoration project included the construction of diversion ditches around the site for stormwater diversion, a passive acid neutralization area using high calcium stone, two aeration ladders, and several sedimentation ponds to allow for water retention and passive treatment prior to discharge.



**Step Aerator**

The Dents Run site was considered to be the worst AMD site in the Commonwealth of PA. The project objective was to provide a passive neutralization system for managing AMD into Dents Run and its tributaries. The AMD is being directed through a series of neutralization beds, step aerators, oxidation & precipitation channels, and settling ponds to raise the pH of the mine drainage water prior to discharge into Dents Run. The site restoration included seeding, mulching, and brush piles all suitable for sustaining the wildlife habitats.

This USACE project included the preparation and approval of the required Contractor Quality Control (CQC) Plan, Accident Prevention Plan, Earthwork, Excavation, and Operations Plan, and Submittal Register prior to start of construction. Berner Construction maintained a USACE-certified quality control manager on-site for the duration of the project. The project commenced in mid-July 2006 and was completed within the contract-required 120-day timeframe.



**Site Overview and Vertical Flow Pond**