

ANTRIM MICRO-HYDROPOWER PROJECT



Top Left: Downstream terminus of 18" HDPE penstock through back wall of powerhouse under construction.

Top Right: Upstream terminus of penstock installed in forebay lined with EDPM rubber liner (not shown).

Left: PA DEP Secretary Michael Krancer with BioMost, Inc. owner, Tim Danehy, during the ceremonial opening of the valve to turn on the turbine.

Location: Duncan Township, Tioga County, PA

Constructed: 2012

Project Cost: \$566,302

Project Description: The Babb Creek Watershed Association (BCWA) was awarded an Energy Harvest Grant from the PADEP to build a micro-hydropower facility at the Antrim Treatment Plant (Plant). The Plant is owned by the Antrim Treatment Trust and is operated by BCWA. All operations are overseen by the PADEP, Moshannon DMO. BioMost was selected to provide design-build services that included design, permitting, installation, and startup. The power generated at the Facility is utilized within the Plant with excess energy to be sold to the local electric utility.

Construction Details: BioMost personnel installed about 1 mile of piping including 18" DR-11 HDPE pipe capable of conveying over 4,000 gpm. Terrain varied from relatively flat to slopes steeper than 1.5H:1V. BioMost installed new road drainage facilities, constructed a ½-mile access road, built a concrete block shed (powerhouse) with 24"-thick steel reinforced concrete retaining wall, constructed a geomembrane-lined forebay, installed electrical transmission lines and equipment, and retro-fitted the existing active treatment plumbing to allow utilization of raw mine drainage.

References:

Mario Carrello, Project Advisor, PA DEP (mcarrello@state.pa.us; 814-342-8127)

Bill Beacom, Past-President, BCWA (stargazr@ptd.net; 570-724-7564)

For more information contact:

BioMost, Inc., 434 Spring Street Ext., Mars, PA 16046

PH 724-776-0161; FX 724-776-0166; bmi@biomost.com; www.biomost.com