



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Office of Active and Abandoned Mine Operations

ROWE TUNNEL

Abandoned Mine Reclamation Project
Contract No. OSM 54(4134) 102.1 EMER

Bureau of Abandoned Mine Reclamation
2 Public Square, 5th Floor
Wilkes-Barre, PA 18701-1915

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF ACTIVE AND ABANDONED MINE OPERATIONS
BUREAU OF ABANDONED MINE RECLAMATION**

**ROWE TUNNEL ABANDONED MINE LAND EMERGENCY PROJECT
ABANDONED MINE RECLAMATION PROJECT
CONTRACT NO. OSM 54(4134)102.1 EMER**

FACT SHEET

Location: The project site is located in Tremont Township, Schuylkill County. From Exit 107 of I-81, turn onto US-209S toward Tremont/Tower City, turn left onto Joliett Street. After 300 feet, turn left onto Molleystown Road (T-634). Keep on Molleystown road for approximately two miles, the project site entrance will be on your right.

Watershed: Lorberry Creek, Cold Water Fishes (CWF)

Official Start Date: August 2, 2019

Contract Completion Date: September 27, 2019

Contractor: Gearhart Brothers Services, LLC, Lancaster PA

Property Owners: Janice A. Lehr and Robert Lehr
Rick E. Bender

Project Cost: \$238,739.05 (Final Amount)
\$155,300.00 (Bid Amount)

Project Area: 8 acres

Purpose: To eliminate public health and safety problems by excavating and removing blockages of the abandoned mine drainage Rowe Tunnel and install piping to facilitate future conveyance of the mine discharge.

Description: Pre-SMCRA coal mining constructed the Rowe Tunnel to dewater mining operations. It was originally utilized by the Philadelphia, Reading Coal and Iron Company during their deep mining operation. The Lehigh Valley Colliery did strip mining and the Shadle Coal Company did the last of the primacy deep mining. The Rowe Tunnel dates to at least 1889 and is approximately 2,000 feet in length as it is depicted on the Pennsylvania Second Geologic Survey Mapping. The Rowe Tunnel was a component of the abandoned Lincoln Colliery and drains workings in the Lykens Valley, Mammoth, and Buck Mountain coal seams. The Rowe Tunnel Discharge opening is approximately 10 feet wide by 7 feet high and is identified as

Abandoned Mine Land (AML) Feature 4134-04. It discharges acid mine drainage to a channel that ultimately flows into Loberry Creek. The Rowe Tunnel Discharge has a base discharge of 8 cubic feet per second (3,500 gallons per minute), that can fluctuate up to 31.6 cubic feet per second (13,855 gallons per minute). The tunnel collapsed near the mouth almost completely blocking causing water surface elevation in the tunnel to rise. Using results from the emergency exploratory drilling project it was estimated the water surface elevation in the tunnel and mine workings varied from 8 to 20 feet high from the bottom of the tunnel. The tunnel blockage was identified as AML Feature 4234-34, a Dangerous Impoundment (DI), that if breached suddenly, could discharge in excess of 1,000 cubic feet per second, causing property damage downstream and potentially risk injury and/or life.

The PADEP-BAMR Wilkes-Barre office designed an emergency project to abate the Dangerous Impoundment. The abatement project consisted of erosion and sedimentation controls such as compost filter sock and rock filters, constructing a steep and narrow access road to the Rowe Tunnel discharge opening, bypass pumping of impounded water, removing the blockage, hauling the debris to a disposal area, removing water control devices, and stabilizing the project area with vegetation.

During the work a second blockage further up gradient in the tunnel was discovered. Additional excavation was performed to remove the blockage and reach competent rock. Extra work items were required along with extra work performed on a Force Account basis in order to accomplish the intended project goal. Seventy-two feet of six-foot diameter pipe was also installed into the tunnel and down gradient. The pipe was bedded and backfilled with stone and on-site material. All disturbed areas were seeded with grasses, legumes, tree seed, and mulched.

Funding:

Pennsylvania's Abandoned Mine Land Grant

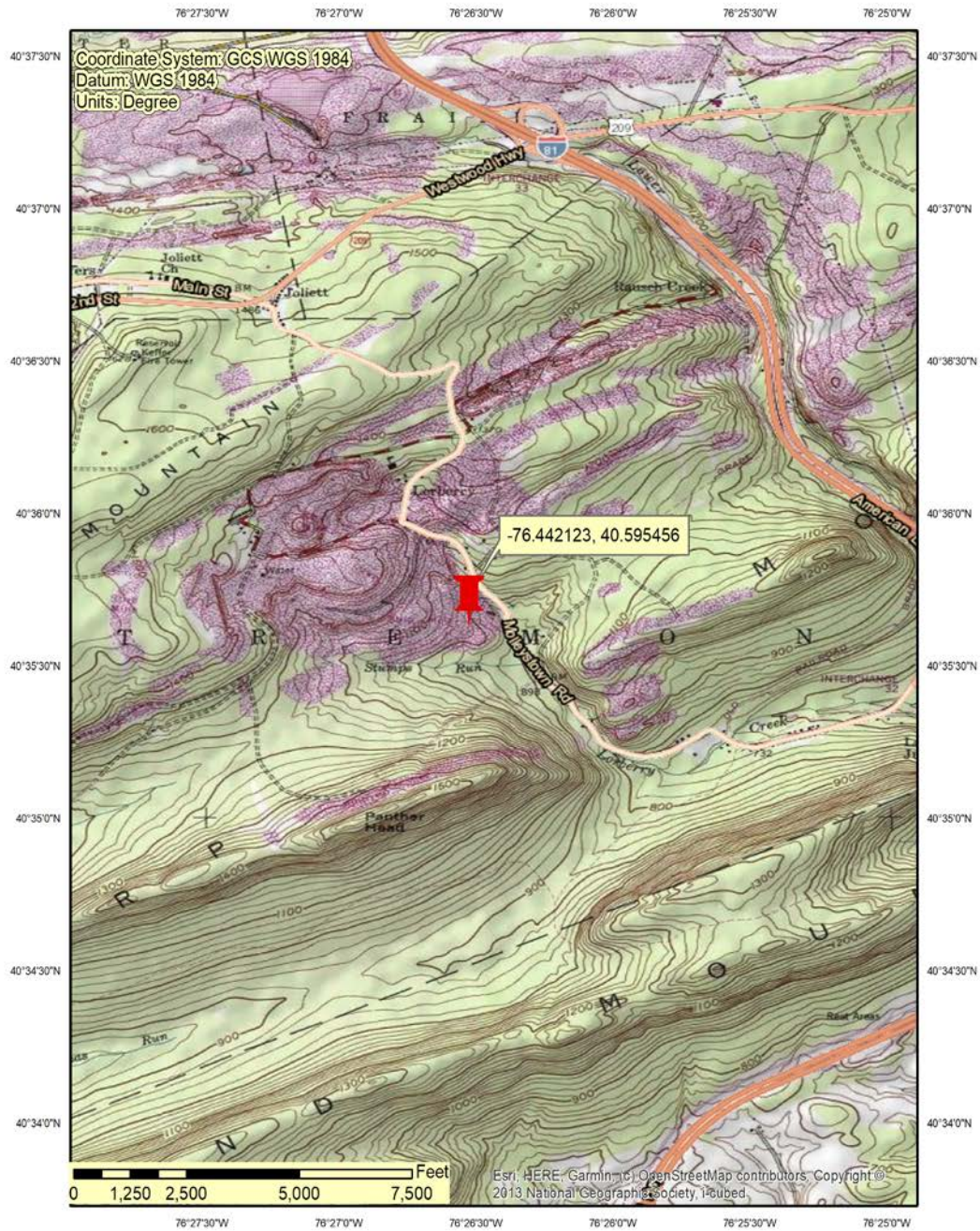
Project Management:

Bureau of Abandoned Mine Reclamation
Wilkes-Barre District Office
570.826.2371

ROWE TUNNEL AML EMERGENCY PROJECT

OSM 54(4134)102.1 EMER

Location Map



OSM 54(4134)102.1 Rowe Tunnel

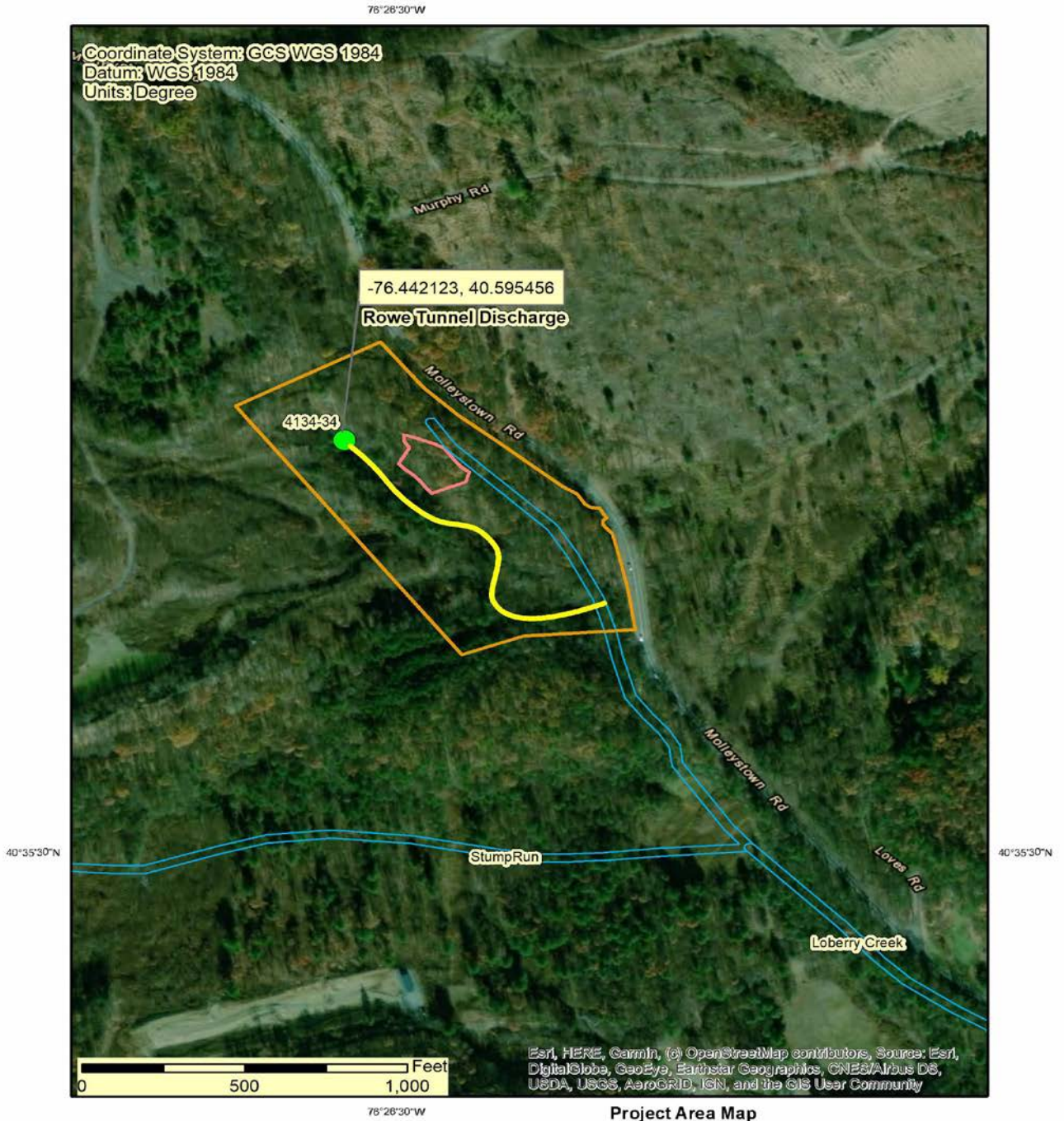
Tremont Twp.
Pine Grove Quad
Schuylkill County,

Project Location Map

ROWE TUNNEL AML EMERGENCY PROJECT

OSM 54(4134)102.1 EMER

Location Map



OSM 54(4134)102.1 Rowe Tunnel
Tremont Twp.
Pine Grove Quad
Schuylkill County,

Legend

- Project_pa4134_AMLF_pnt
- CWA
- Loberry Creek
- DisposalArea

ROWE TUNNEL AML EMERGENCY PROJECT

OSM 54(4134)102.1 EMER

Pre-Construction



ROWE TUNNEL AML EMERGENCY PROJECT

OSM 54(4134)102.1 EMER

During Construction



ROWE TUNNEL AML EMERGENCY PROJECT

OSM 54(4134)102.1 EMER

Post Construction

