

Office of Active and Abandoned Mine Operations

QUAKAKE TUNNEL SUBSIDENCE Abandoned Mine Reclamation Project Contract No. OSM 13(3700)101.1EMER

Bureau of Abandoned Mine Reclamation 2 Public Square 5<sup>th</sup> floor Wilkes-Barre, PA 18701-1915

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

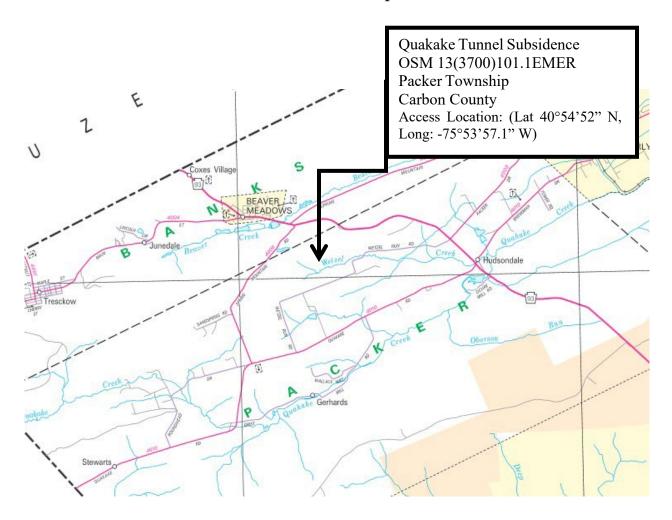
#### QUAKAKE TUNNEL SUBSIDENCE ABANDONED MINE RECLAMATION PROJECT CONTRACT NO. OSM 13(3700) 101.1EMER

#### FACT SHEET

<u>Location:</u>	The project site is located at 978 Gap Street, Packer Township, Carbon County. Follow I-81 S and take Exit 141 for PA-424 E toward PA-309/Greater Hazleton Chamber of Commerce Beltway. Turn left onto PA-424 E/Greater Hazleton Chamber of Commerce Beltway and continue for 3.7 miles. Make a slight right onto PA-93 S and travel for 2.5 miles then turn right onto Spring Mountain Road and continue for 2.1 miles. Turn left on Quakake Road for 0.6 miles then turn left onto Wetzel Run Drive for 1.1 miles. Access location can be found at the following coordinate: Lat 40°54'52" N, Long: -75°53'57.1" W.
Watershed:	Black Creek, CWF (Cold-Water Fishes), MF (Migratory Fishes).
Official Start Date:	August 28, 2020
<u>Contract Completion</u> <u>Date:</u>	January 8, 2021
<u>Contractor:</u>	Atlantic Carbon Group, Inc. Hazleton PA
<u>Property Owners:</u>	Barbara Genetti 4116 Quakake Road Weatherly, PA 18255-3500 Commonwealth of Pennsylvania 400 Market Street Harrisburg, PA 17106
Project Cost:	\$24,500.00 (Bid Amount) \$24,500.00 (Final Amount \$238,421.00 (Commonwealth Purchased Materials)
Project Area:	4.0 Acres
<u>Purpose:</u>	To eliminate a public health and safety problem caused by a collapsed tunnel roof within the Quakake Tunnel resulting in a subsidence at the surface which created a partial blockage to the mine discharge within the tunnel channel. The purpose of this project was to abate the subsided area, remove the tunnel blockage, and install pre-cast concrete sections to recreate the tunnel opening.

Description:	To abate the blockage and vertical opening, the following was completed: erosion and sedimentation controls, such as compost filter sock and rock filters, excavating material in the vertical opening area to gain access to the tunnel channel, removing the blockage, transporting material to an on-site disposal area, installing eight pre-cast concrete sections to recreate the tunnel, backfilling over the installed sections, removing water control devices, and stabilizing the project area with vegetation.
	Twelve additional pre-cast concrete sections were fabricated from existing tunnel sections and installed downstream from the original tunnel section to regrade the site. The sections were then backfilled and stabilized with vegetation.
	This project was sponsored jointly with the Atlantic Carbon Group Inc. with labor and equipment provided by the Atlantic Carbon Group and materials funded by the Department.
Funding:	Pennsylvania's Abandoned Mine Land Grant
Project Management:	Bureau of Abandoned Mine Reclamation Wilkes-Barre District Office 570.830.2371

#### Location Map



### Pre-Construction



Downstream End of Existing Tunnel; Concrete Sections Separated



Subsidence/Tunnel Collapse

### Pre-Construction



Tunnel Blockage at Subsidence Location

# During Construction



Excavating Subsidence Area

# During Construction



Subsidence Area Tunnel Roof Exposed

# During Construction



Placement of Concrete Sections Within Subsidence Area

### Post Construction



Subsidence Area Backfilled

# Post Construction



Extended Mouth of The Tunnel