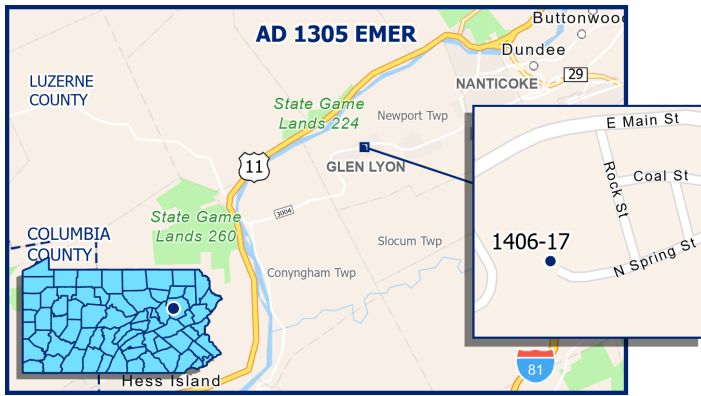




NO. 6 SHAFT SUBSIDENCE 3

ABANDONED MINE RECLAMATION PROJECT

Office of Active and Abandoned Mine Operations

Purpose →

To backfill the collapsed No. 6 mine shaft.

On September 24, 2023, the Luzerne County 911 Center relayed information regarding a large subsidence affecting a building within a housing complex located at 1 Rock Street, Glen Lyon, Newport Township, Luzerne County. The facility contains several multifamily row houses and is owned by Luzerne County Housing Authority. This property was the subject of multiple previous investigations and projects to address issues associated with the No. 6 Shaft, Abandoned Mine Land Feature (AMLF) 1406-17, most recently in August 2022 by AD-1267 - No. 6 Shaft Subsidence 2 Maintenance.

The latest problem was investigated by Bureau of Abandoned Mine Reclamation staff on September 24, 2023. It was observed that a large-scale response was already in progress that included the Red Cross, local fire and police departments, and the Department of Environmental Protection's Emergency Response Team. Local officials condemned three buildings near the subsidence (Units 51-55, 71-75, and 91-95).

A large subsidence was located behind the building comprising Units 71-75, approximately 95 feet southwest from the centerline of Rock Street and 340 feet east of the intersection-bend of Newport Street and South Market Street. The subsidence measured approximately 70 feet by 80 feet and was conical to a total depth of approximately 50 feet. The subsidence was directly adjacent to the building housing Units 71-75 and the concrete cantilever footer foundation was visible; the building was not undercut and did not appear to have shifted. The sides and base of the subsidence were dirt and loose material. Material near the edges of the subsidence was actively subsiding; however, the base of the hole appeared choked off and was not deepening. There were multiple utilities visible in the subsidence including a six-inch water main and multiple small conduits with telecommunications and low-voltage power wire; no rock was visible. The water main was shut off, and the electrical meters were pulled on all the condemned units. It was noted that the weekend was very rainy, and it was raining steadily during the investigation.

Review of the mine maps indicated that the subsidence was directly over the No. 6 Shaft. Maps showed this as a four-bay structure with a total depth of 743 feet to the A Vein. The shaft first intersects workings at a depth of 289 feet in the Hillman Vein. The cross section indicated the ground at the problem was filled to a total depth of approximately 60 feet.

Based on field observations, information from the mine maps, and previous activity at this location, this problem was mine related and was attributed to the No. 6 Shaft. It is likely that material in the shaft was displaced by the mine pool, ultimately allowing the surface subsidence to be observed. The problem was reclaimed under AD-1305 EMER - No. 6 Shaft Subsidence 3 using purchased materials.

Project at a Glance

Location:

The project is in Newport Township, Luzerne County, in the census-designated community of Glen Lyon. The site is behind the Luzerne County Housing Authority's Rock Street apartment complex.

Watershed:

Susquehanna River, Warm Water Fishery (WWF)

Project Period:

September 25, 2023 - September 29, 2023

Project Size:

0.5 Acres

Total Project Cost:

\$98,654.78

Funding:

Funding was made available through Pennsylvania's federal Abandoned Mine Land Reclamation Program.

Contractor:

Construction completed in-house by the Bureau of Abandoned Mine Reclamation Anthracite District Construction Crew.

Property Owner:

Luzerne County Housing Authority

Project Management:

Bureau of Abandoned Mine Reclamation Wilkes-Barre District Office



Pennsylvania
Department of
Environmental Protection

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Pre-Construction



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Construction



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Post-Construction

