## What Happens to a Mine after Mining? Making Mine Land Reclamation More of a Community Asset<sup>1</sup>

Michael C. Korb, P.E.<sup>2</sup>

## **Abstract:**

A mine is only a temporary use of the land. The operation of a mine may last a few years or several decades. A mine is closed when it is depleted or isn't profitable. Abandoned mine lands (AML) are reclaimed when funding's available.

Active mine regulators require mine closure plans reclaimed to a specific post-mining land use. Restoring to pre-mining land use has historically been easiest and cheapest to permit. AML priorities have focused on reclamation of hazards. In both cases, mine sites are usually returned to their pre-mine uses, usually wildlife habitat or forestry, which often doesn't benefit communities.

Mine-closure plans are seldom creative. I attempted a revised reclamation plan with a water-filled pit for recreation in the 1980s. Regulatory agencies were not enthused and that plan has become a legend that is still talked about. In the state AML program, we did some "innovative" reclamation, but one department secretary described our role as "filling holes."

In recent years, regulators have looked more kindly on imaginative land uses, and AML projects began reclaiming the energy of communities affected by legacy coal mining. 1990 and 2006 SMCRA amendments created set-aside allowances for abandoned mine drainage treatment. Most recently, the 2016 Federal Appropriations bill included a \$90 million pilot project for economic development on AML.

The pilot program projects are a good start for making AML more of a community asset. Projects could and should include tourism, recreation, museums; industrial development, research or education centers; gardens, parks, fish farms, agriculture; and mine water district heating.

This presentation will look at and discuss some of the pilot projects in progress, some past projects here and in other countries, and will touch on some "out-of-the-box" ideas for making mine closure and AML projects more sustainable and more of a community asset.

<u>Additional Key Words</u>: mine closure, abandoned mines, geothermal, tourism, economic development, tourism, recreation.

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<sup>&</sup>lt;sup>2</sup> Senior Mining Engineer, Tetra Tech, Inc., Pittsburgh PA and Heritage Consultant, MIKEKORB LLC, Wapwallopen PA. <a href="mailto:mike.korb@tetratech.com">mike.korb@tetratech.com</a>, <a href="mailto:mike.korb@tetratech.com">mikekorbllc@gmail.com</a>, 570-233-2191.