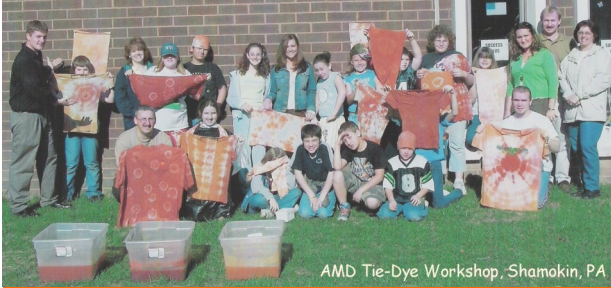


“EPCAMR is restoring Pennsylvania’s vital watersheds and communities impacted by past mining practices.”



AMD Tie-Dye Workshop, Shamokin, PA

Oneida #1 AMD Passive Treatment System (Oxic Limestone Drain), Eagle Rock, PA

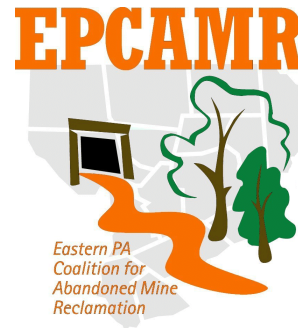


AML Reclamation Site, Gilberton, PA

HELP EPCAMR RECLAIM ABANDONED MINE LANDS THROUGH PARTNERSHIPS TODAY, FOR A CLEANER ENVIRONMENT TOMORROW!

Counties We Serve:

- Bradford
- Carbon
- Columbia
- Dauphin
- Lackawanna
- Lebanon
- Luzerne
- Lycoming
- Montour
- Northumberland
- Schuylkill
- Sullivan
- Susquehanna
- Tioga
- Wayne
- Wyoming



Eastern Pennsylvania Coalition for Abandoned Mine Reclamation

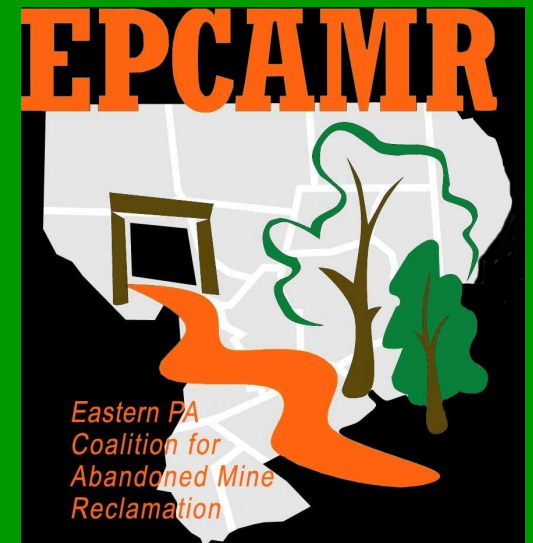
101 South Main Street
Ashley, PA 18706
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Fax: (570) 371-3522
E-mail: info@epcamr.org

EPCAMR Website:
www.OrangeWaterNetwork.org
WPCAMR Website:
www.AMRClearinghouse.org



**A RICH OPPORTUNITY:
A LOOMING LEGACY**

Nearly 250 million years ago, Pennsylvania provided the ideal environment for one of its greatest natural resources—**ANTHRACITE**





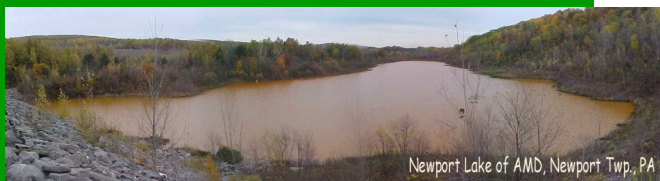
Huber Breaker (Blue Coal Co.), Ashley, PA

In 1762, Connecticut settlers in the Wyoming Valley discovered Anthracite, or “Hard Coal” (as it was named by the miners) and it’s estimated that there were 16 billion tons of coal that lie within the anthracite seams. These coalfields cover almost 700 square miles in ten counties in Eastern PA, containing the richest deposits of anthracite in the world.

By 1917, anthracite production peaked at over 100 million tons coming from more than 773 mines in the region. This rich mining history brought an economic boom to Pennsylvania and fueled two World Wars for America.

Present day, we realize the legacy of this prosperity: polluted creeks, mine fires, dangerous highwalls, underground subsidence, culm banks, black deserts, water filled pits, the elimination of entire ecosystems.

But the story doesn’t end here...



Newport Lake of AMD, Newport Twp., PA

Times are Changing

In 1977, Congress passed the Surface Mining Control and Reclamation Act (SMCRA), establishing laws and taxes which require present-day coal mine operators to take responsibility for the restoration of the land that they temporarily disturb while mining coal. Because of SMCRA and other incentives, modern-day coal operators now play an important role in reclaiming our environment.

Establishing Partnerships - The Key to the Future

Eastern Pennsylvania Coalition for Abandoned Mine Reclamation (EPCAMR), a non-profit organization, was established in 1996 to encourage the reclamation and remediation of land and water impacted by past mining practices on abandoned mine lands in the Eastern Pennsylvania Coalfields.

Identifying the Problems

The remnants of coal and non-coal mining are evident in our environment. In fact, the largest contributor of nonpoint source pollution in our state is **Abandoned Mine Drainage (AMD)** with over 4,000 miles of streams impacted throughout PA.

AMD flows from mine openings, ventilation shafts and from other connections to the underground mine pool. It almost always contains iron that smothers the streambed with mucky sediment of hues from red to orange, destroying aquatic habitat. AMD can also contain aluminum that stains streambeds white and when found in solution, poisons aquatic life. AMD forms when surface water comes in contact with pyrite (and other minerals found in coal) and the air. AMD can be either acidic or alkaline. Circum-neutral water (around pH 6 –pH 7) is essential for most aquatic organisms.

There are over 200,000 acres of **Abandoned Mine Lands (AML)** statewide including 252 miles of unreclaimed and dangerous highwalls, over 1,200 open portals and vertical shafts, 38 underground mine fires, and thousands of acres of culm piles and subsidence prone land.

Working Together

Through **partnerships** with conservation districts; watershed groups; schools and colleges; other non-profit and cooperative grassroots efforts; active industry and the local, state and federal government the EPCAMR efficiently uses our resources, collaborative technical treatment and remediation technologies to restore Pennsylvania’s vital watersheds and communities impacted by abandoned mine lands. We owe it to our children and future generations to come.



Creating and Promoting Solutions

There are many proven treatment technologies for AMD from **Passive Treatment**, such as Aerobic Wetlands, to **Active**, such as Alkaline Injection *In-Situ* Treatment. Not one treatment technology can solve all the different water qualities and quantities that emerge from each AML Problem Area.

Reclamation of these areas can often reduce the amount of water that infiltrates into the mine pool and eventually ends up as AMD. Reclamation consists of putting the land back to an approximate pre-mining contour and sealing up areas of infiltration and fractured rock to keep surface water on the surface in the form of fresh water streams, ponds and lakes. **Remining** of AML is also a viable option and there are many environmental and economical incentives to the process.

Resource Recovery from AMD also has economic potential as semi-precious and useful metals are often found in relatively high purity. For example, Iron Oxide has many applications from pigments for use in stain, paint and make-up to fabricated metals with unique physical properties. EPCAMR promotes these solutions through various educational programs, research, field tours and hands on environmental action projects in communities throughout the region.