## **History of Pa DEP AMD Set Aside Program**

On August 3, 1977, Congress passed the Surface Mining Control and Reclamation Act of 1977 (SMCRA). Title IV of SMCRA established the Abandoned Mine Land (AML) Trust Fund for the reclamation and restoration of areas affected by past mining. The Fund derives from a reclamation fee on clean coal produced by underground and surface coal mining. The federal Office of Surface Mining collects the fees from coal production across the country and then grants the monies back to states and tribes with approved Abandoned Mine Reclamation Programs, like Pennsylvania. When the Act was first enacted, grants to States were used to reclaim health and safety issues caused by past mining practices. Title IV monies could not be used for mine water treatment since mine water issues were mostly considered an environmental problem.

In 1990, an amendment to SMCRA allowed states to "set aside" 10 percent of their Abandoned Mine Land Trust grant to address AMD. Pennsylvania established its 10 Percent Set Aside Program in 1992, began site evaluations in 1993, and constructed its first AMD treatment systems in 1997. Also in 1997, the federal Office of Surface Mining Reclamation and Enforcement (OSMRE) established a program called the Appalachian Clean Streams Initiative (ACSI). This program provided additional funds to states in the Appalachian region to address AMD problems. Information regarding this program is available at the following website: <a href="http://www.ei.lehigh.edu/envirosci/enviroissue/amd/links/bamr1.html">http://www.ei.lehigh.edu/envirosci/enviroissue/amd/links/bamr1.html</a>

In December 2006, Congress passed comprehensive legislation reauthorizing the Abandoned Mine Land (AML) Program under Title IV of SMCRA. The law authorized continuation and expansion of the provision commonly known as the Acid Mine Drainage (AMD) Set-Aside, which allowed any state with an approved reclamation plan to receive and retain up to 30% of its annual grant to be expended for the abatement of the causes and the treatment of the effects of AMD

The Department of Environmental Protection (DEP), in conjunction with the Citizens Advisory Council and the Mining and Reclamation Advisory Board, held ten public town hall meetings in the coal regions of Pennsylvania in May, June and September of 2007. The purpose of the meetings was to receive comments on the revisions brought about by the re-authorization of SMCRA. The Department accepted written comments as well. About 340 people attended the ten town hall meetings, generating over 800 pages of transcripts.

Shortly after the town hall meetings were complete in 2007, DEP assembled a workgroup of DEP and OSM staff to develop a set of guidelines to aid in project selection and treatment of AMD sites.

The workgroup developed the <u>AMD Project Selection and Treatment Guidelines</u>, which were presented at a focus group meeting held in State College on June 10, 2008 for comments. Fiftynine stakeholders attended. They represented participation from federal, state and local government; watershed and other environmental advocacy groups, academia, consultants specializing in mine drainage treatment, and the mining industry. DEP accepted written comments until July 14, 2008, and received comments from 22 stakeholders. Many of the

comments were in support of the guidelines but included several recommendations for the workgroup to consider.

In order to facilitate comments received from the June 10<sup>th</sup> meeting, DEP initiated a review of data from as many passive treatment systems as possible. DEP undertook a data collection effort beginning in late November 2008, and sent letters and project information forms to 279 individuals or groups identified in a database developed by OSM of publicly-funded treatment systems. Approximately fifty percent (50%) of the forms were returned along with a vast amount of additional data and information including monitoring data, as-built drawings, watershed plans, O&M plans, project photographs, and more.

From the focus group meeting and the data collection effort, DEP renamed the guidelines to the <u>Acid Mine Drainage Set-Aside Program Implementation Guidelines</u> and posted them as a final draft on July 15, 2009 on DEP's Bureau of Abandoned Mine Reclamation web site.

In August 2012, after a DEP re-organization moved the Set-Aside Program from DEP's Bureau of Abandoned Mine Reclamation to the newly formed Bureau of Conservation and Restoration (BCR), a new workgroup was convened to take a second look at the Guidelines. The work group consisted of staff from DEP, OSM, and an outside expert in mine drainage treatment. The goal of the new workgroup was to finalized the guidelines and publish them in the PA Bulletin as final.

The 2012 workgroup took another look at the systems treating "High" risk discharges, using data collected in statewide water quality and flow "snapshots" done in 2009, 2010, and 2012 to further evaluate the Risk Matrix published in the 2009 Guidelines.

A workgroup member and professor emeritus, Dr. Arthur Rose completed a more in-depth follow-up to the 2012 data evaluation in 2013 by undertaking a close evaluation of a number of "High," "Medium," and "Low" risk systems, both successful and failing.

From the 2012 and 2013 evaluations, DEP revised the Guidelines and published them as Draft final in the PA Bulletin for public comment and consideration as final on February 21, 2015.

DEP received comments from four different commenters. Many of the overall comments were similar and DEP prepared a Comment and Response Document CRD), along with revisions to the Guidelines, which were published as Final in the PA Bulletin on September 17, 2016.

It is important to note that during the period when the CRD and Technical Guidelines were being finalized, the AMD section of BCR was re-organized back into the Bureau of Abandoned Mine Reclamation. Both Bureaus have a significant number of staff members with decades of AMD experience, are competent and capable professionals with a strong desire to learn about new and emerging technologies as well as innovations in implementing existing proven technologies. The expertise and experience of both Bureaus is reflected in the Final Documents as published in the PAB.