



Executive Summary St Michael Water Treatment Project

HISTORY

Cambria and Somerset Counties had numerous coal mines operating from 1897 thru 1963, resulting in vast hydrologically interconnected mining complexes that have since been abandoned. In St. Michael, PA, one such mining complex known as the Berwind Mine Pool currently discharges at an abandoned mine shaft location, producing almost one third of the acid mine drainage ("AMD") pollutional load flowing into the Little Conemaugh River. In the past, Berwind White Coal Company pumped AMD from the St. Michael Shaft to keep the water at or below an elevation of 1500 so that it would not break out and discharge to surface streams. However, Berwind ceased pumping in July 1962 when its operations came to an end, and AMD began discharging from the top of the shaft in December 1963 and has been discharging ever since. There is no longer any viable responsible mining company who can treat this discharge, which is why CRRC was formed in October 2008 as a public charity to attract funding for, and then build, a facility to treat the AMD.

Untreated AMD has been discharging into the Lower Allegheny Watershed from a 36" diameter pipe near the top of the abandoned Maryland No. 1 Mine shaft collar (St. Michael Shaft) since December 1963. The St. Michael AMD discharge flows progressively into Topper Run, the South Fork of the Little Conemaugh River; Little Conemaugh River; Stoneycreek; Conemaugh River; Kiskiminetas River to the Lower Allegheny River. The St. Michael AMD discharges contribute 3,700 tons of AMD pollution per year to the Little Conemaugh River. This is the largest single source of AMD pollution on the Little Conemaugh River and equates to 29.2% of the total AMD pollution load on the river. The average flow rate from recent data initiated is 2,061 gallons per minute with a maximum 3,656 gallons per minute.

The Table below illustrates the water quality discharging at the St. Michael Shaft.

2001-2004

Parameter	Average
Ph	5.73
Acidity	352
Alkalinity	37
Iron	129
Manganese	4.25
Aluminum	0.46
Sulfates	1,182
Conductivity	1,612

The final piece of the history of the site occurred in 1987, when BethEnergy Mines, Inc. received a permit to open Mine 78 in the C-Prime Seam in an area near the St. Michael's discharge. BethEnergy operated the 78 Mine until October 1987 when the mine was closed due to very depressed steel markets. BethEnergy reclaimed the surface of the mine site but did not treat the AMD or leave behind the financial means to do so.

There now is a unique opportunity to eliminate the environmental damage caused by the current AMD Discharge, restore and protect water quality in the watershed, and create the economic growth that follows from significant water restoration projects such as this one. In fact, the St. Michael Project is modeled after a similar project in 2003 partnered by PA DEP, another public charitable organization and a coal operator in Greene County at the Pittsburgh Seam Shannopin Mine Pool.

The financial commitment to properly dewater and treat the AMD discharge at St. Michael will require a \$12 million - \$13 million capital investment for the Treatment Facility. In addition, there will be on-going costs of treating the AMD discharge on a daily basis along with the expenses of treating AMD perpetually to protect future generations of Pennsylvania citizens.

PROPOSAL

A 501(c) (3) non-profit, public charity entity named the Conemaugh River Restoration Company (CRRC) has been formed. Its mission is to design, construct and operate a facility to pump and treat acid mine water from the Berwind Mine Pool and discharge clean water into the environment for recreational and consumptive uses within the Little Conemaugh River Watershed in Cambria County, Pennsylvania. CRRC has proposed to provide one half of the total \$12 million - \$13 million funding through charitable contributions from private sources, the largest of which to date has been Rosebud Mining Company, to construct the water treatment facility. CRRC is seeking the other 50% funding from PA DEP utilizing the Federal AML appropriations of \$47.6 million for calendar year 2011. In addition, CRRC anticipates covering future operating, maintenance, and if necessary, debt service costs with grants and with contributions from public and private sources including ongoing contributions from Rosebud Mining Company. For example, Rosebud Mining Company has agreed to make regular charitable contributions to CRRC for operating expenses and to ensure the creation of a treatment trust account that will equal the amount of funding received from the PA DEP for the initial capital investment to construct the water treatment facility.