

Project Description - Abandoned mine drainage (AMD) from the Otto Colliery Airshaft Discharge (Otto Discharge) is one of the largest sources in the Schuylkill River watershed. The discharge contributes the majority of streamflow to the Muddy Branch at their confluence. The Muddy Branch flows from the western boundary of the watershed to the West West Branch of the Schuylkill River which then joins the West Branch Schuylkill River. Because of metal loading from the Otto Discharge and other AMD sources, the entire West Branch of the Schuylkill River is designated “impaired” on the Pennsylvania Department of Environmental Protection’s 303(d) List of Impaired Waterways.

Project Timeframe – October 01, 2020 through June 30, 2023

Project Goals – The primary goal of this project involved the construction of a new treatment system within the original footprint of the existing treatment system. The new treatment system is a totally passive system with a settling pond and two finish settling ponds. Level spreaders have been added before and after the cells to increase oxygen and drive off carbon dioxide making the precipitation process more efficient. Additional goals included improving clean-out access for future system cleanings.

Pictures –



Project Results – Construction of a new treatment system within the original footprint of the existing treatment system was installed. The new treatment system adds aeration in the influent channel and between each pond in the system and improves the settling efficiency of the sedimentation ponds and wetland cell. The new system also has drain valves which will make future maintenance of the ponds easier. This project was split between 2018 and 2019 grant rounds to allow for full funding and completion.

Project Costs - \$877,697 EPA Section 319(h).

Partners – Alfred Bnesch and Co, Miller Bros. Construction Inc, Reilly Township, Schuylkill Conservation District, and Schuylkill Headwaters Association.