

Huling Run AMD Treatment Phase II

Growing Greener: C990002528

Armstrong Conservation District

PROJECT DESCRIPTION: The Aluminaide deep mine discharge impacting a tributary to Huling Run was collected and treated with a vertical flow pond in 2018. This project rehabbed the system, collected additional seeps, and reclaimed a highwall and spoil pile near the discharge. The project timeframe was from 01/01/2021 to 11/30/2023.

PROJECT GOALS: The goal was to reduce metal and acidity loading in a tributary to Huling Run.

PROJECT RESULTS: New piping was installed, and the system was changed from a vertical flow pond to a flushable limestone bed. Additional seeps were directed to the treatment system. Alkaline material was added to the spoil and backfilled to reclaim the highwall. The project is effectively removing metals and acidity and adding alkalinity.

Water Quality Parameter	Average Raw Water Inlet	Average Treated Discharge
Alkalinity (mg/L)	0	113.2
pH	3.2	7.4
Total Iron (mg/L)	6.852	0.539
Total Aluminum (mg/L)	9.644	0.540
Hot Acidity (mg/L)	125.8	-89.6
Flow (GPM)	8.75	8.75

PICTURES:



Spoil Pile and Highwall Before Construction



After Construction

PROJECT COSTS: Growing Greener: \$170,000; OSMRE WCAP: \$100,000; Total Project Cost: \$303,856.50

LESSONS LEARNED: Adaptability when working in winter and spring months is important. The project ended up taking a lot longer than intended due to large rain events and snow.

PARTNERS: PA Game Commission is the landowner and provided in-kind match, OSMRE provided a WCAP grant to the Armstrong Conservancy for cash match, Young & Associates Engineers & Surveyors were the engineers and provided in-kind match, Puryear Excavating and Hiles Excavating conducted excavation and construction, and Arrowhead TU will help with future system maintenance post-project.

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