



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

**Bureau Of District Mining Operations
Moshannon Office**



AMD Treatment Moshannon District Mining Operations

**Mining and Reclamation Advisory Board
July 15, 2021**

Primacy Bond Forfeiture ABS New Treatment Systems 2015 - 2019

- Avery Coal Company, Pine Glen. Moshannon Creek.
Hydrated Lime Plant. 100GPM Capacity \$461,886
- Avery Pine Glen Phase II. Expansion to 300GPM
Establishment of Title IV Trust \$764,373
- Thompson Brothers Coal Company, Alder Run.
Hydrated Lime Plant. \$920,232
- Chews Contracting Co., Little D. Morgan Run
VFP Passive Treatment \$455,028

Pine Glen Treatment System Phase I

FLOW 100 GPM
pH 3.5
Acidity 338 mg/l
FE 14 mg/l
Mn 77 mg/l
AL 33 mg/l
SO4 2245.0 mg/l



2010 SMCRA Grant Award to Stream Restoration Inc. \$461,886

Placing the lime silo



Treatment system
construction



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Startup Date Phase I May 2015



2014/04/23

Pine Glen Treatment System Phase II



FLOW 300 GPM
pH 3.5
Acidity 117.8 mg/l
FE 3.3 mg/l
Mn 19.4 mg/l
AL 12.8 mg/l
SO4 674.10 mg/l

Sevenmile Run

Phase II Expansion to 300gpm

OSMRE Watershed Cooperative Grant \$100,000



\$664,373 Growing Greener Grant includes \$540,564 to establish Pine Glen Trust to address Title IV discharge

Pine Glen Treatment System. June 2019



06/26/2019 14:39

Chews Contracting, Little D

Toe of Slope Surface Mine Discharge

FLOW 25 GPM
pH 3.50
Acidity 125.0 mg/l
FE 6.0 mg/l
Mn 40.0 mg/l
SO4 450.0 mg/l



Chews Contracting, Little D
2013 SMCRA Grant Award to Clearfield CCD
\$455,028



Chews Contracting, Little D Built by CCCD, O&M by MDMO



Chews Contracting, Little D Construction Completed June 2016



Deer Creek Passive Treatment

2016 Section 319 Grant Award to Clearfield CCD

\$883,174

FLOW	150	GPM
pH	3.7	
Acidity	130	mg/l
FE	9.71	mg/l
Mn	8.00	mg/l
AL	10.00	mg/l



Deer Creek Passive Treatment

2016 Section 319 Grant Award to Clearfield CCD

\$883,174



Aquatic Life has been restored to Deer Creek!



- The Treatment System improved 2 miles of Deer Creek to the confluence with the West Branch Susquehanna River.
- Mouth of Deer Creek was devoid of life for decades.
- August 2019 fishery survey by TU and Clearfield CCD found wild brook trout, wild brown trout, and several warm water species.
- The restored 2 miles of Deer Creek connects with 9 upstream miles (11 total miles), that have naturally reproducing brook trout, to the West Branch Susquehanna River.

Thompson Bros Alder Run

2011 Construction bid fails to produce eligible bidder



Discharge 37 – Majority of flow
in Alder Run



Discharge 36 – Collection
Piping Collapsed

Rebidding results in 2013 SMCRA Grant Award to Stream Restoration Inc.



Thompson Bros Alder Run

Trenching combines discharges into point ARAW

FLOW 276 GPM
pH 4.16
Acidity 167 mg/l
FE 5.39 mg/l
Mn 22.86 mg/l
AL 19.17 mg/l
SO4 1241.0 mg/l



Thompson Alder Run Hydrated Lime Plant, Operational May 2017



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