

Publicly Funded Mine Drainage Treatment or Abatement Project Information Sheet

PA-250

General Project Information

Project Name and or No.: Avery Coal Company BF 438-102.1
Location: Municipality and County: Beech Creek Twp. Clinton Co.
Watershed: Middle Branch Big Run (Bald Eagle Creek Watershed - Subbasin 9C)
USGS Quadrangle: Howard NW and Snowshoe NE
Latitude and Longitude: 41.175 -77.864444

Contact Information

Contact Organization: PADEP BAMR
Contact Person: David J. Fromell, P.E.
Contact Address: 5th Floor, Rachel Carson State Office Building
400 Market Street
Harrisburg, PA 17101
Contact Telephone Number: 717-783-5646
Contact Email: dfromell@state.pa.us

Organization Currently Responsible For Project Operations, Monitoring and Maintenance

Is this organization different from Contact Organization? Same
Organization Name:
Organization Contact Name:
Organization Contact Address:
Organization Telephone Number:
Organization Email:

Site Information

Who owns the property the project is constructed upon?
1. Edna Anderson (c/o Thomas Timberline Enterprises), & 2. Thomas Timberline Enterprises

Driving Directions to the Project Site (from an easily identifiable reference point):
The project site is located approximately 10 miles northwest of the town of Beech Creek State Route 150. Access to the site is located on the west side of an unnamed gravel road approximately 5500 feet northwest of the intersection with Eagleton Road. The access road intersection is approximately 2 miles from the area of work as shown on the Contract Drawings. Look for the big tree.

Special instructions for entry to the site (gates, keys, notifications or permissions, etc.):
Site is gated. Property owner has changed locks several times. He is OK with BAMR on his property. Jamie Walker BCWA currently has keys.

Is there a perpetual access agreement for monitoring and O&M? [X] Yes [] No
Is the site readily accessible (by 2WD vehicle)? [] Yes [X] No
Was project completed as part of an overall watershed restoration plan? [] Yes [X] No
Is the plan available electronically? [] Yes [X] No
Could you provide the DEP a copy of the plan? [] Yes [X] No
Is a copy of the plan attached? [] Yes [X] No

Project Description (Describe the treatment system including each individual component):
1. Raw water impoundment. 2. AMD enters bottom of Limestone Upflow Pond (LUP) via pipe, header & laterals, exits same lateral pipes via siphon #1. 3. AMD enters Sediment Pond via notched pipe and exits

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via spillway. 4. AMD enters Vertical Flow Reactor (VFR) via spillway exits via lowest underdrain pipes.
(Two layers of pipes -upper layer drains via siphon #2 to flush basin.) 5. AMD enters Aerobic Wetland &
flows via gravity through Limestone Bed & rock ditch to outlet. Influent flow not measurable. Effluent flow
out of Limestone Bed measured via rectangular weir.

Pre-Construction Discharge Flow and Monitoring Data

Is data available electronically? Yes No
In what format? Microsoft Excel Access Database Other (specify) Paper
Indicate how flow was measured: Unknown
Indicate laboratory that analyzed samples (or whether field kits were used)
DEP Labs - No SIS information on old paper copy sample results
Could you provide this data to the DEP? Yes No
Is a copy of the data attached? Yes No

Pre-Construction Receiving Stream Flow and Monitoring Data

Is data available electronically? Yes No
In what format? Microsoft Excel Access Database Other (specify) _____
Indicate how flow was measured: Pre-construction receiving stream (Middle Branch Big Run) flow not
measured. Some information on stream flow and monitoring available in Middle Branch Big Run TMDL.
Indicate laboratory that analyzed samples
Unknown
Were any biological or fish surveys completed? Yes No
Could you provide this data to the DEP? Yes No
Is a copy of the data attached? Yes No

Treatment System Design Information and Criteria

Who or what firm completed project design? (Include name, address, phone, email and contact
person, if available): Daniel R. Helfrich, P.E.

PADEP BAMR

Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA 17101
717-783-5642, email: dhelfrich@state.pa.us

Are digital photographs of the site before, during and/or after construction available? Yes No
Was there a Specific Restoration or Treatment Goal for this treatment system? Yes No
If yes, please describe the goal: Treatment was part of the Bond Forfeiture reclamation requirements.
No specific goal, other than to increase pH and Alkalinity, & decrease metals loading to help restore
Middle Branch Big Run.

What is the Design Flow Rate? 190 gpm

Other design criteria (retention time, acidity loading or removal rate, metals loading or removal
rate, alkalinity generation rate, etc.) Joe Schueck Design - LUP 15 hour detention; VFR as large as
practical; Aerobic Wetland & Limestone Bed in existing footprint; Rock Ditch to outlet into kill zone.

Does the treatment system take all of the flow or is some of the flow bypassed?

All of the flow that could be intercepted is being treated, however during construction BAMR had a
difficult time keeping water in the raw AMD impoundment. Spent \$300,000 extra to install clay cutoff
trench to keep water in system. AMD still getting under liner in VFR so liner cut in several places to
relieve pressure and prevent liner failure.

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Plans and Specifications:

As-Bid Project Drawings and Technical Specifications

Is this information available electronically? Yes No

Could you provide the DEP a copy of the plan? Yes No

Is a copy attached? Yes No

As-Built Drawings

Is this information available electronically? Yes No

Could you provide the DEP a copy of the plan? Yes No

Is a copy attached? Yes No

Construction and Project Funding Information

What year was the project constructed? 2004

When (specific date) did project construction begin? 06/30/2003

When (specific date) was project construction completed? 05/01/2004

Who was the Construction Contractor? (Name, Address, Phone, email, contact person)

Earthmovers Unlimited, Inc., P.O. Box 187, Kylertown, PA 16847, 814-345-6010, John Niebauer, Jr., President

When (specific date) did the treatment system go on-line? Unknown

Primary Funding Partners, and funding provided:

Source	True or false	Amount
Title IV, Appalachian Clean Streams	False	0
PADEP Growing Greener	True	<u>\$1,070,086.21</u>
10% AMD Set Aside Funds	False	0
EPA Section 319	False	0
OSM Watershed Cooperative Assistance Program	False	0
NRCS	False	0
EPA Watershed Protection	False	0
USCOE	False	0
University	False	0
Private/Foundation	False	0

How or by whom was treatment system construction funded or other funding not included in the table?

Source	Amount
APPRO. 290 - BF GENERAL OPERATIONS	<u>\$182,025.33</u>
APPRO. 695 - BF RESTRICTED BOND	<u>\$278,435.79</u>

Post Construction Operation, Monitoring and Maintenance

Is there a Sampling and Monitoring Plan? Yes No

Is the plan available electronically? Yes No

Is a copy of the plan attached? Yes No

Is treatment system currently being sampled and monitored? Yes No

If so, by whom? Beech Creek Watershed Association, & PADEP BAMR Staff

Approximately how many hours per year are spent doing O,M&M for this system? 100 hours
annually (WAG).

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Where are samples being analyzed? (Name, Address, Phone, email, contact person)

PA DEP Labs

If DEP Lab is being used, what is the project ID and the Sample Information System (SIS) monitoring point IDs?

BF438: D-1, LUP1, SPOUT, VFR1, VFR2, VFROUT, AWOUT, RDOUT, BY-1

Is there an Operation and Maintenance Plan? Yes No
Is the plan available electronically? Yes No
Could you provide the DEP a copy of this information? Yes No
Is a copy of the information attached? Yes No

Comments on the treatment system: System continues to produce net alkaline water.

Post- Construction Discharge Flow and Monitoring Data

Is the data available electronically? Yes No
In what format? Microsoft Excel Access Database Other(specify) _____
Indicate how flow was measured: Rectangular weir
Could you provide the DEP a copy of this information? Yes No
Is a copy of the information attached? Yes No

Post-Construction Receiving Stream Flow and Monitoring Data

Is the data available electronically? Yes No
In what format? Microsoft Excel Access Database Other(specify) _____
Indicate how flow was measured: Post-construction receiving stream (Middle Branch Big Run) flow not measured that I know of.
Could you provide the DEP a copy of this information? Yes No
Is a copy of the information attached? Yes No
Were any biological or fish surveys that were completed on the receiving stream? Yes No

Treatment System Maintenance and/or Rehabilitation

Has rehabilitation work been performed at the site? Yes No
True(yes) or false(no): No

If yes, please list the rehabilitation activity. LUP pipes cleaned by BD crew.

If yes, please list the date of rehabilitation. 12/14/2006

If yes, please list the rehabilitation cost. BD Crew - Contact Dean Baker

What routine or non-routine maintenance issues have arisen since system was put online?

Flushing pipes, and routine water monitoring.

How was maintenance work funded?

Bond Forfeiture funds. Also Cambria Office staff.

What routine or non-routine maintenance is currently needed or anticipated in the next 1-3 years?

Flushing pipes, clearing vegetation and routine water monitoring and sampling.

Other Comments

Link to system information:

\\epencofs02\BAMR\Active Project WS\HBG CO\Dan Helfrichs Share\DesignProjects\Treatment Eval uations

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Person(s) Completing this Form (Name, Address, Phone, email, Date Completed):

Daniel R. Helfrich, P.E.

5th Floor, Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA 17101

771-783-5646

dhelfrich@state.pa.us

Form completed 01/09/2009

Is there any other person, company or organization that should be contacted for information about this treatment system or the information requested in this form?

(Include Name, Address, Phone, email, etc):

Dan Helfrich or Dave Fromell