

Publicly Funded Mine Drainage Treatment or Abatement Project Information Sheet

General Project Information

Project Name and or No.: LOYALHANNA FRIEDLINE MINE PA-106
 Location: Municipality and County: COOK TOWNSHIP WESTMORELAND
 Watershed: LOYALHANNA RIVER Creek
 USGS Quadrangle: STAHLSTOWN
 Latitude and Longitude: 41.633889000000003 -79.279722000000007

Contact Information

Contact Organization: LOYALHANNA WATERSHED ASSOCIATION
 Contact Person: SUSAN HUBA
 Contact Address: 110 ANDI LANE
LIGONIER
PA
15658
 Contact Telephone Number: 7242387560
 Contact Email: SLHUBA@VERIZON.NET

Organization Currently Responsible For Project Operations, Monitoring and Maintenance

Is this organization different from Contact Organization? True NO - LWA maintains project
 Organization Name: _____
 Organization Contact Name: _____
 Organization Contact Address: _____
 Organization Telephone Number: 0
 Organization Email: _____

Site Information

Who owns the property the project is constructed upon?
Carnegie Museum of Natural History - Powdermill Nature Reserve

Driving Directions to the Project Site (from an easily identifiable reference point):
From PA Turnpike: Donegal Exit #91. Left onto Route 31 East. Left onto Route 381 North.
After crossing over Turnpike, make a right after Snake fencing to a locked gated
road. Follow road down to treatment system.

Special instructions for entry to the site (gates, keys, notifications or permissions, etc.):
Notification to Powdermill. Key from LWA to unlock road gate.

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

* Project was completed as a result of a recommendation by the U.S. Office of Surface Mining. A restoration plan has since been completed (2006).

Publicly Funded Mine Drainage Treatment or Abatement Project Information Sheet

Project Description (Describe the treatment system including each individual component):

the system was designed in 1996 as a SAPS system. It consists of two SAPS ponds and a series of settling ponds and wetlands. In 2004, BAMR constructed a steel slag bed to increase alkalinity (see attached diagram of system.)

Pre-Construction Discharge Flow and Monitoring Data

Is data available electronically?

Yes or ☒ No

In what format? Microsoft Excel ☐ Access Database ☐ Other(specify) _____

Indicate how flow was measured: _____

Indicate laboratory that analyzed samples (or whether field kits were used)

Skyview Laboratory Inc.

U.S. Office of Surface Mining

Could you provide this data to the DEP?

☒ Yes or No

Is a copy of the data attached?

☒ Yes or No

Pre-Construction Receiving Stream Flow and Monitoring Data

Is data available electronically?

Yes or ☒ No

In what format? Microsoft Excel ☐ Access Database ☐ Other(specify) _____

Indicate how flow was measured: _____

Indicate laboratory that analyzed samples

Skyview Laboratory Inc.

U.S. Office of Surface Mining

Were any biological or fish surveys completed?

☒ Yes or No

Could you provide this data to the DEP?

☒ Yes or No

Is a copy of the data attached?

☒ Yes or No

Treatment System Design Information and Criteria

Who or what firm completed project design? (Include name, address, phone, email and contact person, if available):

Damariscotta Inc.

1050 Merle St. Suite C

Clarian PA 16214

Are digital photographs of the site before, during and/or after construction available? ☒ Yes or No ☒ on enclosed CD

Was there a Specific Restoration or Treatment Goal for this treatment system? ☒ Yes or No

If yes, please describe the goal:

Treat a low flow acidic mine discharge to alleviate pollution to Laurel Run and restore aquatic environment

What is the Design Flow Rate? 10 gpm

Other design criteria (retention time, acidity loading or removal rate, metals loading or removal rate, alkalinity generation rate, etc.) anaerobic system, increase detention time for

metals removal

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

System has numerous seeps throughout site

Publicly Funded Mine Drainage Treatment or Abatement Project Information Sheet

Plans and Specifications:

As-Bid Project Drawings and Technical Specifications

Is this information available electronically?

Yes or No

Could you provide the DEP a copy of the plan?

Yes or No

Is a copy attached?

Yes or No

As-Built Drawings

Is this information available electronically?

Yes or No

Could you provide the DEP a copy of the plan?

Yes or No

Is a copy attached?

Yes or No

Construction and Project Funding Information

What year was the project constructed? 2000 1997

When (specific date) did project construction begin? July 7, 1997

When (specific date) was project construction completed? October 1997

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

David Hails, Ecological Restoration Services, 1633 Gilmore Road, Apollo, PA 15613

When (specific date) did the treatment system go on-line? October 17, 1997

Primary Funding Partners, and funding provided: See attached funding table

Source	True or false	Amount
Title IV, Appalachian Clean Streams	False	\$.00
PADEP Growing Greener	True False	\$200,000.00
10% AMD Set Aside Funds	False	\$.00
EPA Section 319	False	\$.00
OSM Watershed Cooperative Assistance Program	False	\$.00
NRCS	True False	\$.00
EPA Watershed Protection	False	\$.00
USCOE	False	\$.00
University	False	\$.00
Private/Foundation	False	\$.00

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

<u>In-Kind Funding</u>	Source	Amount
		\$ <u>.00 45,625</u>
		\$.00

Post Construction Operation, Monitoring and Maintenance

Is there a Sampling and Monitoring Plan?

Yes or No

Is the plan available electronically?

Yes or No

Is a copy of the plan attached?

Yes or No

Is treatment system currently being sampled and monitored?

Yes or No

If so, by whom? LWA Employees

Approximately how many hours per year are spent doing O,M&M for this system? 20 hours

Publicly Funded Mine Drainage Treatment or Abatement Project Information Sheet

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

Rich Beam, DEP - BAMR Cambria Office 286 Industrial Park Road,
Ebensburg, PA 15931-4119 (814) 472-1800, RBEAM@stat.pa.us

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

7485 - (001-006)

Is there an Operation and Maintenance Plan?

☒ Yes or ☐ No

Is the plan available electronically?

☐ Yes or ☒ No

Could you provide the DEP a copy of this information?

☒ Yes or ☐ No

Is a copy of the information attached?

☒ Yes or ☐ No

Comments on the treatment system: ~~Steel Slag/Limestone Pond~~

Post- Construction Discharge Flow and Monitoring Data

Is the data available electronically?

☒ Yes or ☐ No

In what format? Microsoft Excel ☒ Access Database ☐ Other(specify) _____

Indicate how flow was measured: bucket/staprometer

Could you provide the DEP a copy of this information?

☒ Yes or ☐ No

Is a copy of the information attached?

☒ Yes or ☐ No

Post-Construction Receiving Stream Flow and Monitoring Data

Is the data available electronically?

☐ Yes or ☐ No

In what format? Microsoft Excel ☐ Access Database ☐ Other(specify) _____

Indicate how flow was measured: _____

Could you provide the DEP a copy of this information?

☐ Yes or ☐ No

Is a copy of the information attached?

☒ Yes or ☐ No

Were any biological or fish surveys that were completed on the receiving stream? ☒ Yes or ☐ No

* through BAMR Surveys by Rich Beam

Treatment System Maintenance and/or Rehabilitation

Has rehabilitation work been performed at the site?

☒ Yes or ☐ No

True(yes) or false(no): False

If yes, please list the rehabilitation activity. Replace limestone compost + piping network in SAPS 1, SAPS 2, install emergency spillway in SAPS 1, installation of aluminium recovery bin

If yes, please list the date of rehabilitation. 2001

If yes, please list the rehabilitation cost. \$ 00 \$ 65,000.00

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

Vandalism, compost armouring, clogged pipes, cattail overgrowth

Publicly Funded Mine Drainage Treatment or Abatement Project Information Sheet

How was maintenance work funded?

Private foundation contributions, BAMR assistance

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

pipe cleaning, limestone/compost repair

Other Comments

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

Susan Hluba - Program Manager
Loyalhanna Watershed Association, Inc.
110 Andi Lane
Ligonier, PA 15658 (724) 238-7560 slhuba@verizon.net

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):

Rich Beam - BAMR (pyrolusite bed, steel slag bed)
2816 Industrial Park Road
Ebensburg, PA 15931-4119
(814) 492-1800 rbeam@stat.pa.us



110 Andi Lane • Ligonier, Pennsylvania • 15658

Phone (724) 238-7560 • Fax (724) 238-7681

Email lwa1@verizon.net

www.loyalhannawatershed.org

December 4, 2008

Eric Cavazza, PE
Acting Chief
DEP-Bureau of Abandoned Mine Reclamation
Division of Acid Mine Drainage Abatement
286 Industrial Park Road
Ebensburg, PA 15931

Dear Eric:

Please find the enclosed materials in regards to your request for assistance on completing information on the "Loyalhanna Friedline Mine" Project, a publicly funded mine drainage treatment or abatement project, Project ID PA-106.

A listing of supporting materials in addition to the information sheet you originally sent can be found below. Original construction plans are not included, as there was no way for us to copy them. However, you are more than welcome to borrow these plans from our office if you need them.

Please feel free to contact me if I can provide you with any additional information at (724) 238-7560, or slhuba@verizon.net. Happy Holidays!

Sincerely,

Susan L. Huba
Program Manager

Enclosures: Information Sheet
Loyalhanna Creek Watershed Assessment CD
Friedline Mine Diagram
Pre-Construction Data – Mine Discharge
Pre-Construction Data – Laurel Run (receiving stream)
Pre-Construction Survey of Laurel Run – PA Fish & Boat Commission
Digital Photos of Project Construction on CD
Table of Funding Sources
O,M&M Plan
Friedline Treatment System Sampling Data (through October 2008)