

Publicly Funded Mine Drainage Treatment or Abatement Project Information Sheet  
**General Project Information**

PA-181

Project Name and or No.: Darmac 14 BF 389-101.1  
 Location: Municipality and County: East Franklin Twp. Armstrong Co.  
 Watershed: Glade Run (Crooked Creek Watershed)  
 USGS Quadrangle: Kittanning  
 Latitude and Longitude: 40.8202778 -79.564167

**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 17105  
 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. Charles H. Crowe, RR 3, Kittanning, PA 16201; phone # unlisted; 2. Armstrong County Industrial Development Authority, 402 Market Street, Kittanning, PA 16201; 724-548-1500

Driving Directions to the Project Site (from an easily identifiable reference point):  
From Kittanning: Take Route 422 West toward Pittsburgh. Cross the Allegheny River and go past the interchange for Route 28. Take the exit that says "West Hills (Industrial Park)". Bear right onto North Park Drive off the exit ramp. Turn left onto Parkview Drive. Site is on the left side of Parkview Drive (across the road from the Veterinarian's office).

Special instructions for entry to the site (gates, keys, notifications or permissions, etc.):  
Site is not gated.

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

Project Description (Describe the treatment system including each individual component):  
1. Raw water enters (~300'LX20'WX8'D) ALD. 2. Water exits ALD via ~270 LF 12" HDPE pipe. 3. Water exits 12" HDPE trap & elevated pipe outlet. 4. Pipe outlet enters ~190 LF R-4 rock-lined channel.

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5. Channel outlets into ~3' deep, ~ 280 foot long settling pond. 6. Settling pond enters ~240 foot long shallow wetland through a R-5 rock filter "baffle". 7. Wetland outlets to rock-lined outlet via 18" HDPE pipe principal spillway. 8. Wetland outlets to UNT to Glade Run ~180' from spillway. 9. UNT outlets into Glade Run ~900' away from UNT. The 9 water sampling SIS monitoring Point Alias ID's are PC11-1 through PC11-9. Flow must be bucket-measured at elevated 12" ALD outlet pipe and wetland outlet pipe due to lack of weirs. Water must be ladled out of ALD inlet cleanout pipe. There is no way to measure influent flow rate, but should be same as ALD outflow rate. BAMR CO sampled initially, then Cambria took over sampling.

**Pre-Construction Discharge Flow and Monitoring Data**

Is data available electronically?  Yes  No  
In what format? Microsoft Excel  Access Database  Other (specify) Paperwork in BAMR files  
Indicate how flow was measured: Not sure how flow was measured, it included seeps.  
Indicate laboratory that analyzed samples (or whether field kits were used)  
DEP Labs (Pre-construction SIS Project ID: BF 389-101.1)  
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) Paperwork in BAMR files  
Indicate how flow was measured: Pre-construction receiving stream (UNT to Glade Run) flow was apparently measured via weirs that no longer exist.  
Indicate laboratory that analyzed samples  
DEP Labs  
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): John Stefanko

PADEP BAMR

Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA 17105

717-787-4092, email: jstefanko@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 am requirements & to increase pH and Alkalinity, & decrease metals loading to help restore Glade Run for trout fishing. Post construction digital photos are available.

What is the Design Flow Rate? 150 gpm

Other design criteria (retention time, acidity loading or removal rate, metals loading or removal rate, alkalinity generation rate, etc.) U S Bureau of Mines recommendations of 80% (or greater) CaCO3 (3" to 4" dia.) limestone. USBR's criteria based on a 7-hour retention time, 20-year life, and 150 gpm flow would be ~2,400 tons limestone, and a 0.75-acre aerobic wetland for iron removal. 2691 tons AASHTO No. 1 was installed. See water sample data for alkalinity & metals removal information.

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 on 05/19/2000 BAMR Cambria Office informed BAMR Central Office that new discharge (PC11-9) was discovered, & sampling began immediately. This discharge was reportedly caused by the Development Authority's excavations and may be from one of two old pre-act mine openings. DMO may be planning treatment of the new discharge.

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**Plans and Specifications:**

As-Bid Project Drawings and Technical Specifications  
Is this information available electronically?

Yes  No  
 Yes  No  
 Yes  No

Could you provide the DEP a copy of the plan?  
Is a copy attached?

As-Built Drawings

Is this information available electronically?  
Could you provide the DEP a copy of the plan?  
Is a copy attached?

Yes  No  
 Yes  No  
 Yes  No

**Construction and Project Funding Information**

What year was the project constructed? 1998

When (specific date) did project construction begin? 01/16/1998

When (specific date) was project construction completed? 07/16/1998

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

Casselman Enterprises, Inc., 140 W. Union Street, Somerset, PA 15501, 814-443-1607, John Svonavec

When (specific date) did the treatment system go on-line? 07/16/1998

**Primary Funding Partners, and funding provided:**

Source	True or false	Amount
Title IV, Appalachian Clean Streams	False	0
PADEP Growing Greener	False	0
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. 695 - BF RESTRICTED BOND	\$491,100.00
APPRO. 695 - BF RESTRICTED BOND	\$29,185.54

**Post Construction Operation, Monitoring and Maintenance**

Is there a Sampling and Monitoring Plan?

Yes  No  
 Yes  No  
 Yes  No  
 Yes  No

Is the plan available electronically?

Is a copy of the plan attached?

Is treatment system currently being sampled and monitored?

If so, by whom? PADEP BAMR Staff

Approximately how many hours per year are spent doing O,M&M for this system? 15-20 hours annually on average (not including spillway re-hab time).

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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?

Project ID: BF389-101.1 Monitoring Point Alias: PC11-1, PC11-2, PC11-3, PC11-4, PC11-5, PC11-6, PC11-7, PC11-8, PC11-9

- 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 is working well, and generally has been since it was constructed. Project goals to increase pH and Alkalinity, & decrease metals loading were met. Glade Run water quality has improved, however another (new) discharge (PC 11-9), which remains untreated, still exists at the site. It is BAMR's understanding that the District Mining Office is investigating treatment options for this new discharge (PC11-9).

**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: Bucket & stop-watch.  
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) Water Quality only  
Indicate how flow was measured: Receiving stream (UNT to Glade Run) flow is not being measured, but water quality monitoring is being done.  
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): Yes

If yes, please list the rehabilitation activity. BD crew cleaned debris from pond spillway pipe several times, then finally dug up the pipe and found that it was smashed. BD crew repaired smashed pond spillway pipe and excavated new emergency spillway 6" above spillway pipe so this won't happen again.

If yes, please list the date of rehabilitation. 05/26/2005 (pond spillway re-hab.)

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?

Unplugging spillway pipe, then repairing pond spillway described above, and routine water monitoring.

How was maintenance work funded?

Bond Forfeiture funds. Also Cambria Office staff.

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

Routine water monitoring. However, future improvements, which could be undertaken by the BD Crew, include installing one weir, either at the outlet of the ALD, or the outlet of the Wetland, installing one or two "floating" baffles in the settling pond, & re-establishing wetland vegetation. These improvements could be undertaken whenever the pond needs cleaned.

**Other Comments**

Electronic Link to system information:  
\\Epencofs02\BAMR\Active Project WS\HBG CO\Steve Golembiewskis Share\Operation And Maintenance\BF 389 101 1\Public

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

Steven L. Golembiewski Jr., P.E.  
5th Floor, Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA 17105  
717-783-7949  
stgolembie@state.pa.us                      Form completed 12/23/2008

**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):

Steve Golembiewski or Dave Fromell  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_