Publicly Funded Mine Drainage Treatment or Abatement Project Information Sheet

PA-072

General Project Information

Project Name and or No.: Keystone AMD 65(1183)101.1 & 202.1

Location: Municipality and County: Derry Twp. Westmoreland Co.

Watershed: McCune Run (Loyalhanna Watershed)

USGS Quadrangle: Latrobe

Latitude and Longitude: 40.375 -79.396111

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. Commonwealth of PA, DCNR, Bureau of State Parks, P.O. Box 8451, RCSOB Floor 8, Harrisburg, PA 17105-8451, 717-787-6640; 2. Derry Township, Westmoreland County, 5321 Route 981, 724-539-2961

Driving Directions to the Project Site (from an easily identifiable reference point):
Located near the sewage treatment plant within Keystone State Park (follow your nose).

Special instructions for entry to the site (gates, keys, notifications or permissions, etc.):
Vehicular access via locked gate near the park sewage treatment plant. Obtain keys at Park office.

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

Project Description (Describe the treatment system including each individual component):
Project was built in two phases. Phase 1 = 101.1 (mine drain & pipeline collection/conveyance system). Phase 2 = 202.1 (Passive treatment system). Under Phase 1, the old leaking mine seal was removed & replaced with a new seal, plus a twin-10-inch PVC pipe collection system to convey the mine water ~ 1,500 ft. to an area where it could be treated. Phase 1 cost $166,805.93. AMD initially outletted

into a ditch to McCune Run. After 1 year monitoring at pipe outlet, Phase 2 was constructed. Under Phase 2, raw water is collected by a mine drain & flows through a pipeline system to a Limestone Upflow Pond (LUP). Automatic agridrain valve flushes every day into sed pond. Flow goes to aerobic wetland out a flume and into a roclk lined ditch into McCune Run. Flush pond provided to manually flush LUP and/or sediment pond. Phase 2 cost $237,465.87. Total cost $404,271.80.

Pre-Construction Discharge Flow and Monitoring Data

Is data available electronically? ☒ Yes ☐ No

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

Indicate how flow was measured: flow was estimated prior to Phase 1 or via bucket and stopwatch

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

DEP Labs (Pre-construction SIS Project ID's: AMD65(1183); KEYSTONEPARK; PA1183)

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 (McCune Run) flow not measured.

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): 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: Treat only known discharges to McCune Run.

What is the Design Flow Rate? 55 gpm

Other design criteria (retention time, acidity loading or removal rate, metals loading or removal rate, alkalinity generation rate, etc.) Joe Schueck Design - Limestone Upflow Pond (LUP) design based on 15-hour detention time cycle, flow rate of 55 gpm, while maintining a minimum elevation of 1-ft. above the stone.

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 some flow is leaking out of the pipeline collection system into the outlet ditch location constructed under Phase 1.

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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? 101.1: 2002; 202.1: 2004
When (specific date) did project construction begin? 101.1: 06/08/2001; 202.1: 05/11/2004
When (specific date) was project construction completed? 101.1: 05/09/2002; 202.1: 12/03/2004
Who was the Construction Contractor? (Name, Address, Phone, email, contact person)
Hutchison Excavating, P.O. Box 153, Armagh PA 15920, 814-446-6324, Gene Hutchison, Owner

When (specific date) did the treatment system go on-line? 12/09/2004

Primary Funding Partners, and funding provided:

Source	True or false	Amount
Title IV, Appalachian Clean Streams	True	$249,888.30
PADEP Growing Greener	True	$154,383.50
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

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? PADEP BAMR Staff, Bob Dominck
Approximately how many hours per year are spent doing O,M&M for this system? 100
Where are samples being analyzed? (Name, Address, Phone, email, contact person)
PA DEP Labs

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If DEP Lab is being used, what is the project ID and the Sample Information System (SIS) monitoring point IDs?
AMD65(1183)2: D-1, MP-2, MP-3, MP-5, MP-6, MP-7, MP-8

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: Not functioning well at all. Numerous O & M issues have plagued this system (see comments below).

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: Cutthroat Flume
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 (DEP Labs).
Indicate how flow was measured: Post-construction receiving stream (McCune Run) flow not 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. Numerous activities for Phase 2 (contact Dean Baker)

If yes, please list the date of rehabilitation. Numerous dates for Phase 2 (contact Dean Baker).

If yes, please list the rehabilitation cost. Contact Dean Baker for Phase 2 rehab costs.

What routine or non-routine maintenance issues have arisen since system was put online?
Flushing pipes, routine water monitoring, replace siphon with AgriDrain Smart System, replace LUP aggregate with larger aggregate.
How was maintenance work funded?
AML-nonwater. Also Cambria Office staff & BD Crew (contact Dean Baker).
What routine or non-routine maintenance is currently needed or anticipated in the next 1-3 years?
Flushing pipes, and routine water monitoring. May consider replacing LUP with a VFP.

Other Comments

Electronic Link(s) to treatment system data:
\\epencofs02\BAMR\Active Project WS\HBG CO\Dan Helfrichs Share\DesignProjects\Treatment Evaluations\AMD65 1183

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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 02/02/2009

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

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