

EPCAMR



Eastern PA Coalition for Abandoned Mine Reclamation

Michael A. Hewitt, *Program Manager*

101 South Main Street

Ashley, PA 18706

Fax & Main Line: (570) 371-3522

E-mail: hardcoal@epcamr.org

Website: www.epcamr.org

June 2012 Progress Report

Highlights:

- EPCAMR staff attended an ARIPPA Technical Symposium and Wildlife Issues Forum
- EPCAMR staff constructed a second solar kiln, processed iron oxide pigment, lead a solar energy demo and painting project for students, participated in an AMR Conference Call, tracked conference registrations as they roll in and planned a tour route for the conference.
- Completed RAMLIS Version 12 and made a dozen copies for trial distribution.
- EPCAMR staff sampled 16 boreholes in the Lackawanna Valley. Measured flow on 4 discharges. Updated 2 GIS datasets, processed 4 maps for 3D modeling. Prepared cost estimates for treatment systems in Catawissa and Hazle Creek Watersheds related to QHUPs.
- Added to www.treatminewater.com, saved information from www.datashed.org, and updated www.epcamr.org. Administered the EPCAMR facebook page and Google Apps for Nonprofits account.

Education and Outreach:

- Added a Stormwater Page to www.epcamr.org for a place to post the Stormwater Resources for Municipalities Handbook since the Pocono Northeast Resource Development Council (PNERCDC) lost their www.stormwaterresourcesformunicipalities.com website. Updated several other broken links found by a broken link checker utility for Word Press.
- Printed a few posters for the Lackawanna River Corridor Association (LRCA) in preparation for their Lackawanna River Fest.
- Met with Brian Oram of B.F. Environmental Consultants to discuss mine pools in the Southern Anthracite Field.
- Created EPCAMR Program Manager monthly report for the previous month, gathered other staff reports, posted them to www.epcamr.org and sent to PA Department of Environmental Protection (DEP) 319 Nonpoint source (NPS) program staff.
- Prepared a presentation for and co-coordinated a Technical Symposium and Golf Fundraiser with the Anthracite Region Independent Power Producers Association (ARIPPA) and the Western PA Coalition for Abandoned Mine Reclamation (WPCAMR) staff and board. Several presenters from the non-profit sector presented their projects and met with Co-Generation Industry representatives at the Toftrees Resort in State College, PA.
- Spoke with Jim Andrews, PA DEP Pottsville District Mining Office (DMO), to catch up on mine pool mapping progress and the status of mining in the Southern Anthracite Field. Sent updated GIS files related to the mine pool mapping initiative.
- Posted the 2011 EPCAMR Strategic Plan Update to www.epcamr.org.
- Sent the Anthracite Abandoned Mine Drainage (AMD) Discharges shapefile (with updates by EPCAMR) to Megan Blackmon, Dauphin County Conservation District (DCCD) watershed specialist.
- Printed several business cards for staff in preparation for the summer months.

- Traveled to the PA DEP Moshanno DMO to meet with Mario Carrello and other staff to take a “dry run” tour of AMD treatment and Abandoned Mine Land (AML) reclamation sites in Eastern Clearfield County that is being planned for the upcoming PA Abandoned Mine Reclamation (AMR) Conference in August. Incidentally, the DMO in Moshannon had a library that included several Operation Scarlift Reports. We were able to track down the Loyalsock Creek report and staff scanned Plate 1 (basemap) of the report. The office itself may be a stop on the tour as well, not only as a bathroom break, but it is a certified “green building” with many energy efficient and cost saving designs that would be interesting to tour goers.
- EPCAMR staff participated in a conference call to sort out details of the upcoming AMR Conference in August and share the tour route with the conference committee.
- Did some sleuthing to find close out reports related to the Bear Creek and Audenreid AMD Treatment Projects. The paperwork was needed again by the Office of Surface Mining (OSM) for an audit of their files.
- Sent a mass e-mail AMR Conference Registration invite to over 930 recipients marked “conference” in our Insightly contact database. About 10% were immediately bounced back as deleted or incorrect accounts. Attempted to find replacement e-mails and resent or deleted these contacts from the database.
- Tracking AMR Conference registrations as they began to slowly trickle in. Created an excel sheet to track the incoming registrations and registered several individuals over the phone.
- Added, and then removed a statement on the homepage of www.treatminewater.com about the “Wrekkids” which was going to be our Friday evening entertainment. Updated the tour page with descriptions and a landscape photo of each site.
- Received a phone/internet service quote from Verizon that could possibly save EPCAMR a few dollars a month on overhead costs. Forwarded to Robert for comparison to the Service Electric and Pen Tele Data bills.
- Ordered a Time Tracker Mini presentation timer to aide in moderating the presentations at the AMR Conference. The little device is very easy to use and will remain set if the dials are not moved. There is a volume control and will not make any noise, if it set to do so. The moderator will press the start button once the speaker starts. The speaker will talk for 35 minutes while a green light is displayed on the unit. A yellow light signals that the speaker has 5 minutes left, typically this time is left for questions. A red light will display the end 40 minutes. Each session is 45 minutes long allowing for a little more setup time or an overflow at the end. Some moderators may choose not to use it, but it should help with consistency in communication of signals and to keep the conference moving.
- Attended a 1 ½ day Wildlife Issues Forum hosted by the Game Commission at the Ramada Inn and Conference Center in State College. This forum started off as a normal conference where presenters spoke about relevant issues, but the afternoon of the first day into the morning of the next day was left for planning for the related to the Wildlife Action Plan.

Technical Assistance:

- Took a snapshot of the overview page and costs of 45 treatment systems in the Datashed.org database before they re-upload the old data from the original Office of Surface Mining Passive Treatment System (OSMPTS) database. The OSMPTS database was last updated in 2008, but was not completely uploaded properly the first time Stream Restoration Inc. (SRI) started Datashed.org. [SRI]
- Provided Land Reclamation and AMD Project costs, as well as, cost estimates from the Abandoned Mine Land Inventory System (AMLIS) and from AMD Treat, respectively, to Skelly and Loy as they prepare a Qualified Hydrologic Unit Plan (QHUP) for the Catawissa Creek Watershed. [PEC]
- Used R2V to draw and process cross sections of the Bernice Mine Basin, but realized that the basemap was missing from the Loyalsock Creek Operation Scarlift report. The set had a very

different “zig-zag” line of section that was drawn in addition to the regular cross basin ones. Will continue to locate Plate 1 to finish processing the basin. [SRBC]

- Built another solar kiln, which was approximately half as large as EPCAMR’s first solar kiln, for the Wilkes-Barre Area School District. The kiln was painted by the students a day later at the school in addition to a Solar Powered Race Car activity conducted by PA Department of Environmental Protection (DEP) Environmental Education (EE) Center staff, Anne Devine and her 2 interns.
- Posed a question to Todd Wood, PA DEP Bureau of Conservation and Reclamation (BCR), to ask about using the “underground watershed” for a QHUP, drawing from the precedent of the Jeansville Mine Basin Operation Scarlift Report. If the QHUPs are only to be designed for Priority 3 (and below) AMLIS features that are related to water (usually AMD Discharges and infiltration points), then it makes sense to base the hydrologic unit on the geologic basins which hold the coal, and now water. Surface watersheds are more susceptible to change with development or natural disasters as we have seen in the recent past. This would also help to show the connection and effect of reclamation of land in one watershed to discharges in another watershed.
- Relayed information to the Earth Conservancy (EC) related to the ability of AMD Discharges to be harnessed to produce hydropower with smaller “micro-hydro” turbines. The Buttonwood Discharge in Hanover Township could be a good candidate, since the discharge from the shaft is manipulated into a concrete culvert system and could potentially could be manipulated again (dammed up) to hold back enough head to power a turbine.
- Spoke with Shawn Jones, Susquehanna River Basin Commission (SRBC) intern, about monitoring boreholes in the Western Middle Anthracite Coal Field. Modified an excel sheet from the USGS report (originally PA DEP BAMR data) to record water level data, track and calculate mine pool levels. [SRBC]
- EPCAMR staff traveled around the Lackawanna Valley to conduct water level monitoring of 15 boreholes related to the Scranton Metropolitan Mine Pool. Monitored the Jermyn borehole as well which is connected to the Jermyn Mine Pool. Due to time constraints, we were not able to monitor flow at the OFBH and Duryea Breach discharges, but took the measurements and downloaded transducer data at the end of the month. [LRCA]
- Added AMD Discharge water quality and flow data from the Wyoming Valley data to the EPCAMR Water Monitoring Open Office database.
- Prepared an invoice and final report for the PA Environmental Council (PEC) related to work on the Catawissa Creek QHUP. [PEC]
- Researched online for historical reports for the Lackawanna River. The “Dodge Report”, which was referenced in a draft of the Lackawanna River QHUP Report by LRCA staff, could not be found but several other interesting tidbits of knowledge and photos were found for the report and forwarded off to Bernie McGurl via e-mail. Placed 5 reports on a CD related to Bureau of Mines’ (BOM, now OSM) Conowingo Tunnel Study and a few other interesting BOM reports related to the Lackawanna River or Anthracite Region in general. [LRCA]
- Caught up the Grant Work Tracking Worksheets to pay period 24 in preparation for invoicing.
- Lined up the Loyalsock Creek Scarlift and several Ashburner (Lackawanna and Wyoming Basins, and Southern Wyoming Valley Detail) Basemaps in preparation for 3D mine pool mapping.
- Took flow measurements and calculated the flow of the Askam Boreholes to be approximately 4.90 cubic feet per second (CFS) or about 2,200 gallons per minute (GPM).
- Processed Iron Oxide Pigment from the Honeypt and Silverbrook Discharges with the help of EPCAMR’s Solar Kiln in preparation for increased sales in the summer months. There were several days over 80 degrees and full sun to “bake” the iron oxide at approximately 110 to 130 degrees. Hooked up a 12 volt connection to the solar panel and battery to drive off the water vapor more rapidly than the 3 volt fan which was previously rigged to the kiln.

- Sent Wyoming Valley AMD calculated flows to Todd Wood, PA DEP BCR, as requested and sent the list of “lost and found” boreholes for the Northern Anthracite Coalfield. Penn DOT recently found the Avondale Borehole #35 while milling route 11 and paved the road, but treated the surface of the borehole so it would be easy to chip up the pavement.
- Completed version 12 of the Reclaimed Abandoned Mine Land Inventory (RAMLIS) CD Tool with 14MB to spare. Updated several layers from EPCAMR database, files posted on PASDA & other online repositories. Removed all PASDA IMS layers due to unreliable nature of the server. Files can still be added by the user by accessing www.pasda.psu.edu and following instructions to add layers to ArcMap. Added the Conservation Fund’s PA Protected Lands Inventory layers (published map file and layers), SRBC’s West Branch Strategy AMD Discharge layer, and ARIPPA’s Member Plant Location layers. Produced 12 copies to hand out as trial versions.
- Completed AMD Treat Cost Estimates for 3 discharges to Hazle Creek (Lehigh River Drainage). Weatherly Borough volunteer, Jim Wetzel, requested that we complete passive and active treatment scenarios to treat the Hazlebrook (ST1), Stockton Shaft (ST2) and Quakeake Tunnel Discharges. I used an Anoxic Limestone Drain and Hydrated Lime Plant for comparisons. An initial cost / benefit analysis, calculated as suggested by the Set-Aside Guidelines, showed that if all discharges were treated passively, there would be a 1:2.8 cost to benefit. If all discharges were treated actively, there would be a 1:1.3 cost to benefit. Later Jim asked that Hazlebrook and Stockton Shaft be combined and treated into one. Used a mass balance formula to figure out the concentrations and added the flows together. If combined, there would actually be a cost savings of about \$0.02 per 1,000 gallons on passive treatment and about \$0.06 per thousand gallons on active treatment for the Hazlebrook and Stockton Shaft Discharges, which could equate to a lower cost to benefit ratio.

[] - Denotes funding source where applicable.