

## **MINING AND RECLAMATION ADVISORY BOARD (BOARD)**

**Wednesday, January 21, 2009  
Rachel Carson State Office Building  
16<sup>th</sup> Floor, Delaware Room  
Harrisburg, PA  
10:00 a.m.**

**Voting Members/Alternates in attendance:** Jack Chamberlin (Member), Edward Helfrick (Member), Burt Waite (Member), Richard Fox (Alternate), Robert Hughes (Alternate), David Strong (Member), Janis Dean (Alternate), Darrel Lewis (Alternate), George Ellis (Alternate), Sue Germanio (Alternate), Sue Wilson (Alternate), Tara Smith (Alternate)

**Others in attendance:** Duane Feagley (Alternate), Molly Adams (DEP), William Allen (DEP), Shuvonna Ballard (DEP), Brian Bradley (DEP), Bruce Carl (DEP), James Charowsky (DEP), Roderick Fletcher (DEP), Michael Hewitt (EPCAMR), Richard Morrison (DEP), Joseph Pizarchik (DEP), Paul Pocavich (DEP), George Rieger (OSM), Marc Roda (DEP), Lawrence Ruane (DEP), Michael Smith (DEP), John Stefanko (DEP), Michael Terretti (DEP), John Varner (DEP), Daniel Lapato (DEP), Mario Carrello (DEP), Keith Brady (DEP), Sharon Hill (DEP), Fred Sherfy (OSM)

### **Meeting Called to Order**

Mr. Strong chaired the meeting, and called the meeting to order at 10:00 a.m. He welcomed everyone and asked that they introduce themselves.

### **Adoption of Minutes**

Mr. Strong called for a motion to approve the Board's October 23, 2008, meeting minutes. Mr. Waite gave the motion and Mr. Ellis seconded the motion and with the Board's unanimous vote, the minutes were adopted.

### **Correspondence**

Mr. Fletcher gave a status report on the letter that the Bureau of Abandoned Mine Reclamation sent to Winner Energy. The letter gave a period of sixty (60) days for Winner Energy to respond. Winner Energy sent in a response but not a stand alone report as was desired.

The Board sent a letter under Mr. Osikowicz signature to Acting Secretary Hanger after the agenda was finalized. It gave the Acting Secretary an update on and offered the Board's assistance in dealing with Abandoned Mine Land issues. Mr. Fletcher reported that no response has been received.

## **Committee Reports**

### Policy Committee

No Report

### Reclamation Committee

No Report

### Regulation, Legislation and Technical Committee

No Report

## **Anthracite Mine Pool Mapping Project**

Mr. Hughes and Mr. Hewitt, both from Eastern Pennsylvania Coalition of Abandoned Mine Reclamation (EPCAMR), provided a presentation on the Mine Pool Mapping Initiative in the Anthracite region. This is a collaborative effort with the District Mining Offices, Abandoned Mine Reclamation, Office of Surface Mining and several other entities. They gave a demonstration on the various methods and software used to map mine pools. The software brings together various maps of a target area and provides a three dimensional view of the underground mine pools and their unique features. There are approximately 380 folios that have been acquired from OSM. This leaves a gap in the digitizing of mine pool maps in the southern anthracite field. EPCAMR recently applied for an OSM Applied Science Grant, with the support of MRM to allow them to expand their efforts. There are three universities, Bloomsburg, Lockhaven, and Mansfield with Geology departments who are on tap to assist in the collection and digitizing of the various mine map folios still unaccounted for.

A practical application of this software is that it is easier to use and understand this format than to use spreadsheets or other formats. These maps can also be utilized to help calculate volumes for marketing mine pool water for industrial uses. Pennsylvania State University is also involved in determining potential markets and users.

Mr. Hughes and Mr. Hewitt suggested that a letter of support from the Board would be helpful to them with their pending OSM Applied Science Grant.

There is no scientific community outreach at this time. EPCAMR is working on starting grass roots interest in this project.

A question was posed about possibly mapping western Pennsylvania. Mr. Hewitt stated that the next grant submitted to OSM includes a proposal of a pilot program for the mapping of the bituminous regions stating in Tioga County.

They also requested that if anyone has any other information about other mine pool data that they get into contact with them so that EPCAMR could work to fill in the gaps in their data. Mr. Pizarchik stated that he is aware of two different kinds of mapping efforts taking place. One is documenting all the abandoned underground mines with the assistance of several different bodies in an effort to save any historical, environmental, and subsidence information for use in the future. To the best of his knowledge, the California District Mining Office has been working to document mine pools in the Southwest Region.

Ms. Germanio asked a process question about the sustainability of mine pool water for industrial use. Mr. Hewitt explained that their efforts included trying to determine sustainable yields. He explained that they are still in the early stages of understanding with regards to mine pools and that in past several pools had been interconnected with bore holes.

Mr. Strong would like a “wish list” to assist with the Mine Pool Mapping Project.

### **Reclaiming Primacy Bond Forfeiture Sites**

Mr. Smith, District Mining Manager for the Moshannon District Office, gave a progress report on reclaiming Primacy Bond Forfeiture Sites. The original goal was to complete fifteen sites within three years. Forty nine sites were reclaimed. Twenty six sites were reclaimed through surety reclamation agreements. Nine projects were completed by mine owners who were willing to assume the responsibility. Seven were done with conventional contractors. These projects were completed by the District without additional staff.

Projects which were the easiest were first. They were able to reclaim sites like the Ed Hanslovan site for much less than estimates projected.

They have seven projects left to be completed. There is only one site that does not have something in the works to reclaim it.

They have seventeen acid mine drainage sites in need of reclamation. Five are being treated through passive means. Four have design plans in place or in process. Two of them are under a new permit. There are three sites they consider not feasible or impossible to treat.

Mr. Pizarchik told the assembly that they were looking for any and all ideas for treating the few discharges that seem to be infeasible or impossible to treat. He also stated that according to a court decision, all mine drainage discharges MUST be treated regardless of feasibility. There is also no ranking system in place. A document proposing a ranking system was challenged in court several years ago and nullified. Every discharge must be treated to the same standards and as though the mining company was still operating.

OSM has not been approached about their comments yet about a program plan and amendment.

### **Bark Camp Update**

Mr. Varner gave an overview of how the Bark Camp Site was reclaimed. This was a demonstration project to show the use of dredge material from New York and New Jersey in reclaiming strip mine sites in Clearfield County. The site was owned by the Bureau of Forestry, DCNR. The process of bringing in dredge material to fill in the pits was finished in 2002. Approximately 10,000 feet length of highwall or 20 acres was reclaimed using this method. Extensive sampling was done on the dredge material. Dredge material was transported by rail and off road trucks. The material was combined with lime and ash to create a weak concrete to immobilize all materials in it and create a block in the cut. It was then covered with a manufactured topsoil to allow for revegetating. From 1998 through 2002, 425,000 cubic meters of dredge material was deposited and in 2001 municipal waste incinerator ash was also used along with the cogen ash.

Extensive water sampling was done both up and down stream. Testing was done prior, during, and for several years after the project was completed. The only noticeable change was an increase in chlorides. This was attributed to the saltwater from the dredge material and the incinerator ash which is also very high in chlorides. At their highest concentration, the chlorides reached as high as 15,000mg/l at the base of the fill areas. The drinking water standard for chlorides was 250mg/l. Since no one was receiving their drinking water strictly from Bark Camp Run this was not seen as a serious problem. However, as a result, a recommendation was made to avoid using municipal incinerator ash in the future.

New York & New Jersey Clean Ocean & Shore Trust's 2007 report states that it cost them almost 20 million dollars to transfer and place the dredge material in Bark Camp and to replant the area. This did not include the cost of the actual dredging of the harbors. The final cost equaled approximately 45 dollars per cubic yard of material. It was cost effective as far as the Department was concerned because DEP only needed to pay for sampling and inspection. If the Department was paying for the freight, it would not have been considered a cost effective method.

Although there was some improvement in water pool quality, most of the improvement on the site was related to the clean up of the site prior to the beginning of the project. There are still two abandoned deep mines on the site that continue to discharge acid mine drainage. There was a proposal to fill the deep mines with ash to seal them however funding for this project was never acquired.

The Department considers Bark Camp a successful reclamation demonstration project. Mr. Strong pointed out that the Department got some zero cost reclamation done and some excellent research as well.

A similar site is underway in the Anthracite region in Luzerne County. A question was asked about what is done with the dredge material in preparation of it being placed into strip mines. Mr. Varner explained that it is pumped into the Fort Mifflin Basins where it is allowed to dry. It becomes similar to topsoil.

## **Beneficial Use of Coal Ash Update**

Mr. Brady gave an update on the regulation revisions for coal ash. Two technical guidance documents have been published for comment dealing with Beneficial Use of Coal Ash. Three documents are being combined into these two new documents. The comment period ended on November 19. 23 different individuals and groups commented from citizens, industry members, and environmental groups. Compiling the comment and response document is complicated because several bureaus have contributed to the technical guidance documents. The guidance documents must be redrafted in light of the comments. The comment and response document is delayed largely because the Bureau of Mining and Reclamation is sorely understaffed.

The most frequently received comment was that the public wanted “Regs” and not “Guidance”. Mr. Brady believes this comment arises from a misunderstanding. He asserts that there are a number of regulations for all manner of mining and byproducts.

Mr. Ellis asked why change the guidance documents if you are not updating the regulations. Mr. Brady informed him that the regulations will also be updated.

Mr. Ellis asked what changes in the regulations were happening to necessitate consolidation of the guidance documents. Mr. Pizarchik mentioned that EPA has changed several parameters that affect leachate limits and the Technical Guidance Document’s had to be updated to reflect these new standards. The Bureau of Mining and Reclamation is also updating guidance for methods of monitoring wells, water quality, and how data is gathered. The Bureau is also trying to improve understanding and simplicity of the documents for the public. He also mentioned that updating the guidance, prior to the regulations not only serves the environment but makes it clear to the public that the environment is being protected.

Mr. Ellis expressed frustration that he has to continually change modules. Coal operators are trying to comply with existing Bureau regulations but the regulations continue to change in process. Mr. Pizarchik responded that the National Academy of Sciences made some suggestions that the Bureau thought were sound. He reiterated that changes also had to be made to satisfy EPA.

There was discussion on the use of alkaline addition and the changes proposed in the guidance. It was pointed out by Mike Terretti that using coal ash on the pit floor gives a spike to the alkalinity but does not affect it in the long run. The new guidance will allow ash use as a safety factor, that is, the alkaline need must be met with conventional materials but can be supplemented with alkaline ash. A concern is that some power plants may have to landfill their ash as opposed to using it in pit floors. Mr. Brady explained that the new criteria can be found in the new Technical Guidance Documents. Mr. Pizarchik says that the Bureau needs to go according to where the science leads and that the science states that the ash provides a “bump” but no sustained alkalinity increase. Mr. Pizarchik stated that the Bureau is not promoting one method over another but that they have to do what is required to protect the environment.

Mr. Brady informed the committee that there were three forms that have been finalized in regards to coal ash: “Coal Ash Beneficial Use Certification Application”, “Coal Ash Quality Assessment for Beneficial Use”, and “Coal Ash Water Quality Monitoring Report”

Mr. Brady also said that there are a number of fact sheets in the works. Some of these documents are geared to the public to explain the types of ash and their uses.

Mr. Pizarchik and Mr. Strong reiterated that the Coal Ash program is based in science.

### **ABS Legacy Trust Update**

Mr. Allen informed the Board that the Bureau has 81 agreements in place with responsible parties to deal with discharges. Of those, 49 are bonded, 23 are fully funded trusts, and 8 partially funded trusts. EM Brown fully funded their trust which pushed it into the fully funded category from the partial.

The program has 400,000 dollars more than they did in October. There are approximately 36 million dollars in bonds. August was an unusually productive month for reclamation. Revenue has been up \$265,000 this fiscal year. This is good but makes predicting future revenue difficult. \$77,000 in civil penalties have been awarded to the “Rec Fee” fund. Conversion assistance is still around the half million dollars a year range. There is approximately 30 million dollars in outstanding guarantees.

\$3.9 million to date is in the reclamation fee account (not including interest or civil penalties).

In December the anthracite portion of the mining industry did not pay any reclamation fees.

SMCRA fund has approximately 50 million dollars. In November and December it recorded negative interest. Ms. Germanio asked how an account could have a negative interest and Mr. Pizarchik stated that since the State Treasury invests in stocks and bonds, the market downturn affects the fund.

The Operating & Maintenance (O&M) money has been spent on in-house personnel costs for the K & J and the C & K sites. It works out to about 50 dollars an hour. The Department is looking to get grant money for some projects. The Department is also waiting for the Budget Office to finalize the new ABS Legacy Trust. Another possibility is to receive grants through “The Clean Streams Fund”.

Another in-house cost is collecting water samples. Approximately 112 samples a year need to be collected at about 50 dollars a sample a year. Mr. Allen estimates about 15,000 dollars a year for employee costs.

Mr. Pizarchik informed the Board that they would not have a full annual report ready by the July meeting. The completed report should be ready for the October meeting but a short overview should be available for the July meeting.

## **Proposed Land Reclamation Bond Rate Guidelines for 2009**

Mr. Carl presented the proposed Land Reclamation Bond Rate Guidelines for 2009. There were 14 reclamation contracts during 2008 that involved 29 grading areas of approximately 5 million cubic yards. The low bid average for these grading areas was \$1.01 per cubic yard. The lowest bid of any grading area was \$0.77 per cubic yard. The 2009 short push (less than 500 ft) grading rate increased slightly to \$0.95 per cubic yard from last year's \$0.90 per cubic yard. The long push (500 ft or more/haul) rate remained at \$1.20 per cubic yard. Grading bids have steadily increased starting in 2006, but appear to have peaked.

Revegetation costs continue to climb. The 2009 revegetation rate is up to \$1,600 per acre from last year's \$1,530 per acre. Subdrain installation rate increased substantially from \$13.00 per foot last year to \$18.50 per foot this year.

Stage 3 maintenance (pastureland or land occasionally cut for hay) rates decreased from \$600 per acre to \$550 per acre. Select grading costs decreased significantly. Rates have dropped from a high of \$1,600 per acre during 2007 and 2008 to this year's \$1,250 per acre. The remaining reclamation task calculated costs remained about the same from 2008 to 2009.

The MRAB members approved the 2009 Land Reclamation Bond Rate Guidelines. These new bond rates will become effective April 1, 2009.

## **BAMR Projects/Status Report**

The final totals reported for 2007 are 118 projects completed that reclaimed 758 acres at a cost of \$20.6 million. The primary funding sources for those projects were \$9.0M GG, \$8.8M Title IV grant, and \$1.8M AMD Set-aside account. This will be the last report for projects completed in 2007.

Moving into 2008, there are 26 projects reported completed at a cost of \$24.9 million. These projects reclaimed 798 acres. The primary funding sources were \$16.2M Title IV grant, \$6.8M GG, and \$1.7M from a cooperative effort with PaDoT.

2009 starts with 50 active projects that have a contract cost of \$63.9 million. Upon project completion these projects will restore approximately 1,958 acres.

BAMR is currently in the planning and design stage on 196 projects that will be implemented through future contracts or grants. Based on current projections for these projects, funding of over \$108 million will be needed and the projects will address 4,790 acres of reclamation. These projects will be released for bidding with completion of the design plans and the availability of funding.

On December 15 OSM announced that PA's 2009 AML Grant is \$29,975,292, an increase of \$2.0M over the 2008 Grant. The Department is currently finalizing the grant application (legal review and signatures). The grant will result in approximately \$11 million in construction projects. The effective date of the grant will be retroactive to January 1<sup>st</sup>.

## **New Business**

### **Letters**

The Board made a motion to draft a letter of support for EPCAMR in their application from OSM's Applied Science Program grant for their continued efforts in mine pool mapping project. Motion was made and seconded.

Funding the ABS Trust Shortfall

OSM Funding of Emergency Projects

### **2007/2008 Draft Annual Report**

Ms. Germanio reviewed the Board's 2007-2008 Annual Report and found errors which she will turn over to Patty Davenport for editing. The report must go to the state Senate and House's Environmental Resources and Energy Committees. A motion was made that after these corrections are made to go final with the report. The motion was then seconded.

### **2009 MRAB Scheduled Meeting Dates**

April 23, 2009 RCSOB, RM 105

July 23, 2009 TBA

October 22, 2009 RCSOB, RM 105

## **Open Time**

Mr. Rieger reminded the Board that Pennsylvania submitted a program amendment related to bonding program. It was published on January 14 and there is a 30 day comment period. These were the regulations promulgated after numerous meetings in regards to primacy ABS discharges. A motion was made and seconded for a letter of support for the regulation changes. Ms. Germanio will draft a letter of support for the program amendment and send it to Sue Wilson and Mr. Pizarchik for review.

## **Adjournment**

With no further questions or comments, Mr. Strong called for a motion to adjourn the meeting. The motion was made and seconded and the meeting was adjourned at 1:40 p.m.