



**Appalachian Region Technology Team Teleconference
January 7, 2013**

PARTICIPANTS:

Michele Hamlin, Department of Environmental Protection (PA DEP)
Harve Mooney, Virginia Department of Mines, Minerals and Energy (VA DMME)
Paul Rothman, Kentucky Department of Natural Resources (KY DNR)
Cheryl Socotch, Ohio Department of Natural Resources (OH DNR)
Charles Sturey, West Virginia Department of Environmental Resources (WV DEP)
Jeff Trump, Office of Surface Mining Appalachian Regional Office (OSM ARO)
Lois Uranowski, Office of Surface Mining Appalachian Regional Office (OSM ARO)
Sheila Walton, Office of Surface Mining Knoxville Field Office (KFO)

TEAM REPORTS:

PAUL ROTHMAN (KY):

The Kentucky Department of Natural Resources(DNR) / Division of Mine Reclamation and Enforcement (DMRE) continues to develop internal training for all levels of field inspection personnel (supervisors through inspector).

CHERYL SOCOTCH (OH):

The Ohio Environmental Protection Association (OEPA/Ohio's 402 authorities) has been issuing Individual NPDES permits to various mine operations, including coal waste/processing and underground mine permits with specific (additional) numeric limitations for Sulfate and Total Dissolved Solids since April 2011. A number of Ohio coal operators just recently brought this to the attention of Ohio Mineral Resource Management (MRM)(SMCRA authority) due to concerns regarding not being able to operate these already approved and issued mine permits and meet the requirements of the newly added numeric criteria. OEPA did not consult or discuss with Ohio Mineral Resource Management (OMRM) prior to issuing the individual permits. OMRM is hoping to meet and discuss these concerns with OEPA and suggest more open lines of communication between the two permitting authorities.

MICHELE HAMLIN (PA):

- Act 54 Report – Pennsylvania's Bituminous Mine Subsidence and Land Conservation Act (Act 54) requires that every five years DEP's Mining Program analyze permit/monitoring data and report its findings concerning the impact of underground mine subsidence on surface structures, features and resources. The Mining Program has contracted with the University of Pittsburgh,

which produced the 3rd Act 54 report, to again conduct the analysis and produce our 4th report. Subsidence impacts to streams will be focused on to a greater extent in this report than in past reports, due to the availability of a greater amount of stream data since the implementation of the mining program's "Surface Water Protection – Bituminous Underground Coal Mining Operations TGD" in 2005.

- A report of the findings of a priority pollutant study, conducted by PA DEP and USGS, which analyzed mine drainage water from surface mines, underground mines and mine waste piles for a wide suite of parameters, is near completion for publication in a peer reviewed journal.

HARVE MOONEY (VA):

- Virginia is in the process of revising the webpage. The agency has completed the state page, and each Department is in the process of updating the department pages. Hopefully the upgrades will be done by the first of February. The upgraded website will provide additional online data concerning the mapping GIS systems in Virginia.
- Virginia is currently providing access to the NPDES permits online for the public review. The DMLR Public Info mail box is an attempt to allow additional public access to the permitting process. The NPDES draft application is available as well as the bulk of the information about any permit. The availability of this information has spawned a number of public comment and an increase in the number of requests for informal conferences.

CHARLES STUREY (WV):

A media advisory statement from OSM updating its slurry report from WV was sent to the team.

SHEILA WALTON (TN):

- There are no changes since the last report concerning the status on both the North Cumberland LUM, and the Stream Protection Rule. Both tasks are still on hold pending comments and recommendations from Headquarters (Washington, DC).
- The Cost Recovery initiative is still ongoing. KFO is currently collecting data to estimate the cost to complete any component required under the permitting process. This task will allow OSM to recoup some of the cost for processing coal mining permit applications.
- The draft KFO Annual Report is completed; it is currently being edited for final release.

LOIS URANOWSKI: Reviewed the draft agenda for the winter ARTT meeting. An updated agenda will be sent to the ARTT team and to the MSHA academy.

JEFF TRUMP:

- There will be no ARTT meeting in the month of January 2013 as originally scheduled. Tentative dates for the meeting will be February 19-22, 2013.
- Next teleconference is set for February 4, 2013 at 1:30PM.



**Appalachian Region Technology Team Teleconference
February 6, 2013**

PARTICIPANTS:

Michele Hamlin, Department of Environmental Protection (PA DEP)
David Lane, Office of Surface Mining Appalachian Regional Office (OSM ARO)
Harve Mooney, Virginia Department of Mines, Minerals and Energy (VA DMME)
Paul Rothman, Kentucky Department of Natural Resources (KY DNR)
Cheryl Socotch, Ohio Department of Natural Resources (OH DNR)
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Lois Uranowski, Office of Surface Mining Appalachian Regional Office (OSM ARO)
Sheila Walton, Office of Surface Mining Knoxville Field Office (KFO)

TEAM REPORTS:

PAUL ROTHMAN (KY):

- The Kentucky DNR is working with NTTP to provide ARRI Training over the upcoming weeks to:
 - 1) Field inspection staff in the 5 Division of Mine Reclamation and Enforcement (DMRE) regional offices (95 employees).
 - 2) Field inspection personnel in the 3 Division of Abandoned Mine Land (DAML) regional offices and the DAML technical staff located in Frankfort (51 employees).
 - 3) Technical permit review personnel in the Division of Mine Permits (DMP) located in the DNR Frankfort Office (45 employees).

*This training has already been provided to the DMRE and AML inspection staff located in the Prestonsburg and Pikeville regional offices (62 employees).

- Because of the significant turnover in inspection personnel due to retirements the DMRE has developed a 2 day "in-house" inspector training program which they will provide to the staff in each of their regional offices. This program isn't a substitute for the training provided by NTTP, but is meant to prepare the new inspector for the inspection mentoring process they will soon undergo and more clearly defines their role and the expectations of the Department.

CHERYL SOCOTCH (OH):

Ohio MRM utilizing all program staff (Regulatory, permitting and AML) through new “shared services” approach to assist with field documentation and input of AML features as part of AMLIS inventory. Other shared services across program areas also include inspection assistance from coal regulatory staff for incidental coal permits normally reviewed by limited number of non-coal inspection staff.

MICHELE HAMLIN (PA): Nothing reportable this month

HARVE MOONEY (VA):

The General Assembly of Virginia is in session for about two more weeks. There are no significant amendments to the regulatory program moving through the legislative process. The bill to lift the 31 year moratorium on the mining of uranium has failed in committee.

CHARLES STUREY (WV): Nothing reportable this month.

SHEILA WALTON (TN):

For the LUM and Stream Protection Rule, the goals for TN for 2013 are to focus on:

- 1) Completing the evaluations for the Environmental Impact Statement (EIS) for the North Cumberland Land Unsuitable for Mining (LUM).
 - The Knoxville Field Office (KFO) is currently working with Headquarters to ensure that "Alternatives" are comprehensive and cover the appropriate issues.
- 2) Completing the Stream Protection Rule (SPR) /Environmental Impact Statement (EIS).
 - The SPR team will be meeting next week (week of February 11th). This kickoff meeting for 2013 is to discuss plans and directions for the EIS. The team will also be reviewing "Alternatives".

LOIS URANOWSKI: Reviewed the draft agenda for the winter ARTT meeting. An updated agenda will be sent to the ARTT team and to the MSHA academy.



**Appalachian Region Technology Team
Face-to-Face Meeting
February 20-21, 2013
Mine Health and Safety Academy
Beckley, WV**

PARTICIPANTS:

Roger Calhoun, Office of Surface Mining, Appalachian Region (OSM ARO)
Natalie Carter, Office of Surface Mining, Appalachian Region (OSM ARO)
John Carey, Maryland Bureau of Mines (MD BOM)
Jacqueline Crawford, West Virginia Department of Environmental Resources (WV DEP)
Michele Hamlin, Pennsylvania Department of Environmental Protection (PA DEP)
David Lane, Office of Surface Mining Appalachian Regional Office (OSM ARO)
Harve Mooney, Virginia Department of Mines, Minerals and Energy (VA DMME)
Paul Rothman, Kentucky Department of Natural Resources (KY DNR)
Cheryl Socotch, Ohio Department of Natural Resources (OH DNR)
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ROGER CALHOUN: (OSM)-discussed a variety of subjects affecting the States.

- There are shortages of staff in all phases, including 60% of the staff we had ten years ago.
- Slurry impoundments-we need to work on development of the same criteria throughout the US (same standards).
- Bonding issues-States are at different stages. We need to compare notes and see what is working.
- Pollutional discharges/hydrology issues in general. Discussion included: What trend stations are working? What programs are doing well? Water quality issues-who are the repeat offenders of NPDES? Abandoned Mine Land (AML) issues are State specific, very different for each State.
- AML vs. NPDES-There is currently a court case pending in WV over bond forfeiture.

TEAM REPORTS:

MICHELE HAMLIN: (PA)

- Brent Means-in consultation with industry and PA DEP is investigating a “Best Practices” method on permits for prediction of post mining discharges. A preliminary meeting occurred in January and included Brent Means and Jay Hawkins (OSM), PA DEP staff from the California District Mining Office and Greg Shuler - Central Office in Harrisburg, and staff from Moody and Associates. A second meeting is planned.
- In 2008 & 2009, Brent Means conducted a review of and reported on the techniques and requirements the PA DEP Underground Mining Program uses during the permitting process to evaluate for and prevent potential post-mining discharges.
- The report commended the mining program’s requirements for detailed and pertinent hydrologic information to determine pre-mining and predict post-mining hydrologic conditions, performance of comprehensive post-mining discharge evaluations during the permit review process, and the preventative measure of prohibiting mining in high risk areas to ensure discharges do not occur.
- The report found several programmatic problems and offered recommendations including: Monitoring data was not routinely reviewed during permit revisions or reviews because it is not submitted in a usable format for graphing analysis. This issue has recently been addressed (as a result of a recent evaluation of stream flow monitoring data over longwall mines by the central office) by developing a spreadsheet template on which operators can submit hydrologic monitoring data required by both the permit application and the permit. The spreadsheets have been submitted to the district office for beta testing.
- CHIAs were not properly completed. The report recommended that the CHIA form be revised so that it would be a more useful tool in evaluating for post mining discharges during permit issuance, renewals and bond release by providing sections to document important hydrologic information and decisions/explanations. PA DEP has updated the CHIA form based on these recommendations.
- Communication between permitting staff and inspection staff was lacking due to permitting and inspection staff working out of different district mining offices. As a result, the inspection staff was not aware of important permit decisions and requirements, including permit conditions allowing for piezometer installations to occur at later dates with respect to the location of mining. The report recommended reinstating mid-permit (2.5 yrs) meetings of permit & inspection staff at mine locations, educating inspection staff on the hydrologic review process for underground mining permits, and requiring that all piezometers be installed prior to permit issuance. The bond release procedure with respect to hydrology issues was not well established and in one instance stage 1 bond release occurred without a review of mine pool monitoring data. The report recommended that all mine pools contain monitoring wells which are monitored until bond release and the CHIA be revised to include documentation of hydrologic information at bond release and up to date hydrologic information for the site. The CHIA has been updated.

JOHN CAREY (MD):

- Inspectors and permitters work close together in Maryland.
- Impact Monitoring –retroactive back to permit review. There is no “excessive burden” to owner/operators.
- WET tests are required in permits. MD is working in coordination with EPA/NPDES permit people. WET tests are being done quarterly.

CHERYL SOCOTCH (OH):

- In order to address problems and shortcomings for evaluation of monitoring requirements for underground mining (full coal recovery) the Division has developed a team of MRM permitting, hydrology and inspection to improve management of the monitoring data and evaluation for impacts and future permitting actions. Ohio may need to consult with PA who is also addressing similar issues for improvement in management of underground monitoring data.
- Ohio has completed development of electronic permitting process for all coal applications. Operators may submit applications electronically at this time although will be mandatory method for submittal effective July 1, 2013. So far to date, everything is working well with exception of larger files must be submitted as attachment (PDF) and Electronic signatures have been approved.
- Ohio DNR is establishing an “AMD-Frac Team” with individuals from MRM and Division of Oil & Gas to review potential for use and of mine water for fracking needs. The team will develop guidelines and statute necessary and will address concerns including: potential subsidence issues from water withdrawal, water quality issues, and use of siphons from streams.
- Grant money from OSM being used to fund a joint study conducted by Ohio MRM and OSU to evaluate for long-term impacts on previously surface mined streams throughout Ohio.
- Ohio MRM revising statute to allow for off-side mitigation of streams and wetlands when conditions on mine site are not practical.

CHARLES STUREY (WV):

Charlie had given a presentation on the WV Department of Environmental Protection, Division of Mining and Reclamation Coal Refuse Embankment Compaction study.

HARVE MOONEY (VA):

- All application permits have to go thru Harve’s office. Public notices and Comments must go through the office as well. The review staff is becoming more proficient through this process. This is to become implemented NLT Dec 2013.
- 60-day turnaround time frame is the goal.
- Renewals and the WET Test need to be brought up to standards.
- EPA has not required selenium standards as yet. Monitoring data must be done, however.

SHEILA WALTON (TN):

- Three priorities have been established:
 1. Spring Protection Rule
 2. New Cumberland LUM
 3. Cost Recovery

PAUL ROTHMAN (KY)

- Kentucky ARRI Arbor Day Event – scheduled for April 26, 2013 at J.W. Resources (formerly Xinerger) in Bell County, Kentucky.
- NTTTP ARRI Training to be conducted at all 5 DMRE regional field offices, 3 DAML regional offices and the DMP office in Frankfort. Approximately 200 DNR staff will have completed this training by April 11, 2013.
- DNR is in the process of conducting training for the inspection staff in the 5 DMRE regional field offices
- DNR prepared legislation for the 2013 legislative session that facilitated changes to reclamation bonding and provided for the creation of Guaranteed Reclamation Fund. The Governor signed this legislation on March 22, 2013.

BRENT MEANS (OSM):

Reviewed and presented the latest information regarding AMD 5.01 Plus via GoToMeeting.

TOM GALYA/ARIELLE AVISHAI: (OSM)

Tom and Arielle gave an update on ASTM Coal Mining GeoSpatial Data Standards via GoToMeeting.

- The goal is to create a standardized for geospatial data to better facilitate the sharing of GIS data across the different RA programs and among the SMCRA community.
- AML Standards generally followed the AMLIS layout.
- Over 6 years, this team has developed 4 AML standards and 11 Title V standards.
- Reviewed Title IV (AML) and Title V (regulatory) standards.

PETER MICHAEL/LOIS URANOWSKI (OSM) :

Peter gave a presentation on “Applying Geomorphic Reclamation Methodologies to Appalachia”. The presentation was provided to all team members.

LOIS URANOWSKI/JAY HAWKINS (OSM):

Jay gave a presentation the “characteristics of Streams overlaying longwall Coal Mines in PA, WV, and OH”.

CRAIG WALKER (OSM):

Craig reviewed the Range-Wide Indiana Bat Protection and Enhancement Plan Guidelines for Surface Coal-mining operations along with the February 2013 revisions with the Team. A copy was provided to all in attendance.

CHARLES STUREY/JACQUELINE CRAWFORD (WV DEP)

Jacqueline Crawford gave an updated presentation on LIDAR. This works with Google but is not available to the public at the present time. The title of the presentation was "Determining the Potential of Mining within Slurry Impoundment Protection Zones Using GIS and Mining Occurrences".

LOIS URANOWSKI (OSM):

Lois discussed new applied science and technology needs. Projects/discussions included:

- How to measure stream restoration success.
- Impoundment design criteria.
- Total Dissolved Solids (TDS) depending on existing studies.
- New technology/dewatering slurry.
- Interstate information/data exchange. An example given here was dumping in deep mines. And the impacts it may have in neighboring States.
- Material handling techniques to minimize TDS.
- Define "lag time" of initial flush of high conductivity Post FRA.
- Determining the potential of mining of mining within slurry impoundment protection zones using GIS/mining occurrences.

TONYA MULLINS (OSM)

1) There is a new version of AMDTreat (5.0.1 Plus) available for free download from the TIPS' website.

2) An upgrade to Groundwater Vistas (v 6.0) is coming soon.

3) The latest version of SEDCAD (4 Update, 2012.12.16) was distributed in Dec 2012.

4) Watershed Modeling Software has been successfully tested and is now ready for distribution.

This software will only be distributed to those requesting it. Contact Tom Galya (OSM-CFO).

5) TIPS has a total of 5 (1-WR, 2-MCR, 2-AR) Trimble ProXRT GPS receivers (sub-decimeter accuracy). These units are available to our customers.

6) The mobile computing team is considering addition of a section to existing ArcPad class to cover "Data Collection Using Smartphones" This will potentially make the two day course to three day class.

7) Please see the following ALERT for SEDCAD4 users:

TIPS Service Managers, please let your TIPS customers know of the following Fix that will address the registry issue that some users are having with the SEDCAD installation.

SEDCAD4 uses the Windows registry to store values between runs. In order to maintain values between runs, you will need to create read/write privileges to users for the SEDCAD4 portion of the windows registry. Then the user(s) will not be asked for the serial number, company info, "recent" files and storm

info, etc. each time. You will need to edit the SEDCAD4 portion (only) of the Windows Registry to allow read/write access. **BEWARE! Editing your computer's registry should only be done by an Administrator. The slightest typo can result in complete disaster for your computer and may require a complete re-image of the entire system. Do not undertake a registry edit unless you know what you are doing!**

1. run the Registry Editor (regedt32.exe -- found in WinNT\System32 subfolder)
Type Start>>Run...>>regedt32 in the "Open" window
2. access "**HKEY_LOCAL_MACHINE\Software\Civil Software Design**" key
3. With the "Civil Software Design" parent key highlighted, click Permissions on the Security menu
4. change Type of Access to Full Control (for users) -- "this key and all subkeys

TOM HINES (OSM): Tom gave an updated presentation on the NTP program which included:

NTP - 2013

CHANGE, CHALLENGE, AND COMMUNICATIONS

Changes that have been affecting our NTP program include:

- Budget Factors
- Personnel Factors
- Competing Priorities
- Shrinking Staff with Expertise and Experience
- Many New Staff needing Training

Challenges that need to be met or changed:

- How to Save on Expenditures
- How to Prioritize Needs
- How to Prioritize Staff Time
- How to Balance Existing Expert Staff Priorities and Foster New Instructor Resources

Changes in Student Populations:

- Expect requests for fundamentals courses to increase based on staff replacement
- Younger students
- Limited knowledge base for training conference
- Generational Differences (e.g., texting, immediacy, abbreviated messages, high expectation on graphics, etc. (We would value your input on staff background and learning styles!))
- Class sizes are larger

Communications that need addressed include:

- Customer Communications
- Need for Customer Prioritization
- All Parties Combining Ideas for Expense Reduction
- Strategically Identify Immediate and Longer Term Program Evolution to Continue to meet the Training Needs in Accomplishing the Agencies Mission

What NTP Needs from Customers

- Thoughtful Response to Training Needs Survey
- Input on Immediate and Long Term Priority Needs for Training
- Opportunities to Combine Resources to meet the Needs; i.e. as on-site, in-state training
- Thoughtful, Positive Recommendations through your Steering Committee Representatives

Wrap-up:

DAVID LANE/LOIS URANOWSKI:

- David Lane is working on impoundment oversight with a team of seven. OSM is working with the States and coordination of this effort with oversight of MSHA. With strategic planning efforts in place, there needs to be consistent protocol.
- Environmental Impact Statement and the Spring Protection Rule efforts continue.
- There will be no teleconference on March 4. Next scheduled teleconference will be held on April 1, 2013



**Appalachian Region Technology Team Teleconference
April 1, 2013**

PARTICIPANTS:

Michele Hamlin, Department of Environmental Protection (PA DEP)
David Lane, Office of Surface Mining Appalachian Regional Office (OSM ARO)
Paul Rothman, Kentucky Department of Natural Resources (KY DNR)
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TEAM REPORTS:

PAUL ROTHMAN (KY):

- Kentucky ARRI Arbor Day Event – scheduled for April 26, 2013 at J.W. Resources (formerly Xinerger) in Bell County, Kentucky. Given scheduling conflicts Dr. Tammy Horn and Michael French will be providing lectures to the students on April 22th and April 23, 2013 respectively.
- NTTP ARRI Training will be conducted at all 5 DMRE regional field offices, 3 DAML regional offices and the DMP office in Frankfort. Approximately 200 DNR staff will have completed this training by April 11, 2013.
- DNR is currently in the process of conducting inspector training for the staff in the 5 DMRE regional field offices – training has already been completed for the London, Middlesboro, Pikeville and Prestonsburg offices.
- DNR prepared legislation for the 2013 legislative session that facilitated changes to our reclamation bonding regulations and provided for the creation of Guaranteed Reclamation Fund. Governor Brashear signed this legislation on March 22, 2013.

MICHELE HAMLIN (PA):

- The Bureau of Mining Programs has found an error in the equation that was being used to calculate the confidence interval about the median of baseline loadings for the annual check of non-encountered discharges in remining permits. More information about the error can be provided if needed. Pennsylvania has corrected the equation and has begun to use the EPA recommended 1.815 multiplier in remining permits to calculate the confidence interval about the median for annual checks. The 1.815 multiplier provides for a wider confidence interval

than the previously used 1.58 multiplier. Also noted, Minitab Statistical Software calculates a slightly different interquartile range than the method that Pennsylvania is using and EPA is recommending. My bureau would be interested in learning of statistical software that is being used successfully by other states for the purpose of calculating and comparing remining discharge sample data.

- Keith Brady, Sharon Hill and Greg Greenfield of the Bureau of Mining Programs have developed a “coal ash class” for PA’s district mining office staff and have offered to present the class to other states. A descriptive agenda is currently being developed and will be submitted to the ARTT team to review with the goal of offering the class as a webinar.

SHIELA WALTON (TN)

- The Tennessee report still lists the three major tasks as top priority.
 - 1.) The North Cumberland Wildlife Management Area EIS: Tennessee has completed the task of revising the alternatives for the preparation of the Environmental Impact Statement (EIS). There are now six (6) alternatives and they have been approved by OSM headquarters. The reanalysis for the revised alternatives is expected to start soon.
 - 2.) Stream Protection Rule: The team for the Stream Protection Rule is still in the process of revising and/or adding new alternatives. The status for this rule is still the rule-development state.
 - 3.) Cost Recovery Rule: The Federal Register for the OSM Cost Recovery rule was published on March 26, 2013. The public comment period ends on May 28, 2013.

CHARLES STUREY (WV)

WV and other States, as well, are concerned about the effect that cancellations of National Technical Transfer Training Program (NTTP) and Technical Innovation and Professional Services (TIPS) provided training classes will have on personnel.

JEFF TRUMP (OSM)

OSM is in the process of setting up a webinar on presentations made at the WV Mine Drainage Task Force Symposium. Presenters will be Peter Michael, Eric Perry and Brent Means. The date and time for this will be announced at a later date.



**Appalachian Region Technology Team Teleconference
Jun 3, 2013**

PARTICIPANTS:

Michele Hamlin, Department of Environmental Protection (PA DEP)
David Lane, Office of Surface Mining Appalachian Regional Office (OSM ARO)
Harve Mooney, Virginia Department of Mines, Minerals, and Energy (VA DMME)
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TEAM REPORTS:

Paul Rothman (KY):

- KY DNR has been working complete regulations that facilitate HB 66 (Kentucky Reclamation Guaranty Fund) a mandatory bond pool. A number of draft regulations in (Kentucky Administrative Regulations) 405 KAR chapters 8 & 10 have now been crafted and forwarded on to the Governor's office for review.
- The 2013 ARRI Conference will be held in Flatwoods, WV on August 6 & 7, 2013. Access to on-line registration for the conference is available via the ARRI webpage at <http://arri.osmre.gov/>

Michele Hamlin (PA)

PA DEP has made an online underground mine map viewer, Mine Map Atlas, available to the public through a joint effort between PA DEP's Mine Subsidence Insurance program and Penn State's Pennsylvania Spatial Data Access program. The viewer shows the boundaries of underground mines in relation to the surface and allows users to measure surface distances between underground mines and surface features of interest. The effort is ongoing - over 15,000 out of 40,000+ maps have been scanned and approximately half of the scanned maps have been georeferenced.

<http://www.paminemaps.psu.edu/>

Sheila Walton (TN):

- The Knoxville Office (KFO) is still working to implement the Cost Recovery Rule. The public comment period end on May 28, 2013. The team will be reviewing and responding to all comments received.
- The KFO Lands Unsuitable for Mining (LUM) team received approved alternatives from OSM Headquarters. The existing alternatives were revised and two new alternatives were added. The LUM team met on May 20th to discuss the impacts of the new alternative to the draft EIS. They also discussed the changes required to write-ups to reflect the revised alternatives.

Harve Mooney (VA): Nothing reportable this month.

Charles Sturey (WV)

- West Virginia (WV) is concern about funding shortfalls both from the state and federal levels and will support using applied science projects funding if any to be used for training.
- WV is concerned about USFS new bat protocols concerning the reliability of the protocol and is in contact with the USFS office in Elkins.
- WV hosted a seminar on SWORA for industry and consultants on May 14, 2013 with a small fee to cover cost. It was a success and was well received by all. WV plans to host more one day seminar like this.

Lois Uranowski (OSM)

Reminded members of the ARTT Team of the upcoming TROMPE Applied Science field tour to be held on June 18, 2013. Two tours are being held that day from 10:00 AM -- 12:00PM, and another tour from 1:00 -- 3:00PM. Bruce Leavitt and Tim Danehy will be the tour directors for that day. Directions are being sent via email to perspective attendees.

David Lane (OSM)

Next scheduled ARTT teleconference will be held July 1, 2013 at 1:30PM.



**Appalachian Region Technology Team Teleconference
Jul 1, 2013**

PARTICIPANTS:

Michele Hamlin, Department of Environmental Protection (PA DEP)
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Lois Uranowski, Office of Surface Mining Appalachian Regional Office (OSM ARO)

TEAM REPORTS:

Paul Rothman (KY):

- KY DNR has completed crafting bonding regulations that establish the Kentucky Reclamation Guaranty Fund (KRGF) which is a mandatory bond pool. The draft regulations have been reviewed and approved by the Governor's office. The Governor appointed 3 members to the KRGF Commission last week, and the first Commission meeting is scheduled for this week. The Commission must approve the draft regulations before they can be sent on to the Legislative Review Commission where the legislative process will start.

- The 2013 ARRI Conference will be held in Flatwoods, WV on August 6 & 7, 2013. Access to on-line registration for the conference is available via the ARRI webpage at <http://arri.osmre.gov/>. Early registration ends on July 14, 2013 at a reduced rate and after that the conference fee increases by \$25.00.

Hotel information -The conference will be held at the Days Hotel and Conference Center and a block of rooms have been reserved for Monday through Wednesday at a rate of \$77 for two queen beds and \$79 for a king bed. Please call 304-765-5055 for reservations. Mention the ARRI conference.

Michele Hamlin (PA): Nothing reportable this month.

Cheryl Socotch (OH): Nothing reportable this month.

Harve Mooney (VA): Nothing reportable this month.

Charles Sturey (WV)

- 733 request by citizens group submitted to OSM regarding the West Virginia Program
- WV is concerned OSM is not renewing the contract for AMERICORPS. This will affect the GEOMine efforts in VA,WV, and KY.

Lois Uranowski (OSM):

- OSM/MGR/States meeting will be held at Stonewall Jackson, WV Aug 27-29, 2013.
- Lois reviewed the realignment of the AR region.
- A review of the TROMPE field site was also discussed. All agreed that this is a great project for passive treatment for AMD.
- Next ARTT teleconference is set for August 5, 2013 at 1:30PM.



**Appalachian Region Technology Team Teleconference
September 10, 2013**

PARTICIPANTS:

John Carey, Maryland Bureau of Mines (MD BOM)
Kenneth Eltschlager, Office of Surface Mining Appalachian Regional Office (OSM ARO)
Michele Hamlin, Department of Environmental Protection (PA DEP)
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Jeff Trump, Office of Surface Mining Appalachian Regional Office (OSM ARO)

TEAM REPORTS:

Paul Rothman (KY): Nothing reportable this month.

John Carey (MD):

The recent International Mining Compact Commission (IMCC) Bonding Workshop in St. Louis was very successful as a well rounded discussion with pertinent presentations on bonding. All the IMCC member states attended and shared their questions and concerns and information about how their state handles the bonding issue.

Michele Hamlin (PA):

- Permitting staff from PA DEP Bureau of Mining Programs Permits Division and six District Mining Offices will be attending a semi-annual meeting in September to present and discuss current permitting issues, insights and studies within Pennsylvania's mining program.
- PA DEP Bureau of Mining Programs Permits Division is working with PA DEP Bureau of Point and Non-Point Source Management and the USGS to conduct a three year baseline study of the hydrology and biology of an unmined stream basin and parallel study of a post-underground mining stream basin.

Sheila Walton (TN):

- Clear Fork Utility Company, Clairfield TN has requested assistance from the Knoxville Field Office (KFO) concerning one of the water monitoring wells install under the OSM AML program. The well seems to be losing water when the pumps are turned on. OSM proposes to investigate the issue using a borehole camera to view the insides of the well. The camera is expected reveal if the well casing is damaged, leaking or perforated. The investigation is scheduled to happen next week (the week of September 16th). KFO Hydrologist, Rick Mann will be assisting the Clear Fork Utility Company.
- Lands Unsuitable for Mining (LUM): KFO is actively preparing a rewrite of the statement of work for the North Cumberland LUM. The new statement is required because the initial contract terminated before a final product could be delivered for the Environmental Impact Statement (EIS). Therefore, KFO will be posting a new request for proposals for the preparation of the North Cumberland EIS. The new statement of work will include the any updates and changes to the “alternatives” that must be included in the final EIS document.
- KFO is also currently reviewing water quality violations and “bonding” for mine sites in the Tennessee coal fields. This task is listed as one of the focus areas in the Strategic Plans for the Appalachian Region-Office of Surface Mining. KFO is in the process of assessing the needs of known sites requiring long-term bonding funds---TN Trust Funds. The bonding evaluation for these sites is projected to be completed within the next twenty-four (24) months.

Harve Mooney (VA):

- Virginia is poised to receive a 733 letter concerning issues with the current bonding issues. The letter concerns the appropriateness of the use of self bonding as well as adequacy of the amount of bond for mite sites.
- Also at issue are the agency’s administrative processes in relation to formal reviews. There are citizens who wish to intervene but state they are unable to enter since the hearings have not been scheduled. The citizens also note that they rebuke the necessity of the informal review of issues prior to the granting of a formal review of the issue.

Charles Sturey (WV):

There were some questions that WV has on the Appalachian Region Strategic plan and if and when that information may be released.

Jeff Trump (OSM)

There was an email inquiry sent out to the Team asking about important items and about prioritizing what our concerns may be as an entity. Some of those concerns are as follows:

- There are many changes coming down with proposed stream ruling (and CCR rules). In advancement of the proposed OSM rules, some States are already dealing with similar requirements from agency's enforcing the Clean Water Act (CWA). Rather than have the States hit with an entire new concept in how mining must be done (in order to meet new rules), we need to prepare the States. This may need to be technology driven as many of the States enforcing SMCRA are not prepared. Interaction and sharing among the various State (Team) members already provides useful information to the other States that may not have had to deal with CWA issues.
- There is also a concern the States are at a crisis level in funding and the loss of legacy staff that are taking all that knowledge and experience with them. State and Federal are seeing an influx of new personnel due to retirements and , in an effort to insure consistency among the state regulatory programs, training opportunities need to remain constant.
- Several ideas were mentioned about having a proposed workshop. Some of the ideas mentioned were impoundments, a blasting workshop, bonding/permitting, and underground slurry.
- Discussion was held about having a meeting at the Mine and Safety Health Academy (MHSa) about impoundments/injections. MSHA holds an impoundment/injection class there. Jeff Trump will check on the availability and possibility of having a team meeting there in the upcoming FY.

David Lane (OSM):

The next scheduled teleconference call will be on October 7, 2013 at 1:30PM.



**Appalachian Region Technology Team Teleconference
November 4, 2013**

PARTICIPANTS:

John Carey, Maryland Bureau of Mines (MD BOM)
Kenneth Eltschlager, Office of Surface Mining Appalachian Regional Office (OSM ARO)
David Lane, Office of Surface Mining Appalachian Regional Office (OSM ARO)
Harve Mooney, Virginia Department of Mines, Minerals, and Energy (VA DMME)
Paul Rothman, Kentucky Department of Natural Resources (KY DNR)
Cheryl Socotch, Ohio Department of Natural Resources (OH DNR)
Charles Sturey, West Virginia Department of Environmental Resources (WV DEP)
Jeff Trump, Office of Surface Mining Appalachian Regional Office (OSM ARO)

TEAM REPORTS:

Paul Rothman (KY):

Deputy Commissioner Larry Arnett retired on August 15, 2013 and Sandy Gruzesky, Director of the Kentucky Division of Water (DOW), was appointed as the new deputy Commissioner of the Department for Natural Resources on September 11, 2013. Ms. Gruzesky had been with DOW for 19 years and was appointed director in 2008. Prior to that she was the assistant director and fulfilled various roles within the NPDES permitting program. Sandy served in the U.S. Navy Civil Engineer Corps in both active duty and reserve roles and is a retired Commander. She earned a B.S. in civil engineering from the University of Pittsburgh and an M.S. in civil engineering, specializing in environmental engineering, from the University of Kentucky. She is a licensed professional engineer in Kentucky.

John Carey (MD): Nothing reportable this month.

Cheryl Socotch (OH):

- Ohio MRM just purchased (provided through funding from OSM) 10 Panasonic Toughpad FZ-G1 for field permitting and coal enforcement staff for beta testing. With the support of internal IT staff, the lightweight, weather-resistant portable units will provide mobile GPS (GIS) access and capability and will house all maps, information and data from permit files for inspection and permitting staff to have at their hands at all times. The units have Windows 8 and are powered

by a 3rd generation Intel Core i5 vPro processor. If successful, the Division will purchase for all field coal enforcement and permitting staff. These units are more powerful and capable than the current Juno units utilized by the Division's AML program for AMLIS and other GPS use.

- MRM staff is currently working with industry representatives as part of a small task work group concentrating on Mine Pool issues. The workgroup will focus on more comprehensive prediction and monitoring tools. Recommendations for guidance documents are expected by the end of 2013.
- MRM is in process of submitting proposed statute, followed by rule-making to provide for off-site mitigation for impacts to streams and wetland resources on SMCRA permits. A small task group comprised of individuals from MRM, OEPA, ACOE, OSM, and industry and working on recommendations for provision of off-site mitigation (working in cooperation with 401 and 404 mitigation) and potential for off-site mitigation of pre-law impacts from past coal mining practices.
- Ohio's largest coal mining producer, Murray Energy Corporation, has purchased a number of underground coal mines from Consol Energy in WV, including the McElroy, Shoemaker, Robinson Run, Loveridge and Blacksville No. 2 mines, which produced 28.5 million tons of thermal coal in 2012. The transaction also includes Consol's river and dock operations, which transported 19.3 million tons of coal and other commodities along the upper Ohio River system last year.

Harve Mooney (VA):

- Virginia is in the process of upgrading the Laptop Enforcement System used by the inspection staff. Selected individuals are currently testing the new software. Hopefully the upgrades will be done by the first of next year.
- Currently the agency is experiencing a high volume of administrative hearings requests from the industry.
- Virginia will elect a new governor for the state tomorrow. Direction for the state will be decided then. No major initiatives will occur until next year.

Charles Sturey (WV):

- CONSOL Energy Inc. announced Oct. 28 it will sell all five of its West Virginia longwall coal mines and related assets for \$3.5 billion in value to a Murray Energy Corporation subsidiary. The mines being sold are McElroy Mine, Shoemaker Mine, Robinson Run Mine, Loveridge Mine and Blacksville No. 2 mine.

- Effective December 1, 2013, Tom Clarke will be reassigned new duties as an Executive Assistant to the Agency Head where he will deal with environmental matters related to energy development. Tom will conduct research and report to the Cabinet Secretary on matters ranging from extraction to consumption to renewables. Some of these issues have occupied much of Tom's time since he was appointed Mining Director. Harold Ward will be Acting Director until a permanent replacement is named. Harold has 24 years' experience in the mining program and will provide for a seamless transition in the program's leadership.

Jeff Trump (OSM)

- Based on the availability of dates, the best dates for holding a 1 ½ day ARTT team meeting would be Feb 18-20 at the National Mine and Safety Health Academy located in Beaver, WV. Jared Adkins from the MSHA will be providing a class on slurry impoundment/injection.
- Jeff Trump and Ken Eltschlager gave a review from the National Technical Transfer Team meeting summary from a teleconference held October 22, 2103. Part of the discussion included updates on the website of OSM and the AR, technical chats (discussions using Live Meeting and conference call-blasting related issues), and an update on Applied Science projects. The NTTT meeting minutes were provided to the group earlier.
- There will be an OSM Geomorphic Reclamation Forum to be held in Albuquerque, NM May 20-22, 2014. Questions were raised by the team as to why this event can't be held closer to the AR, especially since travel dollars have been and continue to be drastically reduced. Ken will contact Kimery Vories for further information.
- The Instructor Training course (NTTP) will be held November 3-7 in Landsdown, VA-21 new instructors are slated to attend the session. There is a tentative schedule of NTTP courses to be held, but NTTP is awaiting on the budget to be signed before releasing this for the year. A TIPS training schedule has also been coordinated with NTTP and the final schedule will depend on Bureau funding decisions.
- TIPS software is back on line. WV has graciously offered the use of a server there to prevent TIPS from shutting down in the case of another Federal Government shutdown. This will be relayed to TIPS personnel to get their thoughts and input.
- The next scheduled teleconference call will be on December 2, 2013 at 1:30PM.



**Appalachian Region Technology Team Teleconference
December 2, 2013**

PARTICIPANTS:

Kenneth Eltschlager, Office of Surface Mining Appalachian Regional Office (OSM ARO)
Michele Hamlin, Pennsylvania Department of Natural Resources (PA DNR)
David Lane, Office of Surface Mining Appalachian Regional Office (OSM ARO)
Harve Mooney, Virginia Department of Mines, Minerals, and Energy (VA DMME)
Paul Rothman, Kentucky Department of Natural Resources (KY DNR)
Cheryl Socotch, Ohio Department of Natural Resources (OH DNR)
Charles Sturey, West Virginia Department of Environmental Resources (WV DEP)
Jeff Trump, Office of Surface Mining Appalachian Regional Office (OSM ARO)

TEAM DISCUSSION:

The team spent time discussing the upcoming face-to-face meeting to be held at the National Mine Safety and Health Academy (MSHA) February 19-20, 2014. A DRAFT agenda was discussed. The team has voted to go for a 1 ½ day meeting in lieu of a full 2 day meeting because of mission requirements. Jared Adkins, one of the instructors from MSHA will be presenting updates on impoundment foundation investigations, and impoundment seepage. The team also voted for inviting the IMCC, TIPS, and NTTP personnel in addition to team reports and other updates from OSM.

TEAM REPORTS:

Charles Sturey (WV):

Effective December 1, 2013, Tom Clarke was reassigned new duties as an Executive Assistant to the Agency Head where he will deal with environmental matters related to energy development. Tom will conduct research and report to the Cabinet Secretary on matters ranging from extraction to consumption to renewables. Some of these issues have occupied much of Tom's time since he was appointed Mining Director. Harold Ward is Acting Director until a permanent replacement is named. Harold has 24 years' experience in the mining program and will provide for a seamless transition in the program's leadership.

Michele Hamlin (PA):

A work group including staff from PA DEP's Bureau of Mining Programs and California District Mining Office and industry have met to discuss bond requirements for the cost of interim water treatment at coal refuse disposal facilities in the case of site forfeiture. The regulatory authority would be responsible

to treat degraded water (storm-induced runoff and leachate) from the time the permittee fails to operate the facility until the time all site discharges cease following final reclamation. As the Pennsylvania member of ARTT, I was asked by the work group to inquire with the ARTT team about the bonding requirements that other Appalachian states may have concerning interim water treatment at coal refuse disposal sites.

Cheryl Socotch (OH):

Ohio MRM is being approached from the oil/shale industry regarding the potential for beneficial reuse of drilling cuttings for surface mine reclamation for both active mine sites and for abandoned mined land reclamation projects. Since OEPA is the lead Ohio agency responsible for regulation of solid/material waste, MRM is working closely with this agency to evaluate the potential safety and other environmental risks that should be considered if this material is used for beneficial reclamation on mine sites, including acceptable leachate analysis, specific triggers, ensuring representation and characterization of material on site, etc. A current proposal for beneficial reclamation at an inactive mine site in Columbiana County, Ohio has been submitted for consideration as a pilot project although no decisions have been reached at this time.

David Lane (OSM):

Because of time constraints and the length of discussion on the face to face meeting, the rest of the Team opted to wait until next month to give further updates. The next teleconference will be held Monday, January 6, 2014 at 1:30PM.