NATIONAL TECHNOLOGY TRANSFER TEAM MEETING SUMMARY

December 8, 2011 1:00 – 2:00 PM Central Time

Participants

AR – Arielle Avishai, Jeff Trump, **David Lane**, **Ken Eltschlager** HDQ – Steve Sheffield, Josh Rockwell, Li Tai Balboa MCR – **Kimery Vories** (Team Leader) WR – **Duane Matt** TIPS – **Lou Hamm** NTTP – Sarah Donnelly, Tom Hines IMCC – **Greg Conrad** WEIB – Dave Berry NAAMLP –John Koerth Attendees in **Bold**

WR Report

- The Colorado Mining Association is hosting the Northwestern Mining Conference March 19-22, 2012. OSMRE plans on having booth at this event. We appreciate any assistance that can be provided by any of the OSMRE regions (equipment/banners and personnel). Henry Austin is in charge of booth operations.
- We need to figure out a way to finalize our dealings with a **non-respondent applied science awardee**. Ken Eltschlager stated he would try and contact this person. Duane Matt will do the same.
- In-Situ processing team briefing: "The technique of in-situ coal mining, also called insitu coal gasification and/or underground coal gasification, has potential application in areas where conventional mining methods are not applicable. Much of the world's coal reserves are deemed "unrecoverable" due to coal seams being too deep, too much overburden, the depth of the resource, the type of overburden, transportation costs, and other reasons. Rick Fredrickson, Alaska DNR Mining Section Chief, raised the in-situ coal gasification issue in response to permitted coal exploration drilling activity on Native-owned land during the summer of 2010. He drafted a letter to the WR Regional Director asking OSM to take a leadership role in reviewing the regulatory and environmental aspects of in-situ coal mining through establishment of a working group of OSM and Western state personnel to review and analyze the existing technology in relation to the regulations. He requested that the working group provide guidance with the processing of in-situ exploration and mining applications, and requested that OSM assistance be provided to those states that have active underground coal gasification projects." (excerpt from director's briefing paper). A forum took place on October 20-21, 2011 to education all the team members on the aspects of in-situ coal mining (LINC energy and Lawrence Livermore National Laboratories were the presenters). Guidelines are now being developed to address groundwater contamination from in-situ coal mining.
- **In-situ movie** sent to Ken Eltschlager and Kim Vories (now posted on our in-situ processing workgroup SharePoint site and available to whomever wants to see it).

MCR Report

- Ohio State University CCB Research OSU is working on securing the permit for the high-volume FGD gypsum demo project near Conesville power plant of AEP. Placement of FGD gypsum is expected to begin in late summer or early fall. Background monitoring is in progress.
- EPA CCR Rulemaking EPA published its proposed rule on June 21, 2010 on regulating CCR landfills and impoundments. OSM was officially given the lead on mine placement. EPA has defined mine filling as pertaining only to coal mining. EPA comment period ended November 19, 2010. EPA has published a copy of its forthcoming Notice of Data Availability (NODA). The document can be accessed here: http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/ccr-rule/noda.pdf. The NODA contains "information (that) is generally categorized as: (1) Chemical constituent data from coal combustion residuals (CCRs); (2) Facility and waste management unit data; (3) Information on additional alleged damage cases; (4) Adequacy of State programs; and (5) Beneficial Use. In addition, EPA is considering a variety of possible approaches to update and enhance the risk assessment and the regulatory impact analysis (RIA) supporting the development of the final rule." It also seeks comments on numerous additional "damage cases" and "gaps in state government regulatory programs" alleged by environmental groups during the previous public comment period. The NODA comment period ended November 14, 2011.
- **OSM CCR Rulemaking-** Work is progressing on revising the proposed rule and the environmental assessment. A proposed rule is scheduled for May of 2012.
- MCR Natural Stream Design (NSD) Workshop: A video of the workshop has been completed and placed on the MCR Technology Transfer CD/DVD.
- MCR AML Drilling and Grouting Class: Based on a survey of the MCR states, there are 20-21 state staff that would participate in this class if taught in the region. NTTP has scheduled the class for Indianapolis in February 7-10, 2012.
- **Technical Studies Project Management Conference Call** Will be rescheduled in early 2012.
- **ASMR Annual meeting June 9-14, 2012 in Tupelo, MS** The MCR is assisting ASMR with this event. It will sponsor technical sessions on Acid Mine Drainage Mitigation Case Studies in the Illinois Coal Basin and Natural Stream Design for the Midwest. Apx 100 papers have been submitted for this meeting.
- NAAMLP Annual Meeting 2012 in Des Moines, IA The MCR is assisting NAAMLP with this event.

AR Report:

- AR continues to work on updates of the **Applied Science web site** as quarterly and final reports arrive. Maintenance of the site is significantly aided by customer comments and reviews by in house personnel that help keep information current.
- A **Blasting Workshop** is being planned for September 5-6, 2012 at the MSHA Academy in Beckley, WV. The workshop will focus on open discussions on how to better apply the science of blasting, critique and approve blast plans, evaluate compliance with the performance standards, keep records, certify blasters and take and defend enforcement actions. All regions are encouraged to participate. Most of the states should be able to stay at the academy free of charge through the MSHA/states cooperative agreement.

NTTP Report

- **Sarah Donnelly announced her retirement** from government service. Her last day will be December 22, 2011.
- A session of the **Instructor Training Course** (ITC) was held October 30 November 3 at the National Conference Center in Virginia with seventeen participants from both NTTP and TIPS programs.
- The new **Mine Gas Workshop** team conducted a dry run November 14-15, 2011 in Pittsburgh, PA. The workshop was well received and the participants provided valuable feedback and recommendations.
- A special session of the **Coal Field Communications** course was held November 15-17, 2011 in Lebanon, VA.
- An initial scoping meeting regarding an **Impoundments Course** was held in Charleston, WV on December 6 & 7, 2011. The meeting was to outline ideas for a potential course regarding impoundment inspection and to develop a questionnaire that will be distributed to program heads to access course interest and audience.
- A session of the **Bonding Workshop: Administrative and Legal** is scheduled for December 13-15, 2011 in Denver, CO.
- 87 requests were received for the **Rosgen Applied Fluvial Geomorphology** class that will be held February 20-24 in Charleston, WV. The space allocation for this class will be distributed later this week. 34 offices requested spaces and most of them received one space.

HEADQUARTERS Report

- OSM is registered as an exhibitor for **MINExpo International** 2012 September 24-26, **2012** Las Vegas, Nevada. HDQ and WR are coordinating this with NMA.
- Currently we don't have funding for **UGMM**, but Josh is developing a solicitation in case we get funding. OSM's budget office has asked for a comprehensive status report for all projects since the program's inception. Josh is putting that together.
- Greg probably reported on the **UGMM Benchmarking Workshop** prep, which Josh is also working on.

TIPS Report

- The **new equipment** for some state and OSM offices has been received and is going through the property tracking process.
- OSM through TIPS partnered with the USGS on **using unmanned drones** in a proof of concept exercise on a WV mine site. A Raven Unmanned Aerial Vehicle (UAV) was flown to collect color video for the purpose of inspecting drainage ditches along the permit boundary. This area is very dangerous and time consuming for an inspector to walk. The second part of the mission was to use the Raven's thermal camera to look at a known mine fire at the same location. The results of this pilot provide promising opportunities to use this technology to support SMCRA activities.

 Based on the positive results of the WV pilot, OSM plans to continue working with the USGS on other project sites in FY 2012. Part of this effort will be to test the Raven's

ability to map coal seam fires in Colorado accurately and consistently as well as additional sites in the Appalachian Region. Comparisons will be made on using the Raven with traditional inspections and inventories accomplished via helicopter. OSM hopes to measure and demonstrate efficiencies obtained by utilizing the UAV platform to support SMRCA activities.

• TIPS worked with NGA's Rapid Response Ortho (RRO) Program to acquire orthorectified imagery for all three regions over priority areas at no cost. OSM has requested approximately 75 high-resolution satellite images worth a total of \$427,500. This is imagery that has already been collected in the past decade. The imagery requested represents most areas of active mining in the United States with the Appalachian Region being the only region that does not have complete coverage.

IMCC Report

• IMCC continues work on its next **benchmarking workshop on mine mapping**. It is tentatively scheduled for Feb. 15 and 16, 2012 in Pittsburgh at the Sheraton Station Square. There will be a tour in the PM of the 16th at the University of Pittsburgh's map archiving facility. The agenda is complete and all the presenters lined up and it looks to be a really good workshop.

WEIB Report

• WIEB continues coordination with IMCC on multiple oversight policy and funding issues

NAAMLP Report

No NAAMLP representative

Exhibit Schedule

The following is the current OSM exhibits planned for the calendar year 2012.

- Colorado Mining Association Meeting in Denver in March by WR
- ASMR Tupelo, MS June 9-14, 2012 MCR (National Coordination)
- NAAMLP Annual Meeting Des Moines, IA October, 2011 MCR (National Coordination)
- MINExpo International **2012** September 24-26, **2012** Las Vegas, Nevada WR & HDQ
- NASLR Annual Meeting, September 2012 by ??
- TX Surface Mining & Reclamation Workshop, College Station, TX October, 2012 by MCR
- TMRA Annual Meeting, TX, October 2012, by MCR
- ISMR Jasper, IN December, 2012 by MCR

Next conference call will take place at 1 PM Central Time, January 18, 2011.