

**MEETING SUMMARY
MCRCC TECHNOLOGY TRANSFER TEAM
STEERING COMMITTEE CONFERENCE CALL**

DATE: **September 27, 2007**
TIME: 10:00 AM to 10:30 AM CDT
ATTENDEES:
Alabama AML:
Alabama Surface Mining:
Arkansas Mining Division: Greg Melton
Illinois Office of Mines and Minerals:
Illinois AML: Larry Lewis
Indiana Division of Reclamation:
Indiana AML: Marvin Ellis
Iowa Mining and Minerals Bureau:
Kansas Surface Mining Section: Tim Wilson
Louisiana Injection and Mining Division:
Mississippi Mining and Reclamation Division: Stan Thieling
Missouri Land Reclamation Program:
Oklahoma AML:
Oklahoma Department of Mines:
Texas Mining and Reclamation Division:
OSM MCRCC: Kimery Vories, Nick Grant
OSM BFO: Sherry Wilson
OSM TFO:
OSM IFO:

NOTICE: All Future OSM Regional Tech Transfer Conference Calls will be at the same call in Number (877) 319-2035 with the same pass code 348477#. Also be sure to check the Calendar of events on the OSM MCR Website at www.mcrcc.osmre.gov.

1. **Kim Vories** reported on the status of current MCR and OSM NTTT **Technology Transfer**.

OSM CCB Rulemaking ANPR was published March 14, 2007. Comment period closed June 13, 2007. OSM CCB rulemaking team met in DC August 22 & 23 to write the proposed rule. Work continues on proposed rule. The CCB steering committee has begun planning for the next OSM CCB forum in 2009.

EPA CCB Rulemaking NODA EPA published August 29. The three documents that the Agency is requesting comment on include: (1) a joint U.S. Department of Energy (DOE) and EPA report entitled, *Coal Combustion Waste Management at Landfills and Surface Impoundments, 1994-2004*; (2) a risk assessment conducted by EPA on the management of CCW in landfills and surface impoundments; and (3) EPA's damage case assessment. In addition, the Agency has included in the Docket to today's Notice of Data Availability (NODA) a rulemaking petition submitted by a number of citizens' groups

and several approaches, one prepared by the electric utility industry and the other prepared by a number of citizens' groups, regarding the management of CCW. Let Kim know if you want a copy.

2. **Kim Vories** reported on the **2007 Applied Science Process**. All projects have been funded. **Status of the 2005 and 2006 Applied Science Projects** have been updated and posted on technology transfer website www.techtransfer.osmre.gov. The FY 2008 solicitation should be published on grants.gov October 2 and will close on January 2, 2008. The solicitation document will be available on the same technology transfer website.
3. **Mid-Continent Regional Acid Mine Drainage Workshop September 11-13, 2007** –rt. There were 31 participants. **Larry Lewis** reported that the presentations, discussions, and field exercises went very well. It was a quality event with much to offer our technical staff working on AML AMD sites. **Nick Grant** reported that the power points of the talks have all be posted on the MCR website at www.mcrcc.osmre.gov. He also reported that the participant surveys gave the event a 4.5/5 Overall Satisfaction Rating. The participants also made the following suggestions for future events:
 - Reports from every state
 - Title V cases
 - Bioassessments
 - Bioreactors and other innovative technologies
 - COE and permitting issues
 - Long term maintenance issues and maintenance contracts
 - Various alkaline additions and amendments
 - Software
 - Non-coal issues
 - Field visit to construction in progress
4. **Kim Vories** reported the Bats & Mining Steering Committee has begun planning for the next **Indiana Bat forum** in 2009.
5. **Kim Vories** reported that the MCR office has initiated a steering committee to begin planning for a national **geomorphic reclamation forum**.
6. **Coal Mining and the Aquatic Environment**. **Nick Grant** reported he attended the “Conservation Management of the Clinch and Cumberland River Systems: A Collaborative Discussion on Coal Mining and the Aquatic Environment” held September 5-7, 2007. The Nature Conservancy, U.S. Fish and Wildlife Service, and their partners convened the symposium to address stakeholders in discussions of coal mining and the conservation of the rare aquatic biota in the central Appalachians. The symposium fostered a better understanding of coal mining technology and aquatic resource conservation, and mitigation opportunities and priorities. There were about 165 participants.

7. **MCR PHC/CHIA Resource Document is now available on the MCR website** at www.mcrcc.osmre.gov. Paper copies were sent to the head of all MCR program states.
8. The new **OSM Technology Transfer Website** is now up and running. Although it is a work in progress it can be accessed at www.techtransfer.osmre.gov. or by going to the MCR website at www.mcrcc.osmre.gov and under the Links list clicking on “NT³ OSM Technology Transfer.”
9. Kim Vories reported on upcoming TDT events including:
 - **Proceedings of 2006 CCB Forum** will be available on the revised CD and the MCR website at www.mcrcc.osmre.gov. Paper copies are at the printers waiting for our notice of registration with the Library of Congress.
 - **2007 TX Surface Mine Reclamation Workshop** October 4-5, 2007 College Station, TX. MCR will send a representative with an exhibit.
 - **NAAML 29th Annual Conference** October 7-10, 2007 Bloomington, IN. OSM will provide a number of papers on AMD mitigation. **Marvin Ellis** reported that there are about 160 participants registered to date.
 - **Geological Society of America** October 28-30 Denver CO. MCR staff will present a paper on CCBs in Coal Mining to Mitigate AMD.
 - **Indiana Surface Mining & Reclamation Symposium** December 3-4, 2007 Jasper, IN. OSM will provide a paper on the Indiana bat status.
 - **IMCC Surface and Ground Water Database Development and Use** -- December 4 and 5 in New Orleans. Send requests for travel support to Greg Conrad.
 - TIPS will sponsor a **Geospatial Conference** in Atlanta, GA on March 24-28, 2008. Information can be found on the TIPS website (www.tips.osmre.gov).
 - 7th Biennial Meeting - **Interstate Technical Group on Abandoned Underground Mines (ITGAUM)** in Kansas City, MO. March 26-28, 2008. Tim Wilson reported that this is probably the best conference around on issues related to protecting roadways from underground mine hazards. Info at <http://www.fhwa.dot.gov/engineering/geotech/hazards/mine/2008workshop.cfm>
10. **Next Conference Call** will be scheduled for October 25, 2007 at 10 AM CDT.

MEETING SUMMARY
MCRCC TECHNOLOGY TRANSFER TEAM
STEERING COMMITTEE CONFERENCE CALL

DATE: **October 25, 2007**
TIME: 10:00 AM to 10:30 AM CDT

ATTENDEES:

Alabama AML:

Alabama Surface Mining:

Arkansas Mining Division: **Greg Melton**

Illinois Office of Mines and Minerals:

Illinois AML: **Larry Lewis**

Indiana Division of Reclamation:

Indiana AML: **Marvin Ellis**

Iowa Mining and Minerals Bureau:

Kansas Surface Mining Section:

Louisiana Injection and Mining Division:

Mississippi Mining and Reclamation Division: **Stan Thieling, Lonnie Barrier**

Missouri Land Reclamation Program: **Larry Teson**

Oklahoma AML:

Oklahoma Department of Mines:

Texas Mining and Reclamation Division:

OSM MCR: **Kimery Vories, Nick Grant**

OSM BFO:

OSM TFO:

OSM IFO:

NOTICE: All Future OSM Regional Tech Transfer Conference Calls will be at the same call in Number (877) 319-2035 with the same pass code 348477#. Also be sure to check the Calendar of events on the OSM MCR Website at www.mcrcc.osmre.gov.

1. **OSM CCB Rulemaking ANPR** was published March 14, 2007. Comment period closed June 13, 2007. OSM CCB rulemaking team met in DC August 22 & 23 to write the proposed rule. Work continues on proposed rule.
2. **Kim Vories** reported on the **2007 Applied Science Process**. All projects have been funded. **Status of the 2005 and 2006 Applied Science Projects** have been updated and posted on technology transfer website www.techtransfer.osmre.gov. The **FY 2008** solicitation has been published on grants.gov October 2 and will close on January 2, 2008. Letters were sent to all prospective proposers in MCR. The solicitation document is available on the same technology transfer website. The final report for the robotics study for exploring underground mines was posted on the website.
3. **Larry Lewis** reported that the **AML AMD work group** is beginning to plan for the next MCR AMD workshop. He is working with Wayne Van Buren, Greg Melton, and Mike Castle on a joint workshop with Arkansas and Oklahoma. Investigations are focusing on Fort Smith in western Arkansas. Nick Grant will take the lead on OSM assistance for this event.

4. The CCB steering committee had its first conference call October 18 to begin planning for the next OSM **CCB forum in 2009**. The next call will be November 27.
5. **Kim Vories** reported the Bats & Mining Steering Committee will begin planning for the next Indiana Bat forum in 2009 at its first conference call on November 27.
6. **Kim Vories** reported that the MCR office has initiated a steering committee to begin planning for a national **geomorphic reclamation forum** with its first conference call November 6.
7. **MCR PHC/CHIA Resource Document is now available on the MCR website** at www.mcrc.org. Paper copies were sent to the head of all MCR program states.
8. The new OSM **Technology Transfer Website** is now up and running. Although it is a work in progress it can be accessed at www.techtransfer.osmre.gov. or by going to the MCR website at www.mcrc.org and under the Links list clicking on “NT³ OSM Technology Transfer.”
9. Kim Vories reported on upcoming TDT events including:
 - **Proceedings of 2006 CCB Forum** are now available on the revised CD and the MCR website at www.mcrc.org. Paper copies are at the printers waiting for our notice of registration with the Library of Congress.
 - **Geological Society of America** October 28-30 Denver CO. MCR staff will present a paper on CCBs in Coal Mining to Mitigate AMD.
 - **Indiana Surface Mining & Reclamation Symposium** December 3-4, 2007 Jasper, IN. OSM will provide papers on the Indiana bat status and Quail Habitat. OSM will also provide three instructors for a workshop on **Stream and Wetland Management**.
 - **IMCC Surface and Ground Water Database Development and Use** -- December 4 and 5 in New Orleans.
 - TIPS will sponsor a **Geospatial Conference** in Atlanta, GA on March 24-28, 2008. Information can be found on the TIPS website (www.tips.osmre.gov).
 - 7th Biennial Meeting - **Interstate Technical Group on Abandoned Underground Mines** (ITGAUM) in Kansas City, MO. March 26-28, 2008. Tim Wilson reported that this is probably the best conference around on issues related to protecting roadways from underground mine hazards. Info at <http://www.fhwa.dot.gov/engineering/geotech/hazards/mine/2008workshop.cfm>
10. **Next Conference Call** will be scheduled for November 28, 2007 at 10 AM CST.

**MEETING SUMMARY
MCR TECHNOLOGY TRANSFER TEAM
STEERING COMMITTEE CONFERENCE CALL**

DATE: **April 9, 2008**
TIME: 10:00 AM to 10:30 AM CST

ATTENDEES:

Alabama AML:

Alabama Surface Mining:

Arkansas Mining Division: **Greg Melton, Wayne Van Buren**

Illinois Office of Mines and Minerals:

Illinois AML: **Larry Lewis**

Indiana Division of Reclamation: **John Richardson**

Indiana AML: **Marvin Ellis**

Iowa Mining and Minerals Bureau:

Kansas Surface Mining Section: **Tim Wilson, Murray Balk**

Louisiana Injection and Mining Division:

Mississippi Mining and Reclamation Division:

Missouri Land Reclamation Program:

Oklahoma AML:

Oklahoma Department of Mines:

Texas Mining and Reclamation Division:

OSM MCR: **Kimery Vories, Nick Grant**

OSM BFO:

OSM TFO:

OSM IFO:

Significant updates in bold italics

1. **OSM CCB Rulemaking** The ANPR was published March 14, 2007. *OSM plans to have the proposed rule published in June of 2008.*
2. **Applied Science Process.** The OSM 2008 Applied Science Project solicitation closed January 2, 2008. A total of 44 proposals totaling \$5.6 million were received by OSM, with 4 from the Mid-Continent Region, 9 from the Western Region, and 31 from the Appalachian Region. There were 10 reforestation, 9 revegetation, 5 hydrology, and 3 AMD and slope stability proposals with the remainder concerning mine pools, blasting, erosion control, environmental impacts, endangered species, coal combustion byproducts, coal mine fires, and information systems. OSM management made the decision on April 8 to fund 11 projects for a total of \$1,517,014. The successful applicants included:

ST	PI and Project Title	Institution	OSM \$	Total \$
CO	R. Musselman <i>The Use of commercial weed fabric and irrigation to enhance growth and survival of aspen and serviceberry on reclaimed surface mine lands</i>	USDA Forest Service	\$90,935	\$181,153
GA	V. Ibeanusi <i>Assessment of Environmental Impacts in Coal Mining Sites Using a Predictive GIS-based Environmental Mining</i>	<i>MHEI - Spelman College</i>	\$172,014	\$229,367

	Decision Support System (EMDSS)			
IL	R. Dunker A System to Evaluate Prime Farmland Reclamation Success Based on Spatial Soil Properties	University of Illinois	\$113,583	\$180,359
KY	R. Sweigard Field Investigation of Best Practices for Steep-Slope Mine Reclamation Employing the Forestry Reclamation Approach	University of Kentucky Research Foundation	\$199,927	\$271,108
OH	S. Kell RBDMS for Water Online: Providing Coal Operators and Their Laboratories Data Review and Reporting Capabilities via Web-enabled Water Quality Database/GIS and Providing On-demand Water Quality Data to the Public	Ohio DNR, Div of Mineral Resource Management	\$200,000	\$326,060
TN	E. Drumm Reforestation of Steep Reclaimed Slopes: Stability and Sediment Control Considerations	The University of Tennessee	\$199,682	\$244,001
TN	J. Franklin Reforestation of Steep Reclaimed Slopes in Appalachia: Forest Establishment and Function	The University of Tennessee	\$170,616	\$230,293
VA	J. Burger Establishing Hardwood Forests with American Chestnut using Forestry Reclamation Approach: Effects of Grading Practices and Ground Cover	VA Polytechnic Institute & State University	\$86,749	\$129,635
VA	R. Paris American Chestnut Restoration on Surface Mines Sites in the Appalachian Region	The American Chestnut Foundation	\$200,000	\$339,661
WV	J. Skousen Hardwood Tree Growth Using the Forestry Reclamation Approach in West Virginia	West Virginia University	\$36,588	\$969,793
WV	E. Pena-Yewtukhiw Determination of Soil Hydrologic Group for Mined Soils Under Forestry Reclamation Approach in Appalachia	West Virginia University	\$45,482	\$67,838

Unsuccessful applicants will be notified by mail early in April. Successful applicants will be contacted by the OSM grants specialist in the appropriate OSM region in the process of developing a cooperative agreement to fund the project.

3. **Indiana Bat and Coal Mining.** The steering committee is planning for a forum to be held the summer of 2009 in Charleston, WV with a half day field trip and a two and half day forum.
4. **CCB Placement at Mines.** The steering committee is planning for a forum to be held during the last half of July 2009 in Morgantown, WV with a full day field trip and two day forum.
5. **Geomorphic Reclamation.** The steering committee is continuing planning for a forum to be held during the last half of April 2009 in Bristol, VA with a full day field trip and two day forum.

6. **Reforestation** – *The MCR is planning to hold two meetings (Terre Haute, IN June 25 & Austin, TX July 22) this summer with Midwestern states and reforestation professionals on the applicability of the FRA to Midwestern States. The meetings will be by invitation and will have about 15-18 participants each.*
7. **Ohio State University CCB Research** – MCR has been working with the OSM CCB regional team at the request of OSU to begin cooperating on an Ohio CCB research initiative to conduct case studies on the use of FGD in mine reclamation. The letter of intent for OSM to provide technical assistance with this effort was mailed 1/17/2008. Ohio has made the decision to fund the research.
8. **ASMR Annual Meeting June 16-18, 2008** in Richmond, Va. OSM will be a gold level sponsor and exhibitor. Kim Vories will be giving a talk on the Indiana Bat and Paul Behum will be presenting a paper on the design of a passive AMD treatment system for the Enos Coal Refuse site in Indiana.
9. **Larry Lewis** reported that the **AML AMD work group** is planning for the next MCR AMD workshop. It will be located in Fort Smith AR September 22-23, 2008. The Holiday Inn has been contracted as the meeting place for the event. The program and registration information has just been released. Please register as soon as possible.
10. **Murray Balk** asked for an update on what OSM was doing about replacing the Aqua Chem software. Debbie Dale of the Hydrology Team prepared an update which is attached to this e-mail.
11. **Tim Wilson** requested OSM guidance on implementation of a new Federal Regulation by EPA/Corp of Engineers on wetland mitigation by SRA AML projects. This request has been passed on to OSM management. The Web access to this rule was received by Tim Wilson and passed on to the rest of the MCR TT team.
12. The new **OSM Technology Transfer Website** is a work in progress it can be accessed at www.techtransfer.osmre.gov. or by going to the MCR website at www.mcrcc.osmre.gov and under the Links list clicking on “NT³ OSM Technology Transfer.”
13. **Next Conference Call** will be scheduled for May 20, 2008 at 10 AM CST.

**MEETING SUMMARY
MCR TECHNOLOGY TRANSFER TEAM
STEERING COMMITTEE CONFERENCE CALL**

DATE: **May 20, 2008**
TIME: 10:00 AM to 10:30 AM CDT
ATTENDEES:
Alabama AML:
Alabama Surface Mining:
Arkansas Mining Division: **Greg Melton**
Illinois Office of Mines and Minerals:
Illinois AML: **Larry Lewis**
Indiana Division of Reclamation: **Todd Huff**
Indiana AML: **Marvin Ellis**
Iowa Mining and Minerals Bureau:
Kansas Surface Mining Section: **Murray Balk**
Louisiana Injection and Mining Division:
Mississippi Mining and Reclamation Division: **Stan Thieling, Lonnie Barrier**
Missouri Land Reclamation Program:
Oklahoma AML:
Oklahoma Department of Mines: **Tekleab Tsegay**
Texas Mining and Reclamation Division:
OSM MCR: **Kimery Vories**
OSM BFO:
OSM TFO:
OSM IFO:

Significant updates in bold italics

NEW THIS MONTH

- 1. OSM CCB Rulemaking** The ANPR was published March 14, 2007. *OSM plans to have the proposed rule published July 10 of 2008.*
- 2. White Nose Syndrome** Hundreds of thousands of American bats, including at least five species, are dying from a mysterious condition. Referred to as White-Nose Syndrome (WNS), to date it has been reported from five states (New York, Vermont, Massachusetts, Connecticut, and Pennsylvania), reportedly killing up to 95% of the bats in several affected winter colonies. Entire species are potentially threatened if we cannot solve this puzzle. *There will be a special agency briefing and strategy session June 9-10 in Albany New York.*
- 3. Applied Science High Priorities for FY 2009** The Director of OSM has tasked each region to come up with two high priority applied science topics for FY 2009 by June 13. Proposals received under these topics will receive extra points in the selection process. In order to accomplish this, I am requesting that: (1) each team member, (2) each OSM regional office, and (3) the MCR office *provide your recommendation for the highest priority topic for the region for FY 2009 and send it to me ASAP by no later than May 23.* On May 27 I will send each of you the results of this effort. *On May 29 at 10 AM CDT we will have a*

conference call and reach a consensus on the two highest priorities. The conference call number is (877) 319-2035 with a pass code of 348477#.

4. **Larry Lewis** reported that the **AML AMD work group** is planning for the next MCR AMD workshop. It will be located in Fort Smith AR September 22-23, 2008. The Holiday Inn has been contracted as the meeting place for the event. The program and registration information has just been released. Please register as soon as possible. A dry run of the field trip will take place May 27. The NTTP program has agreed to provide funding to support the travel of MCR state staff who would not be able to attend without travel support. *Please contact Kim Vories if you need travel assistance.*

ONGOING EFFORTS

5. **Indiana Bat and Coal Mining Forum.** The steering committee is planning for a forum to be held the summer of 2009 in Charleston, WV with a full day field trip and a two day forum.
6. **CCB Placement after new OSM CCB Rule Forum.** The steering committee is planning for a forum to be held during the last half of July 2009 in Morgantown, WV with a full day field trip and two day forum.
7. **Geomorphic Reclamation Forum.** The steering committee is continuing planning for a forum to be held during the last half of April 2009 in Bristol, VA with a full day field trip and two day forum.
8. **Reforestation – *The MCR is planning to hold two meetings (Terre Haute, IN June 25 & Austin, TX July 22) this summer with Midwestern states and reforestation professionals on the applicability of the FRA to Midwestern States. The meetings will be by invitation and will have about 15-18 participants each.***
9. **Ohio State University CCB Research –** MCR has been working with the OSM CCB regional team at the request of OSU to begin cooperating on an Ohio CCB research initiative to conduct case studies on the use of FGD in mine reclamation. The letter of intent for OSM to provide technical assistance with this effort was mailed 1/17/2008. Ohio has made the decision to fund the research. The first planning session was conducted May 9.
10. **ASMR Annual Meeting June 16-18, 2008** in Richmond, Va. OSM will be a gold level sponsor and exhibitor. Kim Vories will be giving a talk on the Indiana Bat and Paul Behum will be presenting a paper on the design of a passive AMD treatment system for the Enos Coal Refuse site in Indiana.
11. The new **OSM Technology Transfer Website** is a work in progress it can be accessed at www.techtransfer.osmre.gov. or by going to the MCR website at www.mcrcc.osmre.gov and under the Links list clicking on “NT³ OSM Technology Transfer.” *Please visit the applied science page to view final reports for past projects.*
12. **Next Conference Call** will be scheduled for July 1, 2008 at 10 AM CDT.

**MEETING SUMMARY
MCR TECHNOLOGY TRANSFER TEAM
STEERING COMMITTEE CONFERENCE CALL**

DATE: **July 1, 2008**
TIME: 10:00 AM to 10:30 AM CDT

ATTENDEES:

Alabama AML: **Larry Barwick**

Alabama Surface Mining:

Arkansas Mining Division: **Wayne VanBuren**

Illinois Office of Mines and Minerals:

Illinois AML: **Larry Lewis**

Indiana Division of Reclamation: **Todd Huff**

Indiana AML: **Marvin Ellis**

Iowa Mining and Minerals Bureau:

Kansas Surface Mining Section:

Louisiana Injection and Mining Division:

Mississippi Mining and Reclamation Division: **Stan Thieling, Lonnie Barrier**

Missouri Land Reclamation Program:

Oklahoma AML:

Oklahoma Department of Mines:

Texas Mining and Reclamation Division: **Mark Schlinggen**

OSM MCR: **Kimery Vories, Len Meier**

OSM BFO:

OSM TFO:

OSM IFO:

Significant updates in bold italics

NEW THIS MONTH

1. **OSM CCB Rulemaking** The ANPR was published March 14, 2007. *OSM plans to have the proposed rule published in July of 2008.*
2. **Science Strategy Meeting on the White Nose Syndrome in Bats** – PTSB staff member Kim Vories attended this meeting, June 9-11, 2008 in Albany New York. There were about 100 people in attendance representing US FWS, Bat Conservation International, OSM, university biologists, and representative State staffs from New York and surrounding States. The purpose of the meeting was to inform the participants on the scientific findings to date and to develop both scientific and management strategies for determining the cause, potential effects and mitigative strategies, and management options. Kim attended to ensure that the OSM Bats and Mines Initiative takes into account the latest research findings regarding this important health risk to bats. Six species of bats have been impacted including the endangered Indiana bat, a species of significant interest in 14 coal mining states. While the disease has not yet been positively verified from coal producing states, where it has been found, mortality rates have exceeded 90% in some hibernacula. The national Indiana bat census will be taking place during early 2009 and will include observations to determine the extent to which the syndrome is impacting other states.

3. **Applied Science High Priorities for FY 2009** The Director of OSM has tasked each region to come up with two high priority applied science topics for FY 2009 by June 13. The following are the regional priorities sent to the Director.

Appalachian Region

Priority 1 – **Blasting Issues:** Develop innovative and improved methods for: (1) assessing and controlling ground vibration and airblast; (2) monitoring blasting characteristics and their effects; (3) assessing structure response and damage caused by blasting; and (4) assessing the impacts of vibration on water wells.

Priority 2 – **Hydrology Issues:** Develop innovative and improved methods for: (1) preventing, minimizing the extent and duration, and restoring stream loss associated with underground mines; (2) predicting outfalls, water quality and quantity associated with mine pools, and the potential for mine blow-outs; (3) predicting, preventing, and treating mine drainage from abandoned or active mines; and (4) assessing water quality parameters.

Mid-Continent Region

Priority 1 – **Soils-based Crop Yield Predictor:** Develop and demonstrate an accurate soils-based predictor of crop yield to be used to determine revegetation success without actually growing crops.

Priority 2 – **Carbon Dioxide Gas Intrusion:** Evaluate potential causes for carbon dioxide gas intrusion into houses and other man made structures built on reclaimed coal mine spoils; identify practical solutions for its prevention; and develop methods for remediating and/or eliminating it.

Western Region

Priority 1 – **Coal Mine Voids and Fires:** Develop reliable techniques and methods for detecting and characterizing coal mine voids and fires.

Priority 2 – **Invasive Species:** Develop innovative and improved methods for identifying, assessing, managing, and preventing invasive species (i.e. cheat grass, etc.) on reclaimed mine lands.

4. **Indiana Bat Coordination Meetings** – PTSB chief, Len Meier met with other OSM, State and Fish and Wildlife Service (FWS) participants to kick off the initial meeting of the Indiana Bat Working Group in Atlanta, Georgia Tuesday, June 10, 2008. This meeting follows up discussions between OSM and FWS management regarding improving consistency and effectiveness of protection and enhancement plans for Indiana Bats on SMCRA mine sites under the 1996 Biological Opinion. Len worked with Lois Uranowski from the OSM Appalachian Region and FWS leadership to kick off the working group meeting by discussing historical perspectives of the Indiana bat issue, regional consistency, expectations for the workgroup and an explanation of the team charter. The work group accepted the draft charter developed by the Management group and began work on the effort. Indications are that the workgroup was well on the way to meeting the goals at the end of the first meeting. OSM members on the Working Group are Ian Dye and Craig Walker. State members are Tim Taylor from Indiana, Richard Wahrer from Kentucky and Bob Fala from West Virginia. State members were chosen by the Interstate Mining Compact Commission. (See attached Charter for the group)
5. **Upper Midwest Reforestation Meeting** – The Upper Midwest Reforestation meeting was held June 26, 2008 in Terre Haute, IN. It included representatives from academia, industry, and the States of IL, IN, and MO. The participants provided valuable input on state specific

considerations related to the use of the Forestry Reclamation Approach in the Upper Midwest. Modifications of the FRA were not recommended. Many of the participants were interested in OSM organizing a field visit to the FRA sites in Ohio as the methods used there seemed to be most applicable to the Upper Midwest. The representatives of Peabody Energy were interested in developing a demonstration project at a mining operation in Indiana and in Illinois so that appropriate research could be conducted to verify the validity of the approach. Planning continues for the meeting in Austin TX on July 22.

6. **Larry Lewis** reported that the **AML AMD work group** is planning for the next MCR AMD workshop. It will be located in Fort Smith AR September 22-23, 2008. The Holiday Inn has been contracted as the meeting place for the event. The program and registration information has just been released. Please register as soon as possible. A dry run of the field trip will take place May 27. The field trip includes 4 sites in Arkansas and 2 in Oklahoma. The work group will meet within the next few days to finalize the field trip logistics. The NTTP program has agreed to provide funding to support the travel of MCR state staff who would not be able to attend without travel support. *Please contact Kim Vories if you need travel assistance.*

ONGOING EFFORTS

7. **Indiana Bat and Coal Mining Forum.** The steering committee is planning for a forum to be held the summer of 2009 in Charleston, WV with a full day field trip and a two day forum.
8. **CCB Placement after new OSM CCB Rule Forum.** The steering committee is planning for a forum to be held during the last half of July 2009 in Morgantown, WV with a full day field trip and two day forum.
9. **Geomorphic Reclamation Forum.** The steering committee is continuing planning for a forum to be held during the last half of April 2009 in Bristol, VA with a full day field trip and two day forum.
10. **Ohio State University CCB Research** – MCR has been working with the OSM CCB regional team at the request of OSU to begin cooperating on an Ohio CCB research initiative to conduct case studies on the use of FGD in mine reclamation. OSU recently requested information on FGD projects on mined land East of the Mississippi.
11. **American Society of Mining and Reclamation (ASMR) Annual Meeting** – MCR staff played important roles at the ASMR Annual Meeting June 14-18, 2008 in Richmond, Virginia. During the event, OSM technology transfer staff will provide an exhibit on current technology transfer initiatives. Kim Vories worked the OSM display with help from other regional offices. Kim participated in the National Executive Council meetings on June 15 and 18. The committee determined that the 2009 meeting will be in Billings MT, 2010 in Harrisburg, PA, and 2011 in Bismarck, ND. Kim presented a paper on Indiana bats and coal mining. Paul Behum presented a paper on passive treatment of AMD.
12. The new OSM **Technology Transfer Website** is a work in progress it can be accessed at www.techtransfer.osmre.gov. or by going to the MCR website at www.mcrc.org and under the Links list clicking on “NT³ OSM Technology Transfer.” *Please visit the applied science page to view final reports for past projects.*
13. **Next Conference Call** will be scheduled for August 20, 2008 at 10 AM CDT.

**MEETING SUMMARY
MCR TECHNOLOGY TRANSFER TEAM
STEERING COMMITTEE CONFERENCE CALL**

DATE: **August 20, 2008**
TIME: 10:00 AM to 10:30 AM CDT

ATTENDEES:

Alabama AML:

Alabama Surface Mining:

Arkansas Mining Division: **Wayne VanBuren, Greg Melton**

Illinois Office of Mines and Minerals:

Illinois AML:

Indiana Division of Reclamation:

Indiana AML:

Iowa Mining and Minerals Bureau:

Kansas Surface Mining Section:

Louisiana Injection and Mining Division:

Mississippi Mining and Reclamation Division:

Missouri Land Reclamation Program:

Oklahoma AML:

Oklahoma Department of Mines:

Texas Mining and Reclamation Division:

OSM MCR: **Kimery Vories**

OSM BFO:

OSM TFO:

OSM IFO:

Significant updates in bold italics

NEW THIS MONTH

1. **OSM CCB Rulemaking** The ANPR was published March 14, 2007. *OSM plans to have the proposed rule published sometime between November 2008 and March 2009.*
2. **The Geomorphic Reclamation Forum is officially scheduled for April 28-30, 2008 in Bristol, VA.**
3. **2009 AML Conference will be September 24-30, 2009 in Rogers, AR**
4. **Applied Science High Priorities for FY 2009**
 - **Reforestation Issues:** Develop innovative and improved methods for: (1) cost effectiveness; (2) forest productivity; and (3) erosion control.
 - **Blasting Issues:** Develop innovative and improved methods for: (1) assessing and controlling ground vibration and airblast; (2) monitoring blasting characteristics and their effects; (3) assessing structure response and damage caused by blasting; and (4) assessing the impacts of vibration on water wells.
 - **Hydrology Issues:** Develop innovative and improved methods for: (1) preventing, minimizing the extent and duration, and restoring stream loss associated with underground mines; (2) predicting outfalls, water quality and quantity associated with mine pools, and the

potential for mine blow-outs; (3) predicting, preventing, and treating mine drainage from abandoned or active mines; and (4) assessing water quality parameters.

- **Soils-based Crop Yield Predictor:** Develop and demonstrate an accurate soils-based predictor of crop yield to be used to determine revegetation success without actually growing crops.
 - **Carbon Dioxide Gas Intrusion:** Evaluate potential causes for carbon dioxide gas intrusion into houses and other man made structures built on reclaimed coal mine spoils; identify practical solutions for its prevention; and develop methods for remediating and/or eliminating it.
 - **Coal Mine Voids and Fires:** Develop reliable techniques and methods for detecting and characterizing coal mine voids and fires.
 - **Invasive Species:** Develop innovative and improved methods for identifying, assessing, managing, and preventing invasive species (i.e. cheat grass, etc.) on reclaimed mine lands.
5. **Indiana Bat Coordination Meetings** – PTSB chief, Len Meier met with other OSM, State and Fish and Wildlife Service (FWS) participants to kick off the initial meeting of the Indiana Bat Working Group in Atlanta, Georgia Tuesday, June 10, 2008. This meeting follows up discussions between OSM and FWS management regarding improving consistency and effectiveness of protection and enhancement plans for Indiana Bats on SMCRA mine sites under the 1996 Biological Opinion. OSM members on the Working Group are Ian Dye and Craig Walker. State members are Tim Taylor from Indiana, Richard Wahrer from Kentucky and Bob Fala from West Virginia. State members were chosen by the Interstate Mining Compact Commission.
6. **Midwest Reforestation Meetings** – The Upper Midwest Reforestation meeting was held June 26, 2008 in Terre Haute, IN. It included representatives from academia, industry, and the States of IL, IN, and MO. The participants provided valuable input on state specific considerations related to the use of the Forestry Reclamation Approach in the Upper Midwest. Modifications of the FRA were not recommended. Many of the participants were interested in OSM organizing a field visit to the FRA sites in Ohio as the methods used there seemed to be most applicable to the Upper Midwest. The representatives of Peabody Energy were interested in developing a demonstration project at a mining operation in Indiana and in Illinois so that appropriate research could be conducted to verify the validity of the approach. *The Lower Midwest Reforestation meeting was held July 22, 2008 in Austin, TX. It included representatives from academia, industry, and the States of TX, MS, AL, and LA. The participants provided valuable input on state specific considerations related to the use of the Forestry Reclamation Approach in the Lower Midwest. Most of these states have been using modified FRA approach to reforestation for many years. Emphasis is placed on use of coarse textured soils that are less vulnerable to compaction, planting a dense vegetative cover to protect from erosion during intense rainfall events, use of commercial pine species for use in commercial forestry, and machine planting for uniform high level of survival and low cost.*
7. **Larry Lewis** reported that the **AML AMD work group** is ready for the next MCR AMD workshop. It will be located in Fort Smith AR September 22-23, 2008. The Holiday Inn has been contracted as the meeting place for the event. The program and registration information has been released. Please register as soon as possible. The field trip includes 4 sites in Arkansas and 2 in Oklahoma.

ONGOING EFFORTS

- 8. Indiana Bat and Coal Mining Forum.** The steering committee is planning for a forum to be held the summer of 2009 in Charleston, WV with a full day field trip and a two day forum. This event may be put off until 2010 while waiting for results from USFWS.
- 9. CCB Placement after new OSM CCB Rule Forum.** The steering committee is planning for a forum to be held during the last half of July 2009 in Morgantown, WV with a full day field trip and two day forum. This event will most likely be moved to 2010 while waiting for the publication of the proposed rule.
- 10. Geomorphic Reclamation Forum.** The steering committee is continuing planning for a forum to be held April 28-30, 2009 in Bristol, VA with a full day field trip and two day forum.
- 11. Ohio State University CCB Research –** MCR has been working with the OSM CCB regional team at the request of OSU to begin cooperating on an Ohio CCB research initiative to conduct case studies on the use of FGD in mine reclamation. OSU recently requested information on FGD projects on mined land East of the Mississippi.
- 12. American Society of Mining and Reclamation (ASMR) Annual Meeting –** WR staff are actively involved in assisting the planning for the meeting June 2009 in Billings Montana.
- 13. The new OSM Technology Transfer Website** is a work in progress it can be accessed at www.techtransfer.osmre.gov. or by going to the MCR website at www.mcrcc.osmre.gov and under the Links list clicking on “NT³ OSM Technology Transfer.” *Please visit the applied science page to view final reports for past projects.*
- 14. Next Conference Call** will be scheduled for October 21, 2008 at 10 AM CST.

**MEETING SUMMARY
MCR TECHNOLOGY TRANSFER TEAM
STEERING COMMITTEE CONFERENCE CALL**

DATE: **October 21, 2008**
TIME: 10:00 AM to 10:30 AM CDT
ATTENDEES:
Alabama AML:
Alabama Surface Mining:
Arkansas Mining Division: **Wayne VanBuren, Greg Melton**
Illinois Office of Mines and Minerals:
Illinois AML: **Larry Lewis**
Indiana Division of Reclamation:
Indiana AML:
Iowa Mining and Minerals Bureau:
Kansas Surface Mining Section: **Tim Wilson**
Louisiana Injection and Mining Division:
Mississippi Mining and Reclamation Division:
Missouri Land Reclamation Program:
Oklahoma AML:
Oklahoma Department of Mines:
Texas Mining and Reclamation Division:
OSM MCR: **Kimery Vories, Bill Joseph**
OSM BFO:
OSM TFO:
OSM IFO:

Significant updates in bold italics

The team discussed the selection of a State technical representative for the **Applied Science Review and Selection Process** to represent the Mid-Continent States. The results were that **Marlene Spence** from the Kansas program was unanimously approved to be the MCR state representative.

Larry Lewis and the team discussed the results of the **AMD workshop** in Arkansas and made suggestions for improvements for the next workshop in Indiana. We need to organize the event to facilitate discussion more. We need to organize the field trip around the use of a bus or vans to avoid an excessively long caravan of cars. Overall the team agrees that the AMD workshops are great benefit to the states and should be continued.

ONGOING EFFORTS

1. **OSM CCB Rulemaking** The ANPR was published March 14, 2007. *OSM plans to have the proposed rule published sometime between November 2008 and March 2009.*
2. **The Geomorphic Reclamation Forum is officially scheduled for April 28-30, 2008 in Bristol, VA. On-line registration is now available.**
3. **2009 AML Conference will be September 24-30, 2009 in Rogers, AR**
4. **Applied Science Solicitation is now available on the NTTT Website for FY 2009**

5. **Indiana Bat Coordination Meetings** –This effort concerns improving consistency and effectiveness of protection and enhancement plans for Indiana Bats on SMCRA mine sites under the 1996 Biological Opinion. OSM members on the Working Group are Ian Dye and Craig Walker. State members are Tim Taylor from Indiana, Richard Wahrer from Kentucky and Bob Fala from West Virginia. The group plans to have a final product by the end of 2008.
6. **Indiana Bat and Coal Mining Forum.** The steering committee is planning for a forum to be held the summer of 2010 in Charleston, WV with a full day field trip and a two day forum.
7. **CCB Placement after new OSM CCB Rule Forum.** The steering committee is planning for a forum to be held during the last half of July 2010 in Morgantown, WV with a full day field trip and two day forum.
8. **Geomorphic Reclamation Forum.** The steering committee is continuing planning for a forum to be held April 28-30, 2009 in Bristol, VA with a full day field trip and two day forum. On line registration is now available at <ps://www.dce.siu.edu/index.php/Conferences/Geomorphic-Reclamation-and-Natural-Stream-Design-at-Coal-Mines>
9. **Ohio State University CCB Research** – MCR has been working with the OSM CCB regional team at the request of OSU to begin cooperating on an Ohio CCB research initiative to conduct case studies on the use of FGD in mine reclamation. OSM is currently drafting and MOU for this effort.
10. **American Society of Mining and Reclamation (ASMR) Annual Meeting** – WR staff are actively involved in assisting the planning for the meeting June 2009 in Billings Montana.
11. The new OSM **Technology Transfer Website** is a work in progress it can be accessed at www.techtransfer.osmre.gov. or by going to the MCR website at www.mcrcc.osmre.gov and under the Links list clicking on “NT³ OSM Technology Transfer.” *Please visit the applied science page to view final reports for past projects.*
12. **Next Conference Call** will be scheduled for December 16, 2008 at 10 AM CST.

**MEETING SUMMARY
MCR TECHNOLOGY TRANSFER TEAM
STEERING COMMITTEE CONFERENCE CALL**

DATE: **December 16, 2008**
TIME: 10:00 AM to 10:30 AM CST

ATTENDEES:

Alabama AML:

Alabama Surface Mining: **Randall Johnson**

Arkansas Mining Division: **Greg Melton**

Illinois Office of Mines and Minerals:

Illinois AML:

Indiana Division of Reclamation: **John Richardson**

Indiana AML: **Marvin Ellis**

Iowa Mining and Minerals Bureau:

Kansas Surface Mining Section: **Tim Wilson**

Louisiana Injection and Mining Division:

Mississippi Mining and Reclamation Division: **Stan Thieling, Lonnie Barrier**

Missouri Land Reclamation Program:

Oklahoma AML:

Oklahoma Department of Mines: **Tekleab Tsegay**

Texas Mining and Reclamation Division:

OSM MCR: **Kimery Vories**

OSM BFO:

OSM TFO:

OSM IFO:

Significant updates in bold italics

Tim Wilson reported that the NAAML P will be sending out a call for papers for the upcoming annual meeting in Rogers AR September 28-30, 2009. He and Wayne Van Buren are working on soliciting papers and presenters. They will have details on the website after the first of the year. They would appreciate any suggestions or assistance.

Larry Lewis submitted a report for the **AMD Workshop for 2010 in Indiana.**

Based on preliminary discussions between Larry Lewis, Mark Stacy and Steve Herbert, the workshop would: (1) The dates for this is to be determined but will for sure be in the Spring of 2010; (2) The workshop should encourage interaction among members and include more “trouble-shooting” or group participation/discussion, similar to what we did in the Illinois workshop in 2007; (3) The number of presentations should be limited so sufficient time can be allocated to the presentations and for Q & A versus having several different presentations; (4) We need to combine people better when transporting them from site to site for the field trip.

Larry will schedule a phone conference with Mark/Steve & others at the end of January to move this forward. Please call Larry at (217) 524-6513 if you want to be involved in the planning of this event.

ONGOING EFFORTS

1. **OSM CCB Rulemaking** *OMB has returned the proposed rule to OSM with the instructions that it must be resubmitted for publication during the next administration.*
2. **The Geomorphic Reclamation Forum is officially scheduled for April 28-30, 2008 in Bristol, VA. On-line registration is now available.**
3. **2009 AML Conference will be September 24-30, 2009 in Rogers, AR**
4. **Applied Science Solicitation is now available on the NTTT Website for FY 2009**
5. **Indiana Bat Coordination Meetings** –This effort concerns improving consistency and effectiveness of protection and enhancement plans for Indiana Bats on SMCRA mine sites under the 1996 Biological Opinion. OSM members on the Working Group are Ian Dye and Craig Walker. State members are Tim Taylor from Indiana, Richard Wahrer from Kentucky and Bob Fala from West Virginia. *The group was provided a final plan for committee review during December. They plan to go public early in 2009.*
5. **Indiana Bat and Coal Mining Forum.** The steering committee is planning for a forum to be held the summer of 2010 in Charleston, WV with a full day field trip and a two day forum.
6. **CCB Placement after new OSM CCB Rule Forum.** The steering committee is planning for a forum to be held during the last half of July 2010 in Morgantown, WV with a full day field trip and two day forum.
7. **Geomorphic Reclamation Forum.** The steering committee is continuing planning for a forum to be held April 28-30, 2009 in Bristol, VA with a full day field trip and two day forum. On line registration is now available at [ps://www.dce.siu.edu/index.php/Conferences/Geomorphic-Reclamation-and-Natural-Stream-Design-at-Coal-Mines](http://www.dce.siu.edu/index.php/Conferences/Geomorphic-Reclamation-and-Natural-Stream-Design-at-Coal-Mines)
8. **Ohio State University CCB Research** – MCR has been working with the OSM CCB regional team at the request of OSU to begin cooperating on an Ohio CCB research initiative to conduct case studies on the use of FGD in mine reclamation. OSM is currently drafting and MOU for this effort.
9. **American Society of Mining and Reclamation (ASMR) Annual Meeting** – WR staff are actively involved in assisting the planning for the meeting June 2009 in Billings Montana.
10. The new OSM **Technology Transfer Website** is a work in progress and can be accessed at www.techtransfer.osmre.gov. or by going to the MCR website at www.mcrcc.osmre.gov and under the Links list clicking on “NT³ OSM Technology Transfer.” *Please visit the applied science page to view final reports for past projects.*
11. **Next Conference Call** will be scheduled for February 4, 2009 at 10 AM CST.