

## Message From the President *Steve Hohmann, Kentucky*

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### UPCOMING MEETINGS

#### NAAMLPLP Annual Conference

September 26-29, 2004  
Flagstaff, Arizona

#### IMCC Mid-Year Meeting

November 16-17, 2004  
Oklahoma City, Oklahoma

#### NAAMLPLP Winter Business Meeting

March 3-5, 2005  
Anchorage, Alaska

### MISSION STATEMENT

1. To provide a forum to address current issues, discuss common problems and share new technologies regarding abandoned mine land reclamation;
2. To foster positive and productive relationships between the states and tribes represented by the Association and the federal government;
3. To serve as an effective, unified voice when presenting the states'/tribes' common viewpoints; and
4. To coordinate, cooperate and communicate with the Interstate Compact Commission, Western Interstate Energy Board and all other organizations dedicated to wise use and restoration of our natural resources.

Greetings to all NAAMLPLP members and newsletter readers. We are well into 2004 and much is happening in AML reclamation.

I am pleased to report that Congress has held hearings in the House and Senate on pending AML reauthorization legislation. On March 11 the Senate Committee on Energy and Natural Resources conducted a legislative hearing. At that time there were two AML bills under review, S.2086 - the Thomas bill and S.2049 - the Specter bill. I presented a statement to the Committee on behalf of the Association and IMCC. Our colleague from Wyoming, Evan Green, also presented a statement on behalf of his state. Other entities represented on that panel were the Office of Surface Mining (OSM), Trout Unlimited, and the United Mine Workers. Since the hearing several other AML proposals have been introduced in this committee.

On March 30, the House Subcommittee on Energy and Mineral Resources held a hearing focusing on H.R.3796, the Cubin/Rahall bill, and H.R.3778, the Petersen bill. Again, I presented a statement on behalf of the Association and IMCC. Additionally, Mike Sharp, Scott Roberts, and John Masterson testified on behalf of Oklahoma, Pennsylvania, and Wyoming, respectively. Others on that panel were OSM, the United Mine Workers, and the Bituminous Coal Operators Association.

The NAAMLPLP and state testimonies were well received across the board, and it appears that both committees will proceed toward markup of an AML bill. We should all be encouraged by these events, but by no means can we become complacent. The Association and each

state/tribe should continue to press for reauthorization whenever possible because budget concerns remain a major obstacle for any AML legislation. However, I am hopeful and optimistic that one of the reauthorization measures will gain dominance, and ultimately the support, to become law.

Since the close of the Louisville conference last October, AML reauthorization has commanded all our attention, whether it is reviewing and commenting on draft proposals, participating in conference calls, or joining in the group discussion at the recent Winter Meeting. I am confident that the Association's efforts to further the AML Program are a major reason that legislation has found its way into Congress. We should all be proud of the coordinated effort we have mounted and sustained.

Next, I thank Mike Garner, John Carey, and Ed Larrimore for hosting the recent Winter Meeting in Annapolis, MD. The atmosphere, facility, and hospitality combined to make the meeting a productive, yet relaxing, event.

Finally, the responsibility to publish this newsletter will transfer to Kentucky with the Fall 2004 issue. Oklahoma has published the newsletter for the past five years and has set very high standards for the publication. Many thanks to all the Oklahoma staff, especially to Charlotte Stieber and Dianne Ireton, for the time and labor they have invested in the newsletter on behalf of the Association.

I will keep everyone posted via email on any developments concerning AML reauthorization legislation. I look forward to seeing you at the 2004 NAAMLPLP Annual Conference.

## Coal Outcrop Fire Suppression in the Badlands

The Abandoned Mine Lands Division of the North Dakota Public Service Commission conducted its first coal outcrop fire suppression project this past fall. The objective was to extinguish coal seam outcrop fires burning on U.S. Forest Service lands in the North Dakota Badlands. Coal outcrop fire suppression normally falls outside of AML jurisdiction. Authority to conduct this project was obtained as a result of a cooperative agreement between the U.S. Forest Service and the U.S. Department of the Interior, Office of Surface Mining. Funding for the project was provided by a \$37,000 grant from the OSM.

An estimated 30 coal seam outcrop fires were ignited as a result of a 1999 grass fire that burned about 70,000 acres of grasslands in North Dakota and Montana. One family lost their ranch and home to the fire. Most of the resultant coal seam fires were located on the Little Missouri National Grasslands in North Dakota, near the Montana border.

An initial site investigation of some of the 30 coal outcrop fire sites in September 2003 indicated the individual burning areas to vary in size from about a tenth of an acre up to one acre or more in size. The U.S. Forest Service has been monitoring these sites for several years. A primary concern continues to be the possibility of additional grass fires igniting as a result of the burning coal seams. At least four subsequent grass fires have already been attributed to the burning coal seams.

The project began November 14 and was completed by December 10, 2003. Suppression activities were conducted on eight of the highest priority sites. One of the sites was considered too big for complete excavation, based on available funding. Intercept trenches were excavated through the coal seam and around all burning portions of

this site and backfilled with inert, noncombustible material. In time, the burning coal will come into contact with the intercept trenches and extinguish due to removal of the fuel supply. The remaining seven sites were reclaimed by complete excavation of all burning materials, which were mixed with clay and enclosed in a burial trench. Equipment required for the work included an excavator and a front end loader.

Overburden thickness varied from 4-12 feet, and the burning coal seams averaged about 7 feet thick. The typical fracturing and slumping process of overburden associated with burning coal seams allows combustion gasses to escape and a new supply of oxygen to feed the burning underground coal, allowing the fire to grow. Fumaroles venting steam and smoke were common at the sites.

A large percentage of work time at all of the sites was dedicated to chasing down and eliminating "runners." These "runners," or small burn areas, were typically 3-6 feet in diameter and shot out in front of the burn face, often 50-75 feet, following fractures in the coal seam.

Topsoil was stripped, stockpiled, and respread at the sites. Project areas were backfilled and graded to approximate original contour, then finish graded, back-dragged, harrowed, and seeded with native plant species.

Several new coal outcrop fire sites have been discovered recently and it is expected that additional new sites will be discovered over the next couple of years. North Dakota hopes to receive additional grant money in 2004 to continue coal fire suppression work.

**Bruce Beechie**  
ND Public Service Commission, AML Division



*Fractured and slumping overburden was typical at the sites.*



*The plume of steam and smoke was visible for miles.*

## Abandoned Mine Land Enhancement in Virginia

In 1999, OSM issued a new definition of government-financed construction exemptions dealing with abandoned mine land projects. The rule has become known as Abandoned Mine Land (AML) enhancement and can provide programs with opportunities to increase the amount of reclamation accomplished with their finite resources.

Through AML enhancement, contractors are allowed to remove incidental coal from the project site and use proceeds from the coal sale to offset the cost of reclamation. Coal removal can occur as a government-financed construction exemption. Title IV programs are required to consult with respective Title V programs to establish certain findings, especially that there is little likelihood the project site would be mined as a stand-alone Title V permit. The consultation also sets limits as to what coal removal can be considered an engineering necessity or incidental to the project. In promulgating the enhancement rule, OSM felt that highwalls, acid mine drainage, and gob piles would be features that could particularly benefit from enhancement.

The Virginia Department of Mines, Minerals and Energy (DMME) first used the new rule to accomplish the FY 2000 Buchanan County Park Highwall Elimination Project. This project eliminated 3,200 feet of Priority 2 highwall adjacent to Buchanan County's recreation park. DMME reclaimed the site to compliment the existing recreation facilities at the park. The reclaimed area is now used as a practice soccer field, and the county plans to build a horse rink there. DMME's contribution to the project budget was \$100,000, and the agency realized an estimated savings of \$220,000.

DMME's current enhancement projects involve the reclamation of Priority 2 and Priority 3 gob piles. These features are often barren and eroding and contribute to clogged streams and adversely impact water quality. DMME Title IV and Title V programs make the required consultations and set limits on coal removal.

DMME's first gob pile removal project through AML enhancement accomplished the complete removal of the



Virginia's first AML enhancement project.

gob pile and allowed the reclamation of a two-acre Priority 2 dangerous pile and embankment and three acres of Priority 3 gob. DMME estimated the value of this reclamation at \$75,000. DMME's funding to the project was estimated at less than \$4,000. Currently, DMME contractors are working on two AML enhancement gob pile removal projects, and additional projects are pending.

OSM has clarified its enhancement rule as to what constitutes government financing. With the earliest projects, DMME showed its administrative expense as government financing. With the rule now clarified, DMME actually contributes to the construction budget through planting trees on the reclaimed sites.

DMME supports the inclusion of the AML enhancement opportunity in pending legislation to reauthorize fee collection. Through implementing the enhancement rule, DMME has been able to accomplish reclamation of features that otherwise would probably never be reclaimed.

For more information on Virginia's implementation of the AML enhancement rule, contact Roger Williams at 276-523-8208 (roger.williams@dmme.virginia.gov) or Richard Davis at 276-523-8216 (richard.davis@dmme.virginia.gov).

**Richard Davis**  
VA Division of Mine Land Reclamation

## West Virginia's Taylor Creek Impoundment



*Before reclamation - This aerial view looking west clearly shows the pile's steep slopes with eroding refuse leading down to the dangerous impoundment.*

Located in central West Virginia along Taylor Creek, this 90-acre Clay County site was originally part of a massive abandoned coal preparation and waste disposal facility that ceased operation in the 1950s.

The site consisted of two large refuse areas totaling 72 acres as well as an 18-acre impoundment. About 10 acres of refuse was burning, generating irritating, noxious fumes for nearby residents. Most of the refuse pile had extremely steep embankments. In several places, material routinely slipped onto a county roadway, sometimes blocking access for local traffic. Taylor Creek also eroded the pile's toe causing large quantities of material to repeatedly slip into the stream. The potential for a slide of sufficient size to completely block Taylor Creek greatly concerned nearby residents and mine restoration officials.

Even more ominous, should the original spillway have become completely blocked with enough slipping material, water could easily have become rerouted, flowing over the refuse embankment itself. Had such an event occurred, residents living downstream most likely would

have suffered catastrophic flooding.

Taylor Creek Impoundment's large, unreclaimed refuse piles also served as a dangerous attraction to local ATV users; large numbers of ATV trails crisscrossed the steeply-sloped piles. Riders often traversed along the embankment's

unstable edges. Had these sections broken loose under the weight of the rider and vehicle, such individuals could have easily been seriously injured or even killed.

Another serious problem surrounded the site's dangerous 18-acre, water-filled impoundment. With an average depth of 20 feet and near vertical slopes along its edge, this structure posed a serious health and safety threat to an unsuspecting passerby or swimmer. Anyone unfortunate enough to fall or jump into the impoundment would find it nearly impossible to escape due to the looseness and steepness of the refuse material along its edge.

During the summer of 1996 the West Virginia Abandoned Mine Land and Reclamation office contracted with the B. F. Foster Co. to begin restoration. The plan involved

eliminating the impoundment, extinguishing the burning refuse along with regrading and covering the remaining areas of toxic coal refuse with soil, restoring the main stream channel, and constructing drainage control structures.

Upon completion, the contractor had moved 1.8 million cubic yards of refuse, extinguished 10 acres of burning material, drained and treated 1.5 million gallons of acidic mine water, reestablished nearly 4,000 linear feet of Taylor Creek, constructed three-fourths mile of various sized drainage control channel, and soil covered and revegetated the entire site. Construction activities concluded during the spring of 1998 with a final project cost of \$4.2 million.

In addition to successfully restoring much of this site's pre-mined aesthetic values and appeal, this project effectively addressed and removed several health and safety-related problems and eliminated the potential for serious future flooding.

**Joe Zambelli**  
West Virginia Office of Abandoned  
Mine Lands and Reclamation



*After reclamation - Beautiful post-reclamation aerial view of the project, looking westward toward the town of Clay. Taylor Creek flows along the reclaimed pile's toe, hidden in the shadows.*

## Impact of GPS Technology on Reclamation in Texas

The Texas AML Program has reclaimed 11 prelaw uranium mines since 1988, encompassing 1,121 acres of abandoned pits and spoil and 30,370 linear feet of highwall. Our GPS (Global Positioning System) equipment and software have allowed us to complete more work in less time, with fewer people. The following is a brief discussion of the GPS equipment we use and its benefits.

Until 4 years ago we used traditional surveying equipment, a Wild Heerbrugg total station, and employed at least two people to accomplish all of the surveying. We purchased and began using a Leica Geosystems SR530 RTK DGPS system in 2000 and have been able to complete all of our survey work with one person.

The use of GPS equipment has had a greater impact on collecting and managing environmental data (e.g., soils and radioactivity). Before GPS we would use topographic maps, aerial photos, and a compass to approximate our location. Consequently, data locations were not accurate and fewer observations were taken unless there were additional people to survey locations.

We noticed significant improvements in our data-collecting capabilities when we borrowed a hand-held GPS unit (Trimble GeoExplorer II) for site assessments and no longer needed additional people to survey. The GeoExplorer II was quicker and more accurate than compass bearings and paced distances. It took approximately 60 seconds to collect enough GPS positions to estimate our location. The GPS unit also served as a data collector, another plus. The GeoExplorer II's drawbacks were its text display and post-processing for differential corrections.

We bought a Trimble ProXRS backpack GPS unit in 1999. The advantages of the ProXRS versus the GeoExplorer II are approximately 5 seconds to collect positions for each point location (90 percent reduction in time), more memory, graphical location display, background map display, GIS interface, and horizontal accuracy of approximately 3 feet instead of 15 feet (differential correction in the field, using a commercial satellite service).

Many uranium sites are difficult to characterize because of variability, especially where spoil has been regraded and top-dressed with soil. In those cases, the presence and extent of radioactive materials are masked. Soil depth inconsistencies further complicate efforts to quantify salvageable soil. The ProXRS allows us to quickly record sufficient field data and track them through the time we are salvaging soil or removing radioactive materials. We can display data points, contours, or any other feature of interest in the field, thereby allowing us to monitor reclamation work at various levels of detail, within the unit's accuracy constraints. We can assess radioactive hot spots in the field and estimate material volumes "on the fly" by obtaining areas with the GPS unit. It is also used to collect bathymetric data by linking a depth finder to the data collector.



*Bill Reimer, of the Texas AML staff, demonstrating use of ProXRS and scintillometer to conduct radiation surveys at the Brysch abandoned uranium site in south Texas. The TSC1 data collector, running Asset Surveyor software - detailed keypad allows easy data entry (both numbers and text) and background map shows selected features (fences, contour lines, etc.) and locations where data have been collected.*

The ProXRS GPS has become one of the best and most versatile tools we have for assessing and managing environmental information for reclamation and paid for itself (\$11,000) in less than a year by the time saved.

**Jon Brandt and Bill Reimer**  
**Railroad Commission of Texas**

### STAN BARNARD MEMORIAL AWARD

Each voting state and tribe may make one nomination. The nominations are to be submitted to Association President Steve Hohmann, Kentucky Division of Abandoned Mine Lands, by the June 15 deadline. The award will be presented to the winner at the 2004 NAAML Annual Conference in Flagstaff, AZ.

## Maryland Hosts the 2004 Winter Business Meeting

The National Association of Abandoned Mine Land Programs held its business meeting in Annapolis, Maryland, March 8-9, 2004. The Maryland Contingent would like to thank everyone who attended for making it a success. The timing was perfect – the committee and business meetings provided a great forum for candid discussions to prepare



Jeff Jarrett, OSM director, (center) and Danny Lytton, OSM chief of Reclamation Support (second from right) in discussion with (from left) Roger Williams, VA AML; Rod Fletcher, PA AML; and Mike Sharp, OK AML.

members for the Senate hearings later that week and the pending AML Fee Reauthorization.

The meeting began with Jeff Jarrett, director of the Office of Surface Mining (OSM), addressing the Association members on AML Fee Reauthorization. Director Jarrett provided insight into the Administration's Reauthorization Bill and discussed other relevant topics such as the role of OSM in AML Fee Reauthorization, Mineral Leasing Royalties, and the existing and proposed grant allocation formulas. The discussion ended with a question and answer session.

Committee meetings were held throughout the day on Monday. The

committees met separately, then presented an update to the entire membership at Tuesday's business meeting. The Association has committees on Remining/AMD, AMLIS, Legislative Response, Training, Finance, AML Fee Reauthorization, Public Relations, and Membership. The AML Fee Reauthorization Committee meeting

was interrupted so the committee members could attend the United States Naval Academy tour. After the tour, the Reauthorization Committee meeting resumed and continued late into the evening. In a good, frank discussion, each state presented its position on AML Fee Reauthorization so that common ground could be found

and used to formulate a NAAML P position that could be supported by all members.

The Naval Academy Tour provided insight into the life of Navy midshipmen and the history of the Academy. The beautiful campus borders the Chesapeake Bay on one side and downtown Annapolis on the other. Although the weather did not

cooperate, the tour was enjoyable, and the attendees had an opportunity to visit with two midshipmen, getting a first hand account of life at the Academy.

The Tuesday business session was devoted mainly to AML Fee Reauthorization. Danny Lytton of OSM attended the meeting to further explain OSM's positions on the various issues discussed. Bruce Fye of OSM explained the importance of the GPR Data Collection System and how this system, when combined with the data in AMLIS, will better tell the story of the AML Program, particularly in regards to its accomplishments and future needs. Ray Tsingine of the Navajo AML gave a presentation on the NAAML P Annual Conference to be hosted by the Navajo in Flagstaff, Arizona, September 26-29. Marty Parsons of Alaska AML provided information on the 2005 Winter Business Meeting in Anchorage, Alaska.

**Mike Garner**  
**Maryland AML Division**



Members on Naval Academy Tour in front of Bancroft Hall, dormitory for the midshipmen.

## Navajo Nation Hosting Annual Conference

The Navajo AML Program will host the 26<sup>th</sup> Annual National Association of Abandoned Mine Land Programs Conference September 26-29, 2004, at the Little America Hotel Resort, in Flagstaff, Arizona.

We extend an invitation to states, tribes, federal agencies, and other entities to share their knowledge and wealth of information to seek solutions for restoring the environment and in "Restoring Lands to Enhance Beauty, Harmony and the Quality of Life." Technical sessions and workshops will highlight reclamation techniques, public facility projects, and other various environmental topics. The Call for Papers guidelines are on the website at [www.navajoaml.osmre.gov](http://www.navajoaml.osmre.gov). Pre-conference registration forms can be downloaded from the website also.

The Navajo Nation (Dine' Bekeyah) is one of the largest recognized Native American Tribes and reservations in the United States. The reservation extends within the states of Utah, Arizona, and New Mexico, covering more than 27,000 square miles of unparalleled beauty with many spectacular, breathtaking landscapes and views.

Navajo AML has an unforgettable conference agenda in store for you and added attractions. The 26<sup>th</sup> Annual Conference will kick off with a three-day "Discover Navajoland Pre-Conference Tour" scheduled for September 24-26. You will travel by chartered bus to renowned Navajo National Monuments such as Antelope Canyon, Navajo Monument, Monument Valley, Canyon de Chelly - all featured in various Hollywood films, commercials, and magazine publications around the world. These are among some of the spectacular sites we will tour. We will also explore neighboring AML sites, public

facility projects, and one of the largest open pit coal mines on the Navajo Nation, where you will capture a glimpse of Arizona's two most preserved Anasazi ruins. The magnificent three-day tour, limited to the first 45 people at \$250 per person and \$125 per additional spouse or guest, will include fees for lodging, park entrance fees, and transportation.

Registration for the conference, NAAML Association meeting, and exhibit setup will begin on Sunday, September 26, all day and ending with a social evening with our guests. Conference sessions will begin on Monday, September 27, through Wednesday, September 29, with technical sessions and workshops relating to environmental issues, reclamation, and new technology for "Restoring Lands to Enhance Beauty, Harmony

and the Quality of Life." On Monday evening a cookout will be held in the mountains with entertainment by local Native traditional dancers. A field trip

is scheduled for each day of the conference to tour AML reclamation sites and public facility projects in Monument Valley, Utah; Coalmine Canyon, Arizona; and Kytotsmovi, Arizona (Hopi Reservation). Additional tours are also scheduled within the Flagstaff vicinity for spouses and guests. Guest tours will include lunch, applicable



*Monument Valley, UT - Sandstone masterpieces, towering 400 to 1,000 feet, are interspersed with AML sites.*



*Canyon de Chelly, AZ - Home to Indian culture dating from 350 A.D to 1300 A.D., the hundreds of Anasazi ruins, as well as modern Navajo homes and farms, form a spectacular backdrop to AML sites.*

entrance fees, and transportation. The Guest Tour agenda and costs are available on the website. The NAAML Conference Registration is \$175 per person and spouse/guest at \$95 before August 13. Thereafter, it will be \$200 per person and spouse/guest at \$110.

We look forward to seeing you in September 2004. Call the Little America Hotel Resort at 1-800-352-4386 today to make your hotel reservation. A special conference-lodging rate of \$67 plus tax is available. Bring your family for an authentic southwest experience and discover the Navajo Nation and its surrounding beauty. For more information, call Harlan Charley, Public Information Officer at (928) 871-6982 or email: [hcharley@frontiernet.net](mailto:hcharley@frontiernet.net).

**Harlan Charley,**  
**Navajo AML/UMTRA Department**

## NEWSLETTER ARTICLES

Articles are to be between 400 and 500 words and will be subject to editing.

Submit no more than two photos. Photos will not be returned unless requested. Write the name of the article, the author, and the caption on the back of the photo or as part of an email. Photographs can be submitted electronically using the following guidelines – TIF (preferred) or JPG formats, 300 dpi, and original photo size. Do not embed photos in an article; email them as separate files.

Articles can be emailed or a hard copy submitted with a disk. Please include the following in email or on hard copy and disk label – name of article, author's name, telephone number, photo captions.

**Deadline for the Fall edition is October 15, 2004.**

Email articles to [steve.hohmann@ky.gov](mailto:steve.hohmann@ky.gov) or mail articles to:

Steve Hohmann, Director  
Division of Abandoned Mine Lands  
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2521 Lawrenceburg Road  
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For more information, call Steve Hohmann at 502-564-2141.