



NEWSLETTER

Spring 2009

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INSIDE

President's Message	
NAAML P 2009 Conference	2
Winter Meeting	3
Mining Ghost Town, NM	3
Spring Meadow State Park	5
Earth Day in Montana	6
Pennsylvania Partners	7
Huff Run Watershed, OH	7
Military Training Center, KY	9
Those Who Aren't Wary	10
One Less Hazard	10
It's A Dirty Job	11

UPCOMING MEETINGS

2009 Annual Conference
Rogers, AR Sept. 27 - 30

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.

It is a mystery to me why any extremely successful Abandoned Mine Land program would be considered for "de-funding" during hard economic times. AML programs are effective, efficient and public minded. If the leaders of this country are looking for green jobs, on the ground success and positive economic impact on local citizens, the AML programs should serve as models of how to proceed. Every state and tribal AML program is mature and capable of expanding very quickly to funnel additional funds to "shovel-ready" projects throughout the country. Hundreds of millions of dollars of high priority work remain unfunded throughout all state and tribal program areas. Nothing succeeds like success, and as an association, we need to broadcast our stories. Nationwide AML programs have been extremely successful, but the task given to us by congress is ongoing, not nearly complete.

I am not certain how Mike and Charlotte got their order in for such great weather while we were all in Oklahoma City, but that was just one more factor that made our recent mid-winter business meeting successful. I want to express my appreciation to them, and to all the Oklahoma AML staff, for putting together a tremendous meeting. I was personally amazed by the renovations and development in the Bricktown area, humbled by the inspiring nature of the Oklahoma City National Memorial, and fully enjoyed the wonderful Crystal Bridge. Thanks Mike for all you did.

We were all pleased to hear about the reinstating of funds for the emergency reclamation program for the balance of the FY-09 budget year. The news that accompanied the release of the 2010 federal budget outline was not welcome. I believe the association has taken some very effective and positive steps toward addressing this serious issue. After so much effort went into the hard fought 2006 amendments, we need to continue these efforts to guard against the reopening of SMCRA.

Last year, I had the opportunity to travel through and around the Rogers, Arkansas area as a part of our bi-annual acid mine drainage workshop. I am confident that this location will provide a perfect backdrop to our upcoming annual conference on September 27 - 30, 2009. I encourage everyone to begin planning on attending this conference and participating in as many of the planned activities as possible. As an avid canoeist and kayaker, I have spent many days and nights on the beautiful Ozark streams; I am particularly looking forward to floating (not canoeing) on the Buffalo River, one of the only streams in the region I have not enjoyed. The conference organizing committee consists of staff from Arkansas, Missouri, Kansas, and Oklahoma. This cast of professionals will surely put together a conference we will never forget.

I have been sending out a number of notices to all NAAML P members recently, and this is destined to continue. I want to thank those who volunteered for the GPRA task force to work with OSM on developing meaningful and consistent measures that truly represent the AML program. An effort is also underway to organize an association group to work with OSM and the IMCC to put together a training session for revising state and tribal AML plans. Expect to hear more about this in the near future. Most of us are gearing up for the beginning of our construction seasons. I realize this is a very busy time of year for everyone, so I truly appreciate the volunteers for the special duties performed on behalf of our association.

Finally, please remember to broadcast our *Stay Out Stay Alive* campaign. The resolution adopted by this association at the business meeting does more than affirm our commitment to this important issue. It heightens our own awareness of how casual some people feel about these potentially deadly environments, and how diligent we all need to be in these efforts.

Steve Herbert, President



NAAML 2009 Annual Conference

The conference, hosted by Arkansas, Kansas, Missouri, and Oklahoma, will be at the Embassy Suites Northwest Arkansas Hotel, Spa and Convention Center in Rogers, Arkansas, September 27 - 30. The conference logo reflects the theme "Putting the Pieces Together for a Better Tomorrow," with the puzzle pieces labeled *Partnerships*, *Funding*, *Environment*, and *Reclamation*. All are vital components in AML reclamation.

Rogers is a modern metropolitan city that retains its small hometown charm. Nestled in the Ozark Mountains, northwest Arkansas has become a premier vacation destination. The region is rich with rustic charm, scenic lakes, rivers, and highways. Outdoor activities abound - fishing, boating, floating, canoeing, biking, hiking, hunting and horseback riding. History is around every corner - Civil War military parks, museums, historic homes, War Eagle Mill, and the 19th-century Victorian town of Eureka Springs.

The pre-conference tour will include a float trip on the Buffalo National River, America's first National Scenic River, with stops at AML sites along the way, a tour of an underground snow white silica sand mine, and a visit to world-class Blanchard Springs Caverns. Plans for Sunday's activities and reception, Monday's banquet, and Tuesday's social at Beaver Lake are being finalized. Technical papers and presentations are still needed for the Monday and Wednesday sessions. Tuesday's field trips will be taken to the AML regions of Arkansas, Oklahoma, and Kansas/Missouri. Exhibitors and sponsors are still being sought. On Wednesday, the Association business meeting will conclude the conference.

For continuing conference information access the web site at www.onenet.net/~naamlp/2009_conf_home.htm.

Charlotte Stieber
OKAML Program

The Buffalo National River



Eureka Springs, Arkansas



2009 NAAMLPL Winter Meeting

The topics of discussion at the meeting included AML funding, AMLIS, AML Final Rules for the 2006 Amendments to SMCRA, and ARRA Economic Stimulus Funding. Danny Lytton, chief of OSM Division of Reclamation Support, gave updates on the FY 2009 and FY 2010 budgets, the Emergency Program status, SMCRA Amendment Training, and Directive Changes to FAM and AML-1. Greg Conrad, executive director of the Interstate Mining Compact Commission, presented reports on the AML Final Rules, transition team briefing, the ARRA Economic Stimulus Funding, and the Administration's proposed elimination of AML funding to certified states/tribes. Nancy Dean - Bureau of Land Management, Tom Buchta - National Forest Service, and Hal Pranger - National Park Service discussed their AML programs and opportunities for partnerships with state/tribal AML programs on projects using Stimulus Funding. Tara Shiffeltt, OSM, presented the new E-AMLIS, which is replacing the existing AMLIS. The Public Relations Committee reported that they will work with OSM on making changes to the AML Awards Program. The Association passed a *Stay Out and Stay Alive* resolution urging extreme caution to those exploring abandoned mines and historic mining areas. The program managers agreed to write letters to U.S. Senators and U.S. Representatives concerning the President's FY 2010 budget and the serious impacts it would have on AML states and tribes.

After hours, participants explored downtown Oklahoma City, visiting the Oklahoma City National Memorial & Museum, the Myriad Botanical Gardens and Crystal Bridge Tropical Conservatory, and the Oklahoma City Museum of Art. Bricktown, located next to the hotel, is the fastest growing entertainment district in the Southwest and was a big hit with the meeting attendees. Everyone enjoyed wandering the picturesque setting with its canal, gardens, and public art; eating at restaurants encompassing a range of culinary experiences, from gourmet at The Mantel to down home at Toby Keith's I Love This Bar & Grill; and shopping at the Bass Pro Shops Outdoor World. Several attended the Oklahoma City Thunder vs. Chicago Bulls NBA basketball game.

Hosted by the Oklahoma AML Program, the Association's Winter Meeting was attended by 42 people and held at the Courtyard Marriott in Oklahoma City, March 17 & 18.

Charlotte Stieber
OK AML Program



NAAMLPL President Steve Herbert leads discussion at Winter Meeting.



The Field of Empty Chairs, east Gate of Time, & Reflecting Pool at the Oklahoma City National Memorial. Photo by Dustin M. Ramsey.

Community Planning at the Mining Ghost Town of Madrid, New Mexico

The former coal mining camp of Madrid, located midway between Santa Fe and Albuquerque on the Scenic Turquoise Trail National Scenic Byway, has evolved into a bustling mountain community of some 400 people. Large-scale coal mining at Madrid began in the late 1880s with the arrival of the Santa Fe Railroad. In 1906, the Albuquerque and Cerrillos Coal Mining Company created a "company town" for approximately 2,500 people, providing housing, daily water deliveries in rail tank cars, medical care, a company store, schools and unlimited electricity from the company-owned power plant. Under the management of Oscar Huber, the Superintendent of Mines, the town became famous for its Fourth of July parade, lighted Christmas displays and the first lighted baseball stadium west of the Mississippi.

With declining coal demand after World War II, the Albuquerque and Cerrillos Coal Company ceased to operate in 1954. The entire town was put up for sale for \$250,000; there were no takers. With the closure of the mines, Madrid became a ghost town. By the early 1970s Huber's son, Joe, was the owner of the entire town and began to rent or sell the old company houses. The Madrid Historic District and many of the mining-related features, including gob piles, foundations and machinery, were listed on the National Register of Historic Places in 1977. Over the years, most of Madrid's buildings have been restored or preserved. The town has developed into a thriving community with a strong emphasis on arts and tourism, including a private historical coal mining museum, art galleries, studios, boutiques and restaurants.



On the outskirts of town, some of the original company structures are waiting for some TLC. The original wood-frame cabins were dismantled in Kansas and brought to Madrid by train.

Since the 1980s, the New Mexico Abandoned Mine Land Program (NMAMLP) has safeguarded most of the hazardous abandoned coal mine openings at Madrid. The Program has also completed projects to control erosion, control subsidence, improve stormwater drainage and reclaim gob piles. Much of the townsite is built on or adjacent to coal gob piles, with associated problems including windblown dust, accelerated erosion and sedimentation, poor localized stormwater drainage and a destabilized stream system.

The restoration and dynamic stabilization of the main stream through Madrid, channelized during the mining period, would require the cooperation of several landowners and the avoidance of historic structures along the path of the stream. Given the town's current focus on arts and tourism, some landowners and community members may not want particular gob piles reclaimed, preferring that they remain in place as a part of the historic landscape that makes the town unique. Possible alternatives to removal of the gob may include: in-place revegetation, the use of sediment ponds or



After several decades of exposure, gob piles remain without significant vegetation. The piles experience significant erosion off the steep slopes and sediment deposition onto flatter slopes and into drainages.

other barriers to prevent sediment delivery into nearby drainages, creative reshaping of gob piles into environmental art and beneficial reuse of gob material. The County of Santa Fe owns open space in Madrid that includes gob piles and historic mining remains; it may be possible to develop interpretive trails to make this area a community recreation and tourism asset. Performing any of these activities would require consensus and buy-in from the Madrid community members.

NMAMLP is currently evaluating proposals from planning, landscape architecture, and engineering firms to develop a community plan to prioritize and address problems arising from past coal mining practices in and near Madrid. NMAMLP is interested in exploring creative and innovative ways to address the impacts of historic coal mining at Madrid, while honoring its historic heritage and the goals and aspirations of the present community. The planning process will start with the identification of stakeholders; the development of baseline descriptions of the historical, social and physical aspects of the community; and the creation of an inventory of the problems associated with past mining practices, including public health and safety issues, physical dangers and degraded land, water, wildlife and recreational resources.



Old machinery and foundations, like the gears and pulleys from the original coal tram, dot the landscape in Madrid.

Multiple public meetings, including forums, focus groups, surveys and webpages, will be facilitated to allow public participation and comment on community plans and to insure that concerns, goals, aspirations and visions of landowners, residents, funding partners and other stakeholders are heard, noted and considered. The final planning summary report will detail community outreach efforts, identified issues and concerns, community preferences and priorities, and identification of specific problems to be addressed and their prioritization.

Susan A. Lucas Kamat
NM Mining and Minerals Division

State Park Number One Priority for Montana AML Program

With 85,000 visitors a year to Montana's Spring Meadow Lake State Park, it stands to reason the lead and arsenic-contaminated site would be the number one priority for cleanup by the Montana Department of Environmental Quality's Abandoned Mine Lands Program. The Spring Meadow Lake Reclamation Project is located just west of Helena, Montana and contains portions of Spring Meadow Lake State Park and, located adjacent to the Park, portions of the Montana Wildlife Center. Both the Park and the Wildlife Center are administered by the Montana Department of Fish, Wildlife and Parks. Located within the project boundaries are structures listed on the National Register of Historic Places, a wildlife rehabilitation center, and an outdoor education center.



Lead and arsenic contaminated tailings and soils, resulting from mineral processing activities that occurred at the site from 1910 to 1920, have impacted portions of the Park and portions of the Wildlife Center. Elevated levels of arsenic and manganese were also detected in groundwater beneath the Wildlife Center and in surface water along the East Arm portion of Spring Meadow Lake. The Montana Department of Environmental Quality Abandoned Mine Lands Program (MT DEQ AML) is working in conjunction with the Montana Department of Fish, Wildlife and Park to cleanup the site.

"This is not our typical mine reclamation site," says Pebbles Clark, Mine Reclamation Specialist with the MT DEQ AML Program. "A large portion of park visitors are children who are either recreating at the site or at the site for outdoor educational classes." Clark adds that the Wildlife Center employs year round personnel who care for injured or abandoned animals. "Both recreational visitors and site workers are at risk of being exposed to hazardous substances."



Site characterization activities and an evaluation of disposal options have been completed. In February 2009, 1000 cubic yards of contaminated sediments were removed from the East Arm portion of the lake and stockpiled onsite. This work was done during winter while the water level was low and the sediment was dry. In summer 2009, approximately 37,000 cubic yards of waste will be removed from the site and disposed at an off-site solid waste management facility. Total construction costs are estimated to be approximately \$2.8 million.

The primary objective of the Spring Meadow Lake Reclamation Project is to reduce or eliminate risks to human health and the environment. "Reclamation activities will benefit Montanans both environmentally and economically," says Clark. "By removing wastes in contact with water, the water quality in Spring Meadow Lake will improve. By removing contaminated soil, the risk to recreational visitors and onsite workers will be reduced." Reclamation activities will also benefit Montana's economy by providing engineering and construction jobs.

Pebbles Clark
MT AML Program



Montana Reclamation Site Completion Coincides With Earth Day 2009



The Montana Department of Environmental Quality's Mine Waste Cleanup Bureau was able to capitalize on a successful reclamation to commemorate Earth Day 2009 and promote the Governor and First Lady's Math and Science Initiative to youth.

During Earth Week, Montana First Lady Nancy Schweitzer joined about 50 high school students to plant 400 trees and shrubs with the MT DEQ and Montana Conservation Corps at the reclaimed Toston Smelter Site, which sits on the banks of the Missouri River about an hour's drive east of Montana's capital city of Helena.

"The Governor and I want Montana students to be challenged and excited about science. Revegetating an area where virtually nothing grew in the past demonstrates that science can be exciting, full of discovery, and protect the environment," says Montana First Lady Nancy Schweitzer, who is a botanist. "It is also fitting that we are planting trees and wrapping up the reclamation of the smelter site during the week when Montanans and people all over the planet honor the earth."



Starting in September 2008 and ending in April 2009, the MT DEQ reclaimed the 9.4 acre site of severe heavy metal contamination to prevent continued run off of contaminated sediment. The contamination from arsenic and lead posed a threat to human health and the environment. About 30,000 cubic yards of contaminated soil were excavated and sealed in a nearby repository.

"When we started this reclamation project, the site was barren, littered with building rubble and black slag waste piles that extended into the Missouri River," says Devin Clary, DEQ Mine Reclamation Specialist. "Now, post-reclamation, the waste has been removed and encapsulated into a repository that blends into the natural landscape. Once the trees and shrubs we are planting take hold, it will be hard to tell this area was ever disturbed."

Funding for the \$700,000 reclamation project was provided through a grant from the Federal Office of Surface Mining Control, Reclamation and Enforcement.

The Toston Smelter site is an abandoned gold, lead and silver smelter that operated in the late 1880s. The smelter ceased operation in 1888 and was dismantled in 1899.



Devin Clary
MT AML Program

Jono McKinney, President/CEO Montana Conservation Corps; Nancy Schweitzer, Montana First Lady; Sandi Olsen, Remediation Division Administrator, DEQ; Jeff Fleischman, Casper Field Office Director, Office of Surface Mining; Anna Green, Policy Advisor for the First Lady, at the tree planting event, Toston Smelter Reclamation Site, 4-21-09



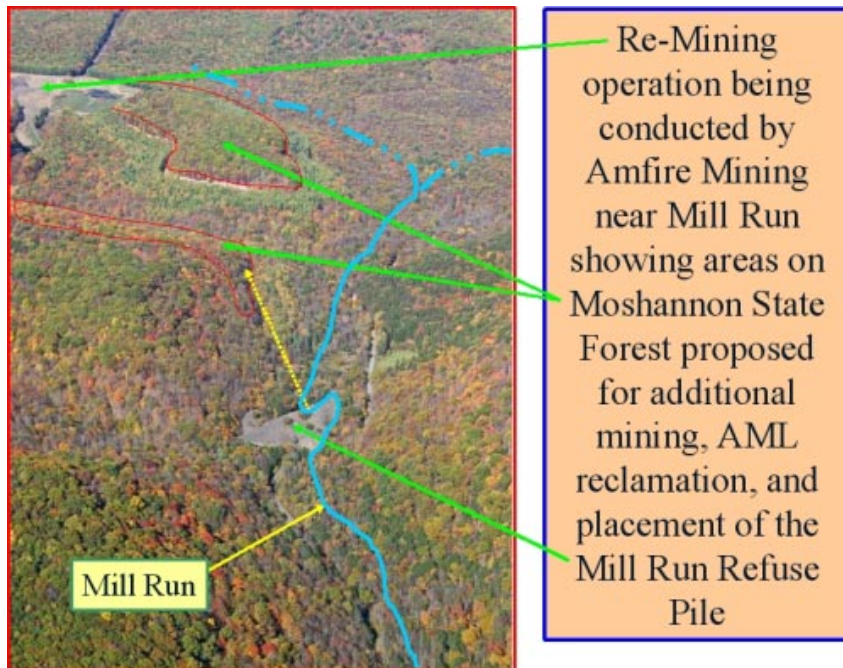
Pennsylvania AML Partners With The Active Mining Industry

A cooperative effort involving representatives of the Pennsylvania Department of Environmental Protection (PA-DEP), Bureau of Abandoned Mine Reclamation (BAMR), the PA-DEP, Knox District Mining Office (KDMO), the Pennsylvania Department of Conservation and Natural Resources (DCNR), Moshannon State Forest (MSF) District, and Amfire Mining Company, LLC (Amfire) has resulted in an agreement to permit re-mining within the MSF property in exchange for reclamation of abandoned mine lands that will eliminate 10,000 feet of dangerous highwall and a 6.4 acre coal refuse pile containing approximately 139,600 cubic yards of waste coal material. The coal refuse pile was sampled and tested prior to the project and found to have no fuel value.

On December 22, 2008, Amfire officially entered into an agreement with DCNR to re-mine approximately 42 acres of coal reserves on

MSF property under Surface Mine Permit (SMP) #24030102 that will include the elimination of 7,700 feet of dangerous highwall. As part of this Sub-Chapter F SMP issued by KDMO, Amfire will incorporate alkaline material into their backfill and construct a small limestone bed to help ameliorate acid mine drainage emanating from an adjacent abandoned deep mine.

In exchange for royalties due to DCNR, Amfire will remove the coal refuse pile, which was cast directly into the Mill Run stream channel, and intermix this material with 14,000 tons of alkaline material which will then be used to backfill and eliminate an additional 2,300 feet of dangerous highwall within an adjacent abandoned surface mine that is also located on DCNR-MSF property. This project will reclaim 19.2 acres of abandoned mine land at no cost to the Abandoned Mine Land Program. The design for the reclamation work was completed by BAMR, which estimated the cost of the reclamation at \$1,494,383.12.



As part of the re-mining and reclamation activities on the MSF property, selected disturbed areas will employ the Office of Surface Mining's Appalachian Regional Reforestation Initiative (ARRI) techniques to help promote reforestation of the disturbed areas. ARRI recommends application of the Forestry Reclamation Approach (FRA) which promotes higher tree seedling survival rates and accelerated tree growth by spreading topsoil in a hummocky fashion to minimize soil compaction. The hybrid American Chestnut, along with other native tree species, are being targeted for the reforestation effort. The remaining disturbed areas will be revegetated with a grass seed mix developed by the Pennsylvania Game Commission for the development of forage and range land for Pennsylvania's expanding elk herd.

Eric Cavazza, P.E., PA-DEP
Bureau of Abandoned Mine Reclamation

Belden AMD Reclamation Project

The Huff Run watershed lies within the unglaciated portion of the Appalachian Plateau physiographic province of Ohio. As early as 1810, coal mining in the vicinity of Huff Run and Mineral City occurred. Documented underground coal and clay mining within the watershed occurred in the Lower Kittanning and Middle Kittanning coal seams. Most underground mining within Huff Run occurred between 1850 and 1930, with the last mine closing in 1946. Acid mine drainage (AMD) discharges from many of these abandoned mines are located throughout much of the central and western portions of the watershed. Many of these mines were also intercepted during subsequent surface mining operations, producing additional discharges.

The Huff Run watershed is plagued with numerous mine discharges, seeps, and surface runoff areas that have severely degraded most of the streams aquatic habitat. The productivity of

the aquatic environment is significantly reduced in water with a low approximate 3pH and elevated concentrations of dissolved aluminum, iron, and manganese, all reducing the biomass and diversity of fish and aquatic insects. Another significant adverse impact to the aquatic environment from AMD has been the deposition of metal oxides and hydroxides onto the streambed.

During March 2000, a Huff Run Acid Mine Drainage Abatement and Treatment Plan (AMDAT) was prepared for the Ohio Department of Natural Resources (ODNR). This plan was developed to assess the impacts of AMD and the restoration potential of abandoned mine land projects on the Huff Run watershed. This proposed restoration site within the watershed is identified as HR-12, also known as the Belden Site. The watershed has been thoroughly investigated; beginning with a study by the USGS in 1976 up through and including studies conducted by Mt.

Union College and ODNR Mineral Resources Management (DMRM) in 1997 and 1999 respectively.

According to the AMDAT, the Belden site, is one of the two highest ranking contaminant sites in Stream Reach 4 as indicated by their having the largest acid loads to Huff Run of all locations sampled in March 1999.

Implementation of this restoration project has resulted in restoration of approximately 4,000 feet of surface waters affecting two streams. This restoration of aquatic habitat will primarily benefit fish and macroinvertebrate (aquatic insects) populations that once occurred throughout Huff Run.

Restoration projects, such as Belden, will ultimately reduce treatment costs incurred by municipalities for public water supplies and even water contact recreation, through savings to personal and public health.

The Huff Run Watershed Restoration Partnership, Inc. was formed in 1996 to restore the Huff Run watershed by improving water quality and enhancing wildlife habitat through the involvement of community and support of government to help realize these goals. The watershed association proactively engages agencies, institutions, and governments to join in their commitment toward accomplishment of river restoration objectives and goals.

The Belden site analysis led to a design with several goal-oriented objectives: 1) to generate high alkaline loads 2) to reduce acidic base flow from toxic mine refuse and spoils 3) reduce erosion of AMD-producing material and formation of AMD, and 4) retain sediment and precipitated metals on site.

This was accomplished by reclaiming toxic portions of exposed mine spoils and coal refuse, establishing positive drainage, and installing passive AMD treatment systems including two steel slag leach beds and several open limestone channels.

Approximately 70,860 cubic yards of earthwork and 24,990 cubic yards of resoiling materials were moved to accomplish the objective of reclaiming 15 AMD-producing acres within the project



site. Alkalinity generation occurs due to the placement of 7,465 tons of steel slag within two constructed leach beds and limestone channels that contain over 6,080 tons of highly calcareous limestone. Construction of a ten acre-foot volume sediment pond insures retention of metals, sediment and precipitants on site.

The project includes an innovative use of steel slag material as provided by Multiserve, Inc. ODNR conducted extensive pre-construction leachate testing of the slag to insure that toxic metals were not present. This project is one of the first ever in Ohio to generate alkalinity with steel slag placed in contact with mildly acidic waters.

Early post-construction discharge values indicate that project goals are being met. Pre-construction calculations indicated that alkalinity generation would fall between 2 lbs/day and 1,670 lbs/day. As the slag beds became functional in February 2009, more than 1,309 lbs/day were being generated. Metals (iron and aluminum) during the same period, as measured by discharge from the retention pond, have decreased from pre-construction loadings of 7 lbs/day to .94 lbs/day.



Belden construction was funded by one of only twelve projects in an annual US EPA Targeted Watershed Grant (\$498,591.00). Leveraged funds were also encumbered from the US Office of Surface Mining Watershed Cooperative Grant (\$73,044.00), and the Department of Natural Resources, Division of Mineral Resources Management (\$88,713.21). The design was completed by ATC Associates of Indianapolis, Indiana and constructed by Tucson, Inc. of New Philadelphia, Ohio. The project is located in

the western portion of Carroll County, Ohio three miles east of the town of Mineral City, and was completed on September 19, 2008 with costs totaling \$660,348.21.

Jim Gue
OH Department of Natural Resources
Division of Mineral Resources Management

Reclamation For Kentucky Military Training Center

The Commonwealth of Kentucky's Division of Abandoned Mine Lands (DAML) recently announced commencement of the River Queen Slurry AML Enhancement Rule Reclamation Project in Muhlenberg County, Kentucky. The project is centrally located at the Wendell H. Ford Regional Training Center (a military installation managed by the Kentucky Department of Military Affairs in the western part of the state) and consists of two distinct areas of proposed reclamation, totaling approximately 281 acres. Both of these sites are former coal refuse disposal areas that have been graded and covered over with earthen material during previous AML reclamation projects, circa 1987 and 1993. The land is used as a National Guard training facility and includes a military aircraft landing strip nearby. It has been determined that acid mine drainage from the slurry is a contributor to water pollution within the area.

Aside from funding some revegetation of the project area, Covol Fuels No.2, LLC, of South Jordan, Utah, will assume the entire cost (estimated to be \$1,967,000.00 based on a reclamation cost of \$7,000 per acre of 281 acres) of the project under the ENH program. Coal refuse will either be dry excavated and mixed with water into slurry, or dredged out wet, and pumped to Minuteman Plant, a temporarily constructed coal processing facility, for recovery. To separate the fine coal from the slurry, several stages of separation equipment such as air jigs, sieves, screens, cyclones, and spirals will be employed at the plant. The separation process will generate three output streams: clean coal, coarse refuse and fine tailings. Monitoring of receiving stream water quality prior to and during coal refuse removal operations and reclamation activities will be conducted.

DAML will assume some of the cost (estimated to be \$39,000) of revegetation under the SGA program after reclamation is complete. Revegetation by DAML will take place as soon as practical. Culverts, ditches, rock check dams, and existing sediment basins will control drainage. Hay bale silt checks and silt fences will provide additional sediment control, and along with the access roads, will be maintained throughout the course of the project. A diversion will be constructed that will follow the natural drainage pattern of the watershed. DAML will expend Title IV funds, in consultation with the Kentucky National Guard, to enhance the reclamation once grade work and revegetation have occurred.

Upon completion of this project, the water quality of nearby Cypress Creek will be improved by removing a source of leachate and the reclaimed land will be a more suitable training ground for military maneuvers. These improvements, and the reprocessing of approximately 20 million tons of raw coal, distinguish this as a winning project for the citizens of the Muhlenberg County community, the Kentucky National Guard, and the Commonwealth of Kentucky. The Ford Training Center is recognized as the leading mechanized infantry and armor maneuver training area east of the Mississippi River, and provides effective and cost-efficient training facilities for National Guard, Reserve and active component units from every branch of service.

Corey Ann Howard
KYAML



Mine Shafts Pose Danger For Those Who Aren't Wary

When I was a youngster, my family went out into the desert in the Dome Valley area for an outing. One of the things I was told was to be careful about running around as there were abandoned mining holes there and you could fall in. It came to mind this week when I was reading a story from Arizona State University's Cronkite News Service about a cement producer, CalPortland, stepping forward to help deal with the issue of abandoned mine shafts.

CalPortland donated three truckloads of concrete and the labor to fill three mine shafts and six prospecting holes in a popular recreation area near Phoenix, after a request was made by State Mine Inspector Joe Hart. Unfortunately, these don't even represent a tiny part of it out there. Some 100,000 abandoned mine shafts have been documented in Arizona so far, with more being added as recreational miners dig new holes. About 9,000 of these are considered extremely dangerous due to their depth.

Undoubtedly, many shafts exist in our area, where mining has been an occupation since Spanish explorers first came to our state. For example, two visitors to the Yuma area were off-roading across the desert near Olgiby Road west of Yuma and found themselves - and their Suzuki Samurai vehicle - at the bottom of a 30-foot mine shaft. They were lucky because neither were seriously injured and they were rescued within 24 hours. However, the outcome is usually not that positive when someone falls into a mine shaft. Two deaths have been reported in the past 13 months. One young girl, like the two visitors here, was riding across the desert and plunged into a shaft. The other was a young man who had the misfortune of building a campfire near a mine shaft and falling into it when he stepped back from the fire.

Usually, authorities try to fence off or fill in mining holes when they are discovered. Unfortunately, vandals and souvenir hunters sometimes take the fencing and signs intended to warn off the public. It is better to actually fill in the holes, but funding cutbacks have made that less possible, according to Hart. He is pleased that CalPortland agreed to help out. Other businesses are also beginning to donate to the effort to fill in mine shafts, as well. They are to be commended for their concern about public safety.

There are a lot of shafts to fill, however, and waiting for donations to make it happen is probably impractical. The scope of the effort needs to be narrowed by putting emphasis on the mine shafts in known recreation areas where encounters with them are more likely. Areas with the most recreation should be first, of course, with the others coming in descending order.

If such a list was available, it may encourage businesses and individuals to donate materials, money or labor to help close the more dangerous holes in their region. In return, recognition could be given to them with monuments or markers placed in these recreation areas.

A list of mine shafts locally, for example, could encourage civic club projects or business donations, especially since off-roading and other outdoor activities are so popular in our area.

BY TERRY ROSS

October 25, 2008

The Sun's News and Information Center

One Less Hazard

There is one less hazard in Mohave County for parents to worry about. Arizona State Mine Inspector (ASMI) Joe Hart awarded Teck Cominco American Incorporated with an Abandoned Mines Program Voluntary Action Award Thursday. The Voluntary Action Awards were designed to recognize companies and organizations that attempt to improve public safety by securing abandoned mines. The company closed 47 mine openings at the McCracken mine site, located about 60 miles southeast of Kingman. The company, working with the Arizona Game and Fish Department, also installed nine bat-compatible closures. "Without private support, donations and in-kind services from other entities, the work could not be completed timely and adequately to protect the public," Hart said. "Having this type of commitment and dedication is vital to accomplishing these goals."

According to a news release, the mine was started in 1874 with five claims on more than 100 acres. From 1874 to 1985 the site was mined for silver, lead and zinc. Teck Resources acquired the site in 1983 through a merger. Arizona Silver Corporation leased the site and operated the mine from 1983 to 1985. No mining has taken place on the property since 1985, according to Teck Cominco.

The company started looking at closing the numerous mine openings in 2006. It identified around 50 openings and surface disturbances. They hired J. Scott Altenbach, PhD., from the

University of New Mexico to study the bats inhabiting some of the mine openings. According to a company news release, he was able to identify several openings that were important to the bats. With the help of the Arizona Game and Fish Department, he designed several bat-friendly closures that would keep people out, yet allow the bats access to their homes.

According to the ASMI, since 1999 more than 200 people have died as the result of accidents involving abandoned and active mines. Last year, a girl was killed after she and a friend fell into an abandoned mine near Chloride. The state saw another mine fatality in January, when a 19-year-old man fell into a mineshaft near Cave Creek.

In 1987, in an attempt to warn residents and decrease the number of accidents, ASMI created the Abandoned Mines Program. The program consists of the *Stay Out - Stay Alive* public safety campaign, Mine Safety Awareness Week, the Abandoned Mines Educational Program and the Voluntary Action Awards. The objective of the program is to inform the public - especially children - about the dangers of exploring or playing around mines. For more information about the program, visit www.asmi.az.gov.

Suzanne Adams

Friday, August 01, 2008 Dailey Miner - Kingman, AZ

California Abandoned Mine Closure Is A Dirty Job

As the host of the Discovery Channel show *Dirty Jobs*, Mike Rowe has done some pretty amazing – disgusting, dangerous and difficult would work well as adjectives here, too – stuff. In the name of entertainment (and expanding his career options), Rowe has helped artificially inseminate a horse, trudded through piles of bat guano, and dived into an alligator-inhabited lake to retrieve golf balls. Thanks to an assist from the California Department of Conservation's Office of Mine Reclamation (OMR) and Ed Winchester, a Mine Safety and Health Administration-certified contractor who has worked with OMR to seal numerous old mines, Rowe can cross plugging an abandoned mine with polyurethane foam off his things-to-do-before-I-die list.

In 2008, members of OMR's Abandoned Mine Lands Unit (AMLU) were on hand to help close a dangerous abandoned mine shaft in the Auburn State Recreation Area in Placer County, northeast of Sacramento, California. The 50-foot deep shaft was located across the shallow and narrow Shirland canal from a well-used public trail within the Auburn city limits and near to some relatively new housing developments. It was discovered hidden in undergrowth and lots of poison oak only after a dog survived a fall down a slightly shallower shaft nearby, prompting a site survey. The abandoned mine, which is on land owned by the U.S. Bureau of Reclamation and managed by the California Department of Parks and Recreation, is one of an estimated 47,000 in California.

Each year, several people get hurt or die exploring or inadvertently falling into abandoned mines in California. AMLU viewed working with *Dirty Jobs*, one of cable television's highest-rated reality shows, as a chance to inform the public about the hazard. "It was kind of strange, because our interest is in promoting safety and we had all these people working around an open mine shaft," said Cy Oggins, manager of AMLU. "It took a lot of work by all the parties to stay safe. There's a fine line between wanting to publicize the *Stay Out, Stay Alive* message and actually creating a situation where accidents can occur. But it was a good experience overall and hopefully the show will help the public understand how dangerous abandoned mines can be."

In 2008, the AMLU closed this former abandoned mine shaft that was discovered after a golden retriever fell into it. (AMLU archive photo).



The AMLU crew poses with the TV star. From left, Jon Mistchenko, contractor Ed Winchester, Mike Rowe of "Dirty Jobs," Sam Hayashi, Cy Oggins and Craig Turner (AMLU archive photo).

The episode appeared in January 2009. Prior to the shoot, the AMLU crew built a temporary bridge over the canal, cleared out a seemingly endless crop of poison oak, hauled in all foam and the necessary gear with an assist from State Parks staff, and took down temporary protective fencing around the shaft's opening as the cameras rolled. But its most important duty was manning the ropes to ensure the high-priced TV talent stayed safe. Rowe helped take down the fencing and handled the dirtiest element of this dirty job, mixing the bags of chemicals that would become the permanent plug. He joined the AMLU crew hours later in covering the plugged shaft with dirt so no trace could be found by the curious.

While AMLU staff were in the background most of the time, they were involved in one of the most dramatic incidents of the shoot: after Winchester and Rowe lowered themselves to the bottom of the shaft, Rowe got stuck on the way out. He was wearing a safety harness, but the pulley locked up and he couldn't move. The OMR crew loaned its muscles. That was a good example, Oggins noted, of the numerous things that can go wrong when people explore abandoned mines and go into shafts, something AMLU staff never does. "It seemed pretty scary at the time," Oggins said. "If we hadn't been there to pull Mike out, he could have been in some trouble. In 2006, a guy exploring by himself in Washington lowered himself into an abandoned mine. He got himself stuck and ended up dying because he couldn't climb back out. No one was around to help him. He was found dead 12 days after he went missing."

There was plenty of help on this occasion. In addition to the AMLU staff and Winchester, a five-man Discovery Channel crew was on hand. Often, five cameras – including AMLU's down-hole video camera, which was lowered into the shaft on a steel cable – were trained on the action. In accordance with the show's format, Rowe served as Winchester's trainee and Winchester served as Rowe's straight man.

OMR had the opportunity to be involved in the show because *Dirty Jobs* segment producer Randa Cardwell had done a segment on a mine closure with AMLU a few years ago while working

for the PBS show “California Connected.” Cardwell initially wanted to film a mine closure in Colorado because of scheduling convenience and Oggins put her in touch with his counterpart there with a request that Cardwell call him back if things didn’t work out. When they didn’t, “Dirty Jobs” called to ask if OMR was ready for its close-up.



Rowe and all but one member of the AMLU staff came down with poison oak during the filming. However, poison oak is the least of Rowe’s worries. He has had a particularly rough go with animals on his show (thrown from horses, scratched by cats, pooped on by bats, attacked by rats, kicked by cows, bitten by a catfish and an ostrich, pecked by chickens ... you get the drift). “I’ve broken toes, fingers and ribs, been cut

and burned, suffered some infections from God-knows-what, but the thing that scared me the worst was working with a blast furnace when I was doing a show about shoeing horses,” Rowe said. “There was a little flare-up inside the furnace. My eyebrows got scorched and my contacts basically melted and stuck to my eyes.”

One thing that seems safe to say after his work with OMR: With a newfound respect for the danger (and dirt) that comes with plugging an abandoned mine, Rowe will never get injured by venturing into one.



Show host Mike Rowe descends into the 50-foot-deep shaft (AMLU archive photo).

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California’s Abandoned Mine Lands Unit staff and the “Dirty Jobs” film crew check the feed from a down-hole video camera lowered into an abandoned mine shaft

(AMLU archive photo).

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