



**OFFICE OF SURFACE MINING
Albuquerque Field Office
ANNUAL EVALUATION REPORT**

for

**New Mexico Abandoned Mine Land Reclamation Program
Evaluation Year 2006**

(July 1, 2005 through June 30, 2006)

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Cover Photo: Lake Valley, New Mexico

INTRODUCTION

This annual evaluation report is produced by the Office of Surface Mining Reclamation and Enforcement (OSM) in fulfillment of its Statutory responsibility [under the Surface Mining Control and Reclamation Act of 1977, (SMCRA)] to annually assess the accomplishments of the New Mexico Mining and Minerals Division, Abandoned Mine Lands Reclamation Program (New Mexico AML). The annual report consists of OSM's oversight findings based on field inspections and meetings with the New Mexico AML during the 12-month evaluation period beginning July 1, 2005 and ending June 30, 2006.

OSM has responsibility under SMCRA for approving State and Tribal AML Programs in carrying out the goals of Title IV of SMCRA. The primary goal of Abandoned Mine Land (AML) Programs is to mitigate the effects of past mining by reclaiming abandoned coal and non-coal (mineral) mines. The primary emphasis is placed on correcting the most serious problems endangering public health, safety, general welfare, and property.

On behalf of the Secretary of the Interior, OSM administers the Abandoned Mine Reclamation Fund by awarding grants to States and Tribes, to cover their administration and reclamation costs of running their Programs. The OSM Western Region, Albuquerque Field Office (WR-AFO) through its oversight process, annually monitors the progress and accomplishments of the New Mexico AML Program.

In conducting this annual review, AFO followed OSM Directive AML-22, which contains general procedures for evaluating Abandoned Mined Land Reclamation Programs. This requires OSM and State Programs to annually develop an oversight work plan with specific topics (principles of excellence) for evaluation during the evaluation period. The work plan identified specific performance measures to assess Program performance for each principle of excellence and to make recommendations to improve performance, if necessary.

This annual evaluation report documents the activities and accomplishments of the New Mexico AML Program over the 12 month period beginning July 1, 2005 and ending June 30, 2006. In the past, the New Mexico AML Program has been an excellent and well managed State Program that has received excellent oversight evaluations in OSM annual evaluation reports. OSM did not see fit to make any recommendations for improvement as a result of this year's oversight activities.

This year's oversight activity involved the following State and Federal personnel:

NM-AML

John Kretzmann, Program Manager
Randall Armijo, Environ. Coordinator
Lloyd Moiola, Project Manager

OSM-AFO

Willis Gainer, Field Office Director
Vernon Maldonado, AML Spec.
Dan Martinez, Grants Specialist

PART I. GENERAL INFORMATION

The State of New Mexico contains a diversity of ecosystems ranging from high, steeply sloping mountainous areas to semiarid plains and arid desert. Vegetative communities and wildlife are equally diverse across the state. Average rainfall ranges from a high of approximately 20 inches per year to a low of about six inches depending on elevation. New Mexico's coal resource underlies approximately one-fifth of the state's surface (over 15 million acres) and totals over 40.6 billion short tons of coal. A significant amount of pre-law mining has occurred within the State since the turn of the century, leaving numerous high priority hazards.

Land ownership in New Mexico is approximately 34.1% Federal (BLM, USFS, NPS) and 11.6% State Trust Land for a total of 45.7% public lands (55,566 sq. mi.). The highest concentration of AML hazards occurs on much of this public land. Public land is increasingly being developed for open space public recreation such as camping, biking, hiking, campgrounds, etc. Population demographics and increased access to mining areas within the State are changing and this change is raising the SMCRA priority of several mining areas and associated mine hazards.

The state of New Mexico has a long mining history. One of the oldest existing mines in the United States, is just south of Santa Fe, New Mexico. It dates back to 1200 A.D. Some pre-historic mining occurred as early as 600 A.D. Indians mined turquoise, lead and copper for years prior to the arrival of Europeans. Spanish explorers mined for silver and gold in the 1800's. The Cerrillos area, just south of Santa Fe, was an important mining district in New Mexico. Abandoned gold and silver mines also exist in the southern part of the State near Orogrande and Deming. Whether from mineral mining or coal mining, numerous physical hazards, in the form of mine equipment and structures, portals, and vertical shafts, exist throughout the State.

New Mexico AML Program History:

New Mexico received primacy under SMCRA on December 31, 1980. New Mexico's AML Program was subsequently approved by the Secretary of Interior on June 17, 1981. Since that time, the New Mexico AML Program has been working to reclaim both its high priority coal and non-coal inventory. Although the State has not yet certified completion of its high priority coal reclamation, the bulk of the high priority coal reclamation has been completed. Life threatening hazards from non-coal have occasionally predisposed or displaced coal hazard priorities.

The State's inventory of unreclaimed mines is substantial and total estimated reclamation cost of reclaiming all known mine related hazards exceeds the amount of unallocated AML funds currently available to New Mexico. Therefore, New Mexico continually struggles to prioritize its most important safety and environmental hazards.

As of September 30, 2005, New Mexico had \$20,719,006 in their State Share Balance. New Mexico estimates that it would take approximately \$19.2 million to reclaim all remain high priority coal hazards in the State. This amount closely approximates the un-appropriated balance that currently exists in the New Mexico State Share. At the current staffing level (8 FTE's) and funding levels (\$1.5 to \$1.8 million per year), it would take approximately 10 years for the State to complete the reclamation work already in its AMLIS inventory.

Based on the cost estimates reflected in OSM's AMLIS database as of August 2006, New Mexico has completed \$11,942,300 in high priority-1 and -2 coal problems, an additional \$544,150 worth of the inventory has been funded for reclamation and \$5,393,700 remains unfunded. New Mexico AML has also completed \$3,328.618 worth of priority-3 coal & non-coal problems in its inventory. All together, the State's AML Program has claim to \$14,940,418 worth of completed mine reclamation work and has funded another \$1,196,950 worth that is scheduled for future reclamation.

Program Staffing:

The New Mexico AML Program is under the New Mexico Mining and Minerals Division, of the New Mexico Energy, Minerals and Natural Resources Department. Under a recent reorganization of the Mining and Minerals Division, the Abandoned Mine Land "Bureau" was renamed the Abandoned Mine Land "Program" which is accordingly now under the direction of a Program Manager rather than a Bureau Chief.

All of the AML staff work out of the New Mexico AML Office, Mining and Minerals Division, Energy and Minerals Department located at 1220 South Saint Frances Drive, Santa Fe, New Mexico, NM 87505, telephone (505) 476-3400. The AML Program consists of eight full time employees plus the equivalent of one additional support staff within the Mining and Minerals Division. The AML Program has had a staffing level of about nine (9) FTE's during the past 25 years. Three of these positions cost share with other programs in the Division.

Status of Fee Collections and Fund Distributions:

The Abandoned Mine Reclamation Fund consists of fees, contributions, late payment interest, penalties, administrative charges, and interest earned on investment of the fund's principal. Nationwide, from January 30, 1978, when the first fees were paid, through FY-2005 (September 30, 2005), the nationwide fund has collected \$7,550,346,642. Total appropriations nationwide, during this same time period, are \$5,748,548,370. The un-appropriated balance in the national AML Fund as of this same period is \$1,801,798,272.

According to data published for the State of New Mexico, on OSM's web site (www.osmre.gov), \$3 to \$5 million in AML fees is collected annually from active coal production. New Mexico's total State-share collections, from January 1978 to September 30, 2005, is approximately \$112,887,327. State-share (50%) collections for this amount would therefore be \$56,443,664. However, State-share distributions thus far have only totaled \$35,724,658 (63.3% of State-share collections). The difference, \$20,719,006, is the New Mexico undistributed State-share balance as of September 30, 2005. Current figures for the end of the evaluation period (June 30, 2006) are not yet published and available.

Cumulative State-share distributions as of September 30, 2005 to New Mexico, via construction and administration grants, totals \$35,724,658. According to the New Mexico EMNRD web site at (www.emnrd.state.nm.us), the Energy, Minerals and Natural Resources Department has overseen the closure of over 4,000 mine openings and the remediation of hundreds of acres of mine waste with these funds. However, the Department estimates that about 15,000 hazards at 5,000 mine sites still remain un-reclaimed.

The New Mexico AML Program receives grant funding of about \$1.5 to \$1.8 million annually.¹ These grants include administration, construction and future set-aside sub-accounts. New Mexico estimates that actual administrative cost averages between 20% and 30% of total funding, making the Program quite cost effective. Other than construction work, very little is contracted out by the Program as project development and engineering design work is done in-house. This has a lot to do with why the Program continues to be so cost effective.

Grants and Financial Information:

As mentioned above, the undistributed State-share Balance for New Mexico as of June 30, 2005 was \$20,719,006. Current figures for the end of the evaluation period (June 30, 2006) are not yet published and available.

The following AML grants were active during the evaluation period:

Grant Number	Grant Period*	Amount
GR307350	07/01/03 to 06/30/06	\$1,814,300.
GR407350	07/01/04 to 06/30/07	\$1,779,448
GR507350	07/01/05 to 06/30/08	\$1,637,421
GR617350**	07/01/06 to 06/30/09	\$2,998,187

* Construction Grants are awarded for a three-year period.

**GR617350 is not the actual annual NM budget, it includes set-aside funds that will be used over a 3-yr. period.

PART II. PROGRAM ACCOMPLISHMENTS

Overall Program Accomplishments to Date:

New Mexico AML has funded or completed 161 AML Projects since the beginning of the Program. Approximately 81 of the 161 projects were coal and 80 were non-coal. This split coincides with the ratio of coal to non-coal in the State.

Like most Western states, New Mexico is under a lot of public and political pressure to safeguard those hazards most accessible to the public. New Mexico has experienced eight (8) abandoned mine related fatalities in the last 40 years and numerous AML related injuries. These fatalities have placed a lot of attention and emphasis on the AML Program and have forced the Program to focus attention on several non-coal sites that were previously considered to be remote. Increased off-road recreational vehicle use has caused the SMCRA priority to be revisited for several sites in the inventory.

¹ [Note: As a minimum program State (any state with outstanding priority-1 coal hazards that receives less than \$1.5M in any given year), New Mexico occasionally receives a small percentage of Federal-share money based upon its historical coal production prior to 1977. For example, New Mexico received \$193,742.00 in Federal-share distributions in 2004 and \$212,251 in 2005 in addition to its State-share funding.]

The 2005-2006 construction season added Lake Valley-Phase I (noncoal), Lumberton (coal), Sugarite-Phase V (coal), Yankee Vukonich (coal), Gold Hill (noncoal), La Madera (noncoal) and Manhattan Mine Maintenance Project (noncoal).

The 2004-2005 construction season added Abbe Springs (copper), Sugarite Phase IV (coal), Cerrillos South (coal), Bogg Canyon (noncoal) and Spar Group (noncoal). In addition, some small maintenance projects were completed at Florite Ridge and Lordsburg.

Having completed 166 AML reclamation projects as of July 30, 2006, New Mexico AML has closed or safeguarded over than 3100 hazardous mine features (does not include summer 2005 construction data). Among these were some of the most hazardous features (such as vertical shafts) in the state. Although other serious hazards still exist, certainly lives have been saved and injuries prevented because of this work.

Substantial environmental degradation is typically associated with abandoned mines. The 161 reclamation projects completed as of July 2006 have certainly had a positive environmental effect on the State. These positive environmental effects can be measured in terms of protection of cultural and historic property, wildlife enhancement and protection of habitat, re-vegetation and associated decreases in erosion, improvements in water quality, improvements in air quality and overall a discernable improvement in the quality of life for the citizens of New Mexico. A lot of work remains to be done, especially with regard to abandoned non-coal mines.

AMLIS Data Reporting:

Beginning in 2004, OSM revised its oversight evaluation period. Consequently, the revised evaluation period (July 1 through June 30) splits the summer construction period in half. This makes reporting of annual accomplishments difficult and makes it almost impossible to have AMLIS data for the current year available by the end of the evaluation period. For example, any projects completed after July 1st would not be reported until the following evaluation period.

In EY-2004, New Mexico projected its accomplishments data for the remainder of the year. This proved to be too difficult to do and to track. Consequently, in EY-2005 New Mexico AML and OSM agreed that no new AMLIS data would be reported for CY-2005 in the EY-2005 oversight report. This means that 2005 was a “lag year” in that the 2004 evaluation year included projects for work completed after July 1, 2004 and the 2005 report will not duplicate that data. As a result, the data in this EY-2006 report, and subsequent reports, will accurately reflect each previous year’s accomplishments.

Summary of EY-2006 Projects

The following tables list projects that were either completed or in some phase of project development during EY-2006. Project development means site characterization, obtaining biological, archaeological or cultural / historic clearances for National Environmental Policy Act (NEPA) compliance and project design engineering including development of contract designs and specifications.

**AML Reclamation Projects in Construction or Completed
During the 2005 -2006 Construction Season :**

Lake Valley – Phase I* [BLM Land]	Completed safeguarding of 80 mine openings (42 shafts, 26 pits and 12 adits).
Lumberton Reclamation Project* (coal)	Project completed July 2006. (Safeguarding of three portals and reclamation of seven gob piles on two acres).
Sugarite Phase V Coal Reclamation Project	Project completed in August 2005 (one gob pile on four acres)
Lordsburg and Fluorite Ridge Reclamation Maintenance Projects	Backfilled one subsidence shaft and two subsided open stopes on previously reclaimed sites.
Manhattan Mine Maintenance	Backfilled one subsided shaft in a previously reclaimed site within a subdivision.
Yankee-Vukonich Coal Reclamation Project (2004 & 2005)	Stabilization of 6 coal piles on four acres and restoration of ¼ mile of arroyo. Work continued into EY-2006.
Gold Hill*	Reclamation of 11 shafts, 4 pits and 10 adits was completed in EY-2005 and EY-2006.
La Madera	Safeguarded 3 portals, work completed in EY-2006.
Grants II Maintenance	Backfilled one subsided mine shaft on a previously reclaimed site.

* Summer of 2006 projects, construction may continue into EY-2007 (i.e., construction may continue past June 30, 2006).

AML Projects in Project Development during EY-2006:

Granite Gap	Design completed, contract awarded, construction to start Sept. 2006.
Bayard/Niblett Mine Safeguard	Small construction project recently let out for bid.
Bradley Mine Safeguard	Working ongoing for Right of Entry and NEPA.
Burrow Peak Mine Safeguard	Project on hold or no progress since 1998.
Carthage Gob Reseeding	Design completed, may bid out project in EY-2007.
Cerrillos Central Mt. Mine Safeguard Project	Archaeological report in progress.
Vermejo Park Reclamation Project	Reconnaissance scheduled. To be done in various phases.
Granite Mountain Mine Safeguard	Project on hold.
Grants Uranium Phase III	Project on hold.
Lake Valley – Phase II Mine Safeguard	Archaeological clearance received; NEPA clearance and design 75% complete. On private land.
Madrid SE Coal Reclamation	Project on hold.
Mongollon Rd. Mine Safeguard	Right of Entry pending, project on hold.
Rogersville Coal Reclamaton	Archaeological report in process.
San Mateo	Project on hold.
Sugarite Phase VI Coal Gob Recl. Project	Phase VI is in the engineering design stage and may not go to construction for a couple of years depending on funding levels.
Waterflow II Gob Recl.	Working on archaeological survey & NEPA compliance.
Yankee Canyon Gob Recl.	Working on Right of Entry issues, project on hold.
Zuni 21 Mine Safeguard	NMAML is contracting out the archaeological survey for a USFS project.
San Pedro Ph. I	Working on archaeological report, NEPA underway, ROE problems.
Carbonate Hill	Archaeological surveys nearing completion.
Cooke's Peak Ph. I	Preliminary project development work underway.
Carbonate Hill Mine	Working on NEPA compliance.
Madrid North Gob (coal)	Two shaft and two adits to be safeguarded, community does not want gob piles disturbed.
San Pedro	Archaeological Surveys
Vermejo (coal)	Reconnaissance

Protection of Bats / Habitat:

The New Mexico AML Program continues to make a dedicated effort to identify and protect bat populations that use abandoned mines for habitat. New Mexico AML installs bat grates as necessary to provide for bat access while restricting public access. Designs have included access panels for follow-up studies on the effectiveness of the bat-compatible closures and access by owls and small mammals has been incorporated into recent designs. In addition, the Program has contracted out Bat studies to the University of New Mexico.

Project Approvals:

The OSM-AFO reviewed grant applications, grant close out reports and project packages submitted for funding. OSM issued Findings of No Significant Impact (FONSI) and Authorizations to Proceed (ATP) for all projects submitted by the AML Program during the evaluation period. Materials submitted by the AML Program for OSM approval were of excellent quality. During EY-2006, New Mexico submitted NEPA packages and OSM issued a Finding of No Significant Impact (FONSI) and an Authorization to Proceed (ATP) for the Granite Gap, Lake Valley Phase-2, Madrid North, Oro Grande Phase-2 and Nesbit Hanover Projects. All submissions were found to be complete and adequately addressed all NEPA requirements. New Mexico has done a good job of project scheduling and every year has a list of projects that have received NEPA approvals from OSM and are ready for construction.

PART III. RESULTS OF ENHANCEMENT AND PERFORMANCE REVIEWS

The oversight workplan for EY-2006 identified two topics or principles for review:

Principle 1: On-the-ground reclamation is achieved in a timely, cost-effective manner;

Principle 2: Compliance with State procurement policies and the Federal Assistance Manual.

The goal of these principles is to evaluate the quality of on-the-ground reclamation work, to determine if the State is following its procurement process & federal contract requirements.

Because both the New Mexico Fiscal Officer AML and the OSM-AFO Senior Grants Specialist were heavily involved with transitioning to new financial systems (OSM's FBMS and New Mexico's SHARE both required substantial input of data and system testing), OSM decided to forgo Principle-2 evaluation for this year. However, this principle has been evaluated by OSM in the past and the no problems were identified.

In evaluating Principle 1, New Mexico AML and OSM inspected reclamation sites, grants files, NEPA Documents, and contract specifications. This year the AFO conducted site inspections of the La Madera (noncoal), Yankee Vukonich (coal) and Lumberton (coal) safeguard/reclamation projects. Representatives from the New Mexico AML Program sponsored and led OSM on the site inspection tours. No short or long-term problems were identified as result of the oversight inspections.

The New Mexico AML Program is a mature program, and past oversight has consistently documented high quality reclamation work. New Mexico AML Program staff and management maintained ongoing communication with OSM as needed throughout the evaluation period.

Principle No. 1 - On-the-ground reclamation –quality, accomplishments and cost-effectiveness.

There are no performance standards for AML reclamation set forth in SMCRA. OSM inspects field reclamation and may occasionally offer suggestions or recommendations. The New Mexico AML Program design engineer and Program Manager draw up detailed designs & contract specifications for all projects. No outside design consultants are hired or contracted. This fact, together with New Mexico's contract bidding procedures, ensure that high quality and cost effective reclamation is routinely achieved.

Inspections of Gold Hill, Lake Valley-Phase I, Sugarite-Phase IV & V (coal), La Madera (noncoal), Yankee Vukonich (coal) and Lumberton (coal) safeguard/reclamation projects, between July 1, 2005 and July 1, 2006, determined that reclamation work accomplished by the New Mexico AML Program, effectively safeguards the public. All reclamation sites inspected demonstrated that physical mine hazards posing a danger to people and wildlife were fully eliminated or safeguarded. All reclaimed landscapes appeared to be stable. Revegetation efforts were in place to not only control erosion but also seed mixes were designed to enhance and protect threatened or endangered wildlife as well as non-threatened species.

This finding is consistent with past oversight evaluations that concluded that reclamation work accomplished under the New Mexico AML Program is overall of excellent quality and environmentally sound. All NEPA documents reviewed were well written, concise, and appropriately addressed all environmental concerns to the satisfaction of OSM-AFO. FONSI's and ATP's were issued without delay for all project packages submitted for approval and funding.

Lumberton (during construction):

This project was inspected on May 30, 2006 while in the middle of the construction phase. Work consists of: 1) the excavation of six trenches and burying mine waste from adjacent gob piles; 2) closure of three partially open adits using mine waste and earthen material; 3) introducing soil amendments at four site locations; 4) installing straw wattles on various slope locations to control runoff; and, 5) seeding of all disturbed areas. The site contains six cultural / historic features with associated avoidance areas. The project will involve a total of approximately 8,300 cubic yards of earth moving.

La Madera (completed):

This project site is located about four miles north of La Madera in Rio Arriba County. The hazards being addressed stem from six abandoned mica (non-coal) mines that pose significant hazards to the public. The project safeguarded and reclaimed 16 mine features (11 mine openings were backfilled and another one was closed with a PUF closure, 4 adits were closed, one of which received a steel bat gate closure, disturbed areas were re-vegetated). The project started in September 2005 and was completed in July 2006.

Sugarite Gob Stabilization / Reclamation Project (Phase IV):

The multi-phase Sugarite AML Project is located just east of Raton, New Mexico within the Sugarite State Park. Huge volumes of coal gob (piles) exist at this site. Much of this material has been eroding into Chicoria Creek since the mine site was abandoned. The creek is situated right at the toe or base of the gob piles. Because the gob contains materials that are toxic to

plants, little vegetation was previously growing on the gob piles and rainfall runoff resulted in huge erosion ditches throughout the face of the gob piles. The volume of the gob piles is so large that hauling of gob to relocate the pile is not an option for reclamation. Also, the State Historic Preservation Division will not allow removal of the gob waste.

The AML Program has been working to stabilize the gob piles in place. Another goal of the project is to improve the safety of the visitors to the park. There are several gob piles on both sides of the steeply sloping canyon. The project has been ongoing since 1998 and is being done in phases. Each phase addresses stages of reclamation work and different gob piles located in the canyon. The AML Program received the OSM Western Regional AML Reclamation award and the Peoples Choice Award in 2002, for this project.

In July 2005 (the start of EY-2006), work was still ongoing for Sugarite-Phase IV on the west side of the canyon and construction for Phase V had just started. Phases IV and V are the steepest slopes for the project so far. Soil amendments are worked in by hand and the overall project is mostly done by hand. Some areas are acidic and some areas the gob is sodic. Seedlings and hydro seeding were used to establish vegetation on the gob piles. The seed mix and seedlings used primarily consist of plants natural to the area. Archaeological avoidance areas exist on the site and are properly flagged & protected. The reclamation technique also includes straw bale and coir-roll terraces, branch packing using 4 to 7 ft. long branches mostly consisting of conifer trees hauled in from a nearby ranch.

Phases IV and V of the project are on the East side of the canyon with east facing slopes. The entire area experienced a 100-year storm event in 2004 and heavy snow storms. This unusually high precipitation has caused some erosion of the site and has impacted the reclamation work in some areas. On the other hand, the combination of high rainfall and soil amendments added to the gob material, has resulted in rapid establishment of seedlings and other vegetation on the steeply sloping embankments. Early in the project, the New Mexico AML Program conducted research on some small plots to compare revegetation success. This research showed that high volumes of mulch substantively improved vegetation efforts largely due to increased water absorption and retention. In some of the reclaimed areas, revegetation success has exceeded expectations; especially in areas where woodchips and mulch were incorporated into the gob material (see photos in appendix). Consequently, the soil amendments have been adjusted accordingly to increase the amount of mulch.

Overall, the reclamation technology being applied at the site is proving to be effective. Erosion would have been considerably worse if not for the reclamation of branch packing in the erosion channels, straw bale and coir roll terraces, and the overall revegetation of the site. Reclamation for the most part appears to be keeping erosion in check. Branch packing is catching the eroded gob material as planned in the designed and is keeping the gob on site. The hope is that the branch packing should eventually stabilize the deeply incised erosion channels so that vegetation can be established in the drainages.

Phase V involves the planting and maintenance (for 6 months) of approximately 12,600 seedlings, hydro-seeding using a bonded fiber matrix. The survival rate for the seedlings on early phases is estimated at 65%.

Yankee-Vukonich Coal Reclamation Project:

This coal reclamation project is in a canyon approximately one mile east of the Sugarite Project in northern New Mexico (approximately 8 miles east of Raton). Six coal piles were stabilized and two small mine opening was closed by the project in 2004. The survival rate for the seedlings and revegetation on the gob piles estimated to be a 62% survival rate.

The abandoned mine site was littered with mining debris. The debris was also cleaned up as part of the reclamation work. Approximately ¼ mile of arroyo that contained coal mine waste material was reclaimed and a roadway was relocated in certain locations next to the channel. The existing drainage pattern was damaged by past mining so New Mexico AML restored the natural sinuosity of the channel. In addition, steep slopes surrounding the channel were stabilized and revegetated. Construction on the stream channel and access road started in May 2005 and was completed in August 2005. Vegetation is coming in quite well due to lots of rainfall.

Gold Hill:

An oversight inspection of this noncoal reclamation project was conducted in June 2005. This noncoal site is located about five miles north east of Lordsburg, New Mexico on U.S. Forest Service land. It consists of about 14 different mine sites containing 18 adits, 13 shafts, and four miscellaneous features, all of which pose hazards to the public. The area is hot, arid desert with lots of yucca and cacti. The project has time restrictions imposed due to the presence of bats and bat habitat. Construction work was limited to March 1'st through May31'st and from September 1'st through October 1'st.

Twelve adits on the bench area were reclaimed, half of them were backfilled the others had culvert type bat-gate closures. Another three adits were reclaimed at the bottom of the hillside. A total of 26 mine features were backfilled, six bat grates were installed inside of culverts; a weathering steel bat cupola was installed on one adit; a polyurethane foam plug closure was installed on one adit; and all disturbed areas were reseeded.

PART IV. AML INVENTORY STATUS & NEW MEXICO'S NEW INHOUSE DATABASE

Because very little surface coal mining occurred in the State prior to SMCRA, most reclamation work involves the reclamation of underground mine hazards. Although the acreage associated with underground mining is small relative to surface mining, the numbers of hazards encountered are high and the danger associated with these hazards is extreme. The New Mexico AML Program often refers to abatement of hazards such as mine openings and shafts and the removal of hazardous structures and facilities as "safeguarding" of the site.

The AMLIS database contains an inventory of priority 1, 2, and 3 hazards associated with abandoned coal mines and a list of non-coal abandoned mines that have been funded (or completed). As previously mentioned in this report, EY-2005 accomplishments are reported in this EY-2006 annual evaluation report and EY-2006 accomplishments will be reported in the

EY-2007 annual evaluation report. I.e., all future AMLIS entries will be reported one year out of phase.

The following tables show AMLIS accomplishments for EY-2005 and cumulative accomplishments to date as of the end of EY-2005. EY-2006 data will be reflected in next year's tables of the 2007 annual evaluation report.

Table 1
New Mexico AML Reclamation Program
EY-2005 Accomplishments¹

Problem Type and Description	Completed EY-2004	Costs
Benchs	0.0 acres	\$0.
Clogged Stream Lands	1.0 miles	\$192,092.
Dangerous Highwalls	0.0	\$0.0.
Dangerous Impoundments	0 (count)	\$0.
Dangerous Piles & Embankments	0.0	\$0.
Dangerous Slides	0 acres	\$0.
EF-Equipment/Facilities	4 (count)	\$9,000.
Gasses: Hazardous / Explosive	0 (count)	\$0.
Gob (coal piles)	6.0 acres	\$340,091.
Highwalls	0 feet	\$0.
Hazardous Equipment & Facilities	0 (count)	\$0.
Haul Roads	1.0 acres	\$5000.
Industrial/Residential Waste	0 acres	\$0.
Mine Openings	0.0 (count)	\$0.0.
Other	0 (count)	\$0.
Portals	38 (count)	\$163,052.
Pits	0.0 acres	\$0.
Polluted Water: Agric. & Indust.	0 (count)	\$0.
Subsidence	0.0 acres	\$0.
Spoil Areas	7 acres	\$32,982.
Surface Burning	0.0 acres	\$0.
Slurry	0.0 acres	\$0.
Underground Mine Fires	0.0 acres	\$0.
Vertical Openings	92 (count)	\$421,782.
Water Problems	0 (count)	\$0.
NEW MEXICO TOTAL COSTS		\$1,164,000.

Note: This table is based on a Problem Type Unit and Cost Detail Report from the Abandoned Mine Land Inventory System. Neither AMLIS nor this table contains an inventory of un-reclaimed non-coal hazards.

¹ Table does not include all EY-2006 AMLIS Data. Because some 2005-2006 construction projects were still ongoing as of June 30, 2006, EY-2006 accomplishments will be included in the 2007 Annual Evaluation Report.

Table 2
New Mexico Abandoned Mine Reclamation Program
“Cumulative” AML Reclamation Accomplishments as of June 30, 2005

Problem Type and Description	Completed to Date	Costs
Benches	3.0 acres	\$7,301.
Clogged Stream Lands	1.0 miles	\$436,604.
Dangerous Highwalls	0 feet	\$35,100.
Dangerous Impoundments	0 (count)	\$0.
Dangerous Piles & Embankments	8.5 acres	\$368,900.
Dangerous Slides	0 acres	\$0.
EF-Equipment/Facilities	12 (count)	\$31,635.
Gasses: Hazardous / Explosive	0 (count)	\$56,563.
Gobs	118.0 acres	\$3,136,286.
Highwalls	0 feet	\$0.
Hazardous Equipment & Facilities	17 (count)	\$119,467.
Haul Roads	6.0 acres	\$35,300.
Hazardous Water Bodies	0.0 acres	\$0.
Industrial/Residential Waste	0 acres	\$0.
Mine Openings	4 (count)	\$122,140.
Other	0 (count)	\$163,052.
Portals	466 (count)	\$1,923,891.
Pits	2.0 acres	\$3,890.
Polluted Water: Agric. & Industrial	4 (count)	\$13,400.
Polluted Water: Human Consumption	1 (count)	\$34,710.
Subsidence	36.6 acres	\$4,617,644.
Spoil Areas	257.0 acres	\$128,944.
Surface Burning	35.0 acres	\$760,406.
Slurry	2.0 acres	\$421,782.
Underground Mine Fires	168.0 acres	\$234,983.
Vertical Openings	768 (count)	\$3,708,667.
Water Problems	0 (gal./min.)	\$0.
NEW MEXICO TOTAL COSTS		\$16,360,665.00

Note: This table is based on a Problem Type Unit and Cost Detail Report from the Abandoned Mine Land Inventory System. Neither AMLIS nor this table contains an inventory of un-reclaimed non-coal hazards. Non-coal hazards in New Mexico are not all inventoried in AMLIS. New Mexico AML estimates that an additional 2,000 un-reclaimed portals and 14,000 vertical openings exist in New Mexico that still require safeguarding (hazard abatement / reclamation).

PART V. Summary and Recommendations:

OSM considers the New Mexico AML Program to be an exemplary Program. OSM's review determined that the New Mexico AML Program is doing excellent reclamation and safeguarding work. The New Mexico AML Program makes cost-effective use of its AML funds while achieving quality reclamation. Attention is paid to details, contractors are required to fulfill all contract specifications in the field, and NEPA compliance is fully satisfied both prior and during construction. In conclusion, all reclamation work is of high quality, timely, and consistent with contract specifications.

OSM views the New Mexico AML Program as a State partner in meeting mutual environmental goals and challenges. The Program has always been willing to provide assistance to other State and Tribal Programs and has established a cooperative, productive relationship with OSM. The New Mexico AML Program is an active member of the Southwest AML Partnership which functions to assist, educate and share resources in an effort to accomplish more with their limited AML funds.