OFFICE OF SURFACE MINING ANNUAL EVALUATION REPORT for the New Mexico Abandoned Mine Land Reclamation Program Evaluation Year 2004 (July 1, 2003 through June 30, 2004)

> Cover Photo: Bat Cupola Over Deep Shaft Orogrande Mine Safeguard Reclamation Project Orogrande, New Mexico (AML Design Engineer, John Kretzmann)

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, 2003 and ending June 30, 2004.

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 Regional Coordinating Center's (WRCC) Albuquerque Field Office (AFO) through its oversight process, annually monitors the progress and quality 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, 2003 and ending June 30, 2004. In summary, the New Mexico AML Program is an excellent and well managed State Program. The New Mexico AML Program has consistently received outstanding evaluations in the past. OSM did not make any recommendations for improvement as a result of this year's oversight activities.

This year's oversight activity involved the following personnel:

<u>NM-AML</u> Robert Evetts Randall Armijo John Kretzmann Mary White Dina Vigil Lloyd Moiola Pam Perea <u>OSM-AFO</u> 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.

As previously reported, New Mexico's demographics are gradually changing. This has caused hazards once considered to be remote, to now be easily accessible, and thus could change the SMCRA priority (hazard classification) for those sites. This trend is continuing and has had a notable impact on the reclamation priorities of the New Mexico AML Program.

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.). Much of this public land is where the highest concentration of AML hazards occur. Public land is increasingly being developed for open space public recreation such as camping, biking, hiking, campgrounds, etc.

The state of New Mexico has a long mining history. One of the oldest existing (safeguarded with fencing but un-reclaimed for historical purposes) 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.

Based on the cost estimates reflected in OSM's AMLIS database as of July 2004, New Mexico has completed \$6,171,249 in high priority coal problems an additional \$267,150 worth of the inventory has been funded for reclamation and \$3,363,000 remains unfunded. However, New Mexico estimates that the AMLIS database seriously underestimates the cost of reclamation in 2004 dollars. The state estimates that the true cost would be closer to \$13.5 million. In addition, New Mexico believes that a more current and exhaustive inventory of AML sites would substantially add to the workload already listed in AMLIS. New Mexico estimates that if one were to add administrative and project development costs to the above construction cost estimate, 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 current staffing (8 FTE's, including 1 vacant position) 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 in its AMLIS inventory.

Historically, much of the New Mexico AML Program's reclamation work has involved abandoned coal mines. As the State continues to reclaim the high priority coal hazards in its inventory, resources will also be directed toward safeguarding equally hazardous abandoned "non-coal" mine sites in its inventory that are also eligible for safeguarding and reclamation under the Surface Mining Control and Reclamation Act of 1977 (SMCRA).

Program Staffing:

The New Mexico AML Bureau is under the New Mexico Mining and Minerals Division, of the New Mexico Energy, Minerals and Natural Resources Department. The AML Program consists of eight full time employees plus the equivalent of one additional support staff within the Mining and Minerals Division. Three of these positions cost share with other programs in the Division. Annual salaries in 2004 for the AML Bureau total \$456,788 plus benefits. All of the AML staff work out of the New Mexico AML Office, Energy and Minerals Department located at 1220 South Saint Frances Drive, Santa Fe, New Mexico. The AML Bureau has had an average staffing level of 9 FTE's during the past 24 years. AML construction contracts are estimated to have created numerous jobs during that period, thus having improved the overall economy of the State and perhaps of some communities.

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. From January 30, 1978, when the first fees were paid, through March 31, 2004, the fund has collected \$6,941,102,999.75 and fund appropriations totaled \$5,493,809,291.42.

Between \$3 to \$5 million in AML fees are collected annually from active coal production in New Mexico. New Mexico coal producers have paid approximately \$106,192,713 in coal fees since 1977 when AML fee collection first began. State Share (50%) collections for this amount would therefore be \$53,096,356. However, State Share distributions thus far have only totaled \$32,695,400. The difference, \$20,400,956.21, is the undistributed State Share balance (as of September 30, 2003) for New Mexico. As of March 31, 2004 the undistributed State Share balance had dropped slightly to \$19,745,790.66. Figures as of the end of the evaluation period (June 30, 2004) are not yet available. [As a minimum program state, New Mexico occasionally receives a small percentage of federal share money. For example, New Mexico received \$193,742.00 in federal share distributions for 2004.]

The New Mexico AML Program receives grant funding of about \$1.5 to \$1.8 million annually. These grants include administration, construction and future set-aside sub-accounts. New Mexico estimates that actual administrative costs average 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 inhouse. This accounts for some of the cost effectiveness of the Program.

Grants and Financial Information:

According to data published on OSM's Web Page, the undistributed State Share Balance for New Mexico as of September 30, 2003 was \$20,400,956.00. State Share Balance data for the end of the evaluation period (June 30, 2004) is not yet published and available.

Grant Number	Grant Period	Amount
GR107350	07/01/01 to 06/30/04	\$2,303,941.
GR207350	07/01/01 to 06/30/05	\$3,536, 930.
GR307350	07/01/03 to 06/30/06	\$1,814,300.
GR407350*	07/01/04 to 06/30/007	\$1,779,448

The following AML grants were active during the evaluation period:

* GR407350 is effective July 1, 2004.

PART II. PROGRAM ACCOMPLISHMENTS

Overall Program Accomplishments to Date:

New Mexico AML has funded or completed 155 AML Projects (this year added Abbe Springscopper, Sugarite Phase IV-coal, Bogg Canyon-noncoal and Spar Group-non coal) since the beginning of the Program. Approximately 78 of the 155 projects were coal and 77 were noncoal. This split coincides with the ratio of coal to non-coal in the State. Like most 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. Recent fatalities have placed a lot of attention and emphasis on the AML Program and have forced the Program to focus attention on several noncoal 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.

Having completed 155 AML reclamation projects to date, New Mexico AML has closed or safeguarded more than 3100 hazardous mine features. Among these were some of the most hazardous features (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 155 reclamation projects completed to date have certainly had a positive environmental effect on much of 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.

Summary of Project Workload During EY-2004:

During this evaluation year, the following projects were either completed or in some phase of project development. 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 in EY-2004:				
Lake Valley Phase-1	Invitation for Bids issued			
[BLM Land]				
Lake Valley Phase-2 [Private Land]	(Contract awarded for archaeological surveys)			
Lumberton (coal)	(Plans are being finalized -Safeguard of 4 portals & reclamation of 6 gob piles)			
Abbe Springs Safeguard Project	(Completed safeguarding of 2 VOs)			
Bogg Canyon Safeguard Project	(Completed safeguarding of 2 adits)			
Bradley Group	(Project Development)			
Cerrillos South Reclamation Project	(Completed 280 ft. highwall, 18 closure structures,			
	3 acres haul road, 19 adits, 1 portal, 47.5 acres spoil, 86 Vos)			
Derry I-25 Safeguard Maintenance Project	(Backfill of vertical shaft near I-25)			
Gallup,NM	(Subsidence maintenance.)			
Real de Delores Safeguard Project	(Final inspection August 21, 2003.)			
Spar Group	(Completed, 6 adits, 35.5 acres of spoil piles, 24 VOs)			
Sugarite IV Reclamation Project (coal)	(Completed, 1 mile clogged stream, 1 acre dangerous embankments, 6.5 acres gob, 1 haul road)			

AML Reclamation Projects in Construction or Completed in EY-2004:

Yankee-Vukonich Reclamation Project (coal) (6 coal piles on 4 acres, restore ¹/₂ mile of arroyo)

AML Sites in Project Development:

Black Jack Mine	Design
Bradley Group	Design
Burro Peak	Archaeological surveys
Dillon Canyon (coal)	Realty & Mapping work
Galesteo West	Realty work, Archeological surveys
Gold Hill	IFB, Pending US Forest Service Approval
Granite Gap	Archaeological Surveys
La Madera	IFB, Pending US Forest Service Approval
Madrid North Gob	Shafts to be safeguarded, community does not want gob-
	piles disturbed
Mogollon Road	In project development for some time due to a right-of-way issue
Orogrande-Phase II	Archaeological Surveys
San Pedro	Archaeological Surveys
Steins North & South	Aerial mapping
Stephenson / Bennett Adit	(Completed, BLM funded project)
Sugarite-Phase V	(Next phase of coal gob pile reclamation project)
Tres Hermanos	(Pvt. non-coal w/ active claims, so NM may drop this project.)

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 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. This year New Mexico submitted NEPA packages and OSM issued a Finding of No Significant Impact (FONSI) and an Authorization to Proceed (ATP) for the Abbe Springs, La Madera, Lake Valley and Lumberton reclamation projects. All submissions were found to be complete and adequately addressed all NEPA requirements.

Program Awards & Recognition:

OSM nominated the New Mexico AML Bureau for the 2004 Heritage Preservation Award sponsored by the New Mexico Department of Cultural Affairs, Historic Preservation Division. OSM's nomination was based upon the New Mexico's AML Bureau's high regard for cultural and historic values and resources as exhibited in its ability to work with State and civic groups in designing reclamation projects that consider the varied interests of all parties. Although the Bureau was not selected to receive the award this year, OSM's nomination serves as recognition that the Bureau's is held in high esteem by the OSM-AFO for its quality of work as exhibited by past efforts and achievements in the area of historic preservation.

The New Mexico AML Bureau was selected to receive the OSM Regional AML Reclamation Award for the Cerrillos Reclamation Project. The award will be officially presented to the New Mexico AML Program at the National Association of AML Programs in Flagstaff, Arizona in September 2004.

PART III. RESULTS OF ENHANCEMENT AND PERFORMANCE REVIEWS

The oversight workplan for EY-2004 identified two topics or principles for review. 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. In evaluating these principles, New Mexico AML and OSM inspected various reclamation sites and reviewed contract/procurement files, grants files, NEPA Documents, and contract specifications.

This year the AFO conducted site inspections of Orogrande, Stephenson-Bennett, Derry, Fluorite Ridge and the Spar Group mines in Southern New Mexico. AFO also inspected contract / procurement files at the New Mexico AML office in Santa Fe, New Mexico. 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 - <u>On-the-ground reclamation –quality, accomplishments and cost-</u> 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 makes up detailed designs & contract specifications for its projects. This together with New Mexico's contract bidding procedures ensure that high quality cost effective reclamation is achieved at a reasonable cost. The New Mexico State Legislature also adopted a performance-based budget plan, which requires targets and measurable outcomes.

Inspections of four projects in southern New Mexico this year showed that reclamation work accomplished by the New Mexico AML Program, is accomplished in a manner that minimizes the need for maintenance, promotes landscape stability, establishes vegetation and enhances or protects threatened and endangered wildlife. This finding is consistent with past oversight evaluations that concluded that reclamation work accomplished under the New Mexico AML Program overall is of excellent quality and environmentally sound. Most importantly, physical mine hazards to people and wildlife are effectively eliminated or safeguarded from posing a danger to the public.

In making this determination OSM conducted on-site inspections of the Orogrande, Stevenson Bennett, Derry, Fluorite Ridge and Spar Group mine reclamation Projects. The Sugarite Gob project was not inspected this year but was inspected in 2003.

Sugarite Gob Stabilization / Reclamation Project (Phase IV):

This year work was ongoing for Sugarite, Phase IV on the west side of the canyon. OSM did not inspect the project this year as the project has been inspected several times in previous years.

This AML site 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 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. The AML Program has been working to stabilize the gob piles in place. 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.

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 5 miles east of Raton). The Yankee-Vukonich Coal Reclamation Project will reclaim six coal piles situated on four acres and will also restore approximately one half mile of arroyo that contains coal waste material. The existing drainage pattern was damaged by past mining. Erosion has damaged the access road to a home in the area and continues to erode coal fines into the downstream drainages. The site is also littered with mining debris that will be cleaned up by the reclamation. A small mine opening of unknown length exists near the home site that will be closed by the project. The project was inspected by OSM prior to reclamation on September 19, 2003. New Mexico AML Program initiated construction in the summer of 2004 and construction should be completed in August 2004. OSM will inspect the completed project in EY-2005.

Orogrande Project:

New Mexico AML Program completed the first phase of an anticipated multi-phase project this year. The work included backfilling of 18 abandoned adits, 19 shafts and one (1) winze. Bat compatible closures were installed at eight (8) adits and five (5) shafts, allowing for airflow. Horizontal bat closures were installed at two shafts and steel bat cupolas were constructed at three shafts. Polyurethane foam closures were used at other openings where adequate backfill was not readily available. The hazards safeguarded include a 200-foot deep shaft, which was the site of a mine fatality in March of 2000.

Spar Group Mine Safeguard Project:

This project is located in southern New Mexico 10 miles southeast of Deming, in Luna County. Mining consisted of feldspar and perhaps some metals. The project consists of safeguarding and reclaiming 28 hazardous mine openings. The hazards were eliminated by means of backfilling or installing steel closures compatible with existing owl and bat habitats. An excellent job was done with the steel closures to safeguard this site while restricting access by the public.

Stevenson Bennett Safeguard Project:

This site is on private farm land. The project involved grading and stabilization and the installation of a drainage outlet upgraded from the original outlet structure. The upgrade is a pipe array plug outlet that consists of numerous pipes set together to form a larger opening. The structure provides for drainage from the mine workings while preventing access into the workings. The drainage structure feeds into an existing arroyo. The project was completed by New Mexico AML Program however it was funded by the Bureau of Land Management (BLM).

Derry Mine Reclamation & Safeguard Project:

This is an abandoned magnesium mine on BLM land. New Mexico AML funded the project. The site was re-graded to remove waste piles and to control drainage. At the time of the inspection vegetation efforts appeared to be working. The seed mix included white thorn acacia, and cactus pad transplants.

Fluorite Ridge:

This is an abandoned fluorspar mine called the Lucky Mine. A huge vertical opening was addressed years ago by reclamation of the site. The opening was closed using an inverted cone wedge constructed of concrete and steel that was covered with approximately three feet of fill material. A 500-foot deep open-stope was also reclaimed by backfilling the huge opening. The backfill keeps settling and the New Mexico AML Program added backfill to the surface for the third time in the fall of 2003 to address the settling that is occurring. Each time the amount of settling decreases. New Mexico AML monitors the site for settling and maintenance needs. In addition, for additional safety, they have fenced off the site with chain link fencing.

Principle No. 2 – <u>Compliance with State procurement policies and with the</u> Federal Assistance Manual (FAM).

OSM is required by the FAM to periodically review internal controls associated with procurement activities, to prevent waste, fraud and abuse of federally funded programs. This grants administration element was selected for review by NMMD and AFO because the AML construction sub-account provides the largest OSM Federal Grant funding outlay(s), and therefore is most vulnerable to waste, fraud and abuse of Federal funds. New Mexico AML must comply with their AML Plan and the OSM Federal Assistance Manual in administering procurement activities with Federal grant funds. The New Mexico AML Program under the Energy and Minerals Department is the responsible entity for administering OSM grant agreements and procurement under their approved Program.

It has been four years since OSM evaluated New Mexico's compliance with procurement policies and procedural requirements. To perform this review two completed AML reclamation project contracts were randomly selected for review, the Cerrillos South Reclamation Project and the Real de Delores Safeguard Project. The review was performed by an onsite visit to the NMMD – Abandoned Mine Land Bureau offices in Santa Fe, NM on July 15, 2004. The OSM-AFO Grants Specialist and the AML Program Specialist interviewed several personnel involved in grants administration, project design, project management, contractor selection, construction management and contract management including: Mary White, John Kretzmann, Dina Vigil, Pamela Perea, Lloyd Moiola, and Randall Armijo.

According to the New Mexico AML staff, the administrative process has several internal controls built into it to ensure compliance with policies and procedures. Although the procurement process takes a lot of time, circumventing or further streamlining any of the procurement process steps would not be in the best interest of the NMMD-AML Bureau. OSM's review of the two randomly selected project procurement files did not reveal any program deficiencies with regard to contract requirements in the FAM or with regard to State policies and procedures. The conclusion reached is that all New Mexico procurement policies and the OSM Federal Assistance Manual are being followed. Although it has been a while since OSM evaluated this topic in oversight, New Mexico AML activities are still in compliance.

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. Reclamation performed by the AML program has predominately returned the land to its pre-mining land use of grazing; incorporated other post-reclamation land uses, such as wildlife enhancement, into its designs; and has effectively eliminated dangers to public health and safety.

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). The following tables show AMLIS accomplishments for EY-2004 and cumulative accomplishments to date.

New Mexico has been working on developing its own in-house AML database for State use. The New Mexico database incorporates capabilities and information fields that exceed the capabilities of the AMLIS database. The database includes all mines worked on, inventory of abandoned mine hazards, GPS coordinate data, bat cupolas, important letters and correspondence, realty information on land and mineral ownership, information for both current and historic projects, it has map generating capabilities and query and search capabilities and it can be accessed by State personnel from the field. The database is expected to be fully functional and on line by the end of 2005. This is an important accomplishment for the Energy, Minerals and Natural Resources Department. The Database is expected to be proprietary and New Mexico AML Program will be the clearinghouse for qualifying data for input.

Problem Type and Description	Completed EY-2004	Costs
Benchs	0.0 acres	\$ 0.00
Clogged Stream Lands	1.0 miles	\$ 134,512.00
Dangerous Highwalls	280 feet	\$ 35,100.00
Dangerous Impoundments	0 (count)	\$ 0.00
Dangerous Piles & Embankments	1.0 acres	\$ 18,900.00
Dangerous Slides	0 acres	\$ 0.00
EF-Equipment/Facilities	18 (count)	\$ 9,000.00
Gasses: Hazardous / Explosive	0 (count)	\$ 0.00
Gob (coal piles)	6.5 acres	\$ 426,047.00
Highwalls	0 feet	\$ 0.00
Hazardous Equipment & Facilities	0 (count)	\$ 0.00
Haul Roads	4.0 acres	\$ 28,000.00
Industrial/Residential Waste	0 acres	\$ 0.00
Mine Openings	25 (count)	\$ 115,000.00
Other	0 (count)	\$ 0.00
Portals	3 (count)	\$ 8,800.00
Pits	0.0 acres	\$ 0.00
Polluted Water: Agric. & Indust.	0 (count)	\$ 0.00
Subsidence	0.0 acres	\$ 0.00
Spoil Areas	79 acres	\$ 8,643.00
Surface Burning	0.0 acres	\$ 0.00
Slurry	0.0 acres	\$ 0.00
Underground Mine Fires	0.0 acres	\$ 0.00
Vertical Openings	112 (count)	\$ 576,353.00
Water Problems	0 (count)	\$ 0.00
NEW MEXICO TOTAL COSTS		\$ 1,360,355.00

Table 1New Mexico AML Reclamation ProgramEY-2003 Accomplishments

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.

Table 2
New Mexico Abandoned Mine Reclamation Program
Cumulative AML Reclamation Accomplishments YTD

Problem Type and Description	Completed to Date	Costs
Benches	3.0 acres	\$ 7,301.00
Clogged Stream Lands	1.0 miles	\$ 244,512.00
Dangerous Highwalls	0 feet	\$ 35,100.00
Dangerous Impoundments	0 (count)	\$ 0.00
Dangerous Piles & Embankments	8.5 acres	\$ 368,900.00
Dangerous Slides	0 acres	\$ 0.00
EF-Equipment/Facilities	12 (count)	\$ 22,635.00
Gasses: Hazardous / Explosive	0 (count)	\$ 56,563.00
Gobs	118.0 acres	\$ 2,796,195.00
Highwalls	0 feet	\$ 0.00
Hazardous Equipment & Facilities	17 (count)	\$ 119,467.00
Haul Roads	6.0 acres	\$ 30,300.00
Hazardous Water Bodies	0.0 acres	\$ 0.00
Industrial/Residential Waste	0 acres	\$ 0.00
Mine Openings	4 (count)	\$ 122,140.00
Other	0 (count)	\$ 0.00
Portals	466 (count)	\$ 1,923,891.00
Pits	2.0 acres	\$ 3,890.00
Polluted Water: Agric. & Industrial	4 (count)	\$ 13,400.00
Polluted Water: Human Consumption	1 (count)	\$ 1,728.00
Subsidence	36.6 acres	\$ 4,617,644.00
Spoil Areas	257.0 acres	\$ 128,944.00
Surface Burning	35.0 acres	\$ 760,406.00
Slurry	2.0 acres	\$ 1.00
Underground Mine Fires	168.0 acres	\$ 234,983.00
Vertical Openings	768 (count)	\$ 3,708,667.00
Water Problems	0 (gal./min.)	\$ 0.00
NEW MEXICO TOTAL COSTS		\$ 15,203,963.00

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's review did not raise any major concerns with regard to New Mexico AML Program efficiency. OSM considers the New Mexico AML Program to be an exemplary Program. 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 timely cooperation of the management and staff of the New Mexico AML Program was instrumental in producing this final report. The New Mexico AML Program is an active member of the Southwest Partnership of AML Programs that function to assist and educate each other and to share resources in an attempt to make more cost effective reclamation programs.

The New Mexico AML Program makes cost-effective use of its AML funds while achieving quality reclamation. Construction work accomplished by the New Mexico AML Program is done under contract through competitive open bid, wherein all bids are publicly opened and contracts are awarded to the lowest responsible bidder. Both open competition and sound project designs ensure that all reclamation work is cost-effective.

Field oversight inspections have confirmed that effective monitoring of contractors by New Mexico AML ensures that all reclamation work is of high quality, timely, and consistent with contract specifications. Reclaimed sites require little maintenance, with the exception of repairing infrequent damage due to vandalism. New Mexico's overall use of AML funds during this evaluation period is consistent with the priorities identified in SMCRA.

New Mexico is to be commended for excelling in its initiative to protect bat populations by its innovative design closures.

The AML Program is commended for constructing a Five-year Action Plan (2003-2008) that should increase the number of abandoned mine land projects completed during the first and second years of the three-year grant periods. The plan includes the development of a "fast track list," an expanded "routine prioritized list" that should improve operational efficiency and on-the-ground results. In addition, the action plan includes a section for self-evaluation of reclamation effectiveness in both short-term and long-term results.

The newly developed New Mexico AML database is considered to be a major accomplishment for the Program. It will serve to improve productivity and cost efficiency over the long term and is scheduled for full deployment in late 2005. In addition, the database will prove to be useful to other Departments / Bureaus within the State by providing accurate and timely information for areas where mine reclamation projects occur and for those not reclaimed but in the database as part of the state inventory. OSM applauds the New Mexico Program for its efforts and initiative in developing the coal / non-coal database.