

**OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT
ANNUAL EVALUATION SUMMARY REPORT
FOR THE
ABANDONED MINE LANDS PROGRAM**



**CROW TRIBE
EVALUATION YEAR 2007
(July 1, 2006 though June 30, 2007)**

September 5, 2007

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ABANDONED MINE LANDS 2007 ANNUAL REPORT FOR CROW TRIBE

Part I. Introduction

Evaluation of the tribal reclamation program is conducted by the Casper Field Office (CFO) of the Office of Surface Mining Reclamation and Enforcement (OSM). The 2007 evaluation period started on July 1, 2006 and concluded June 30, 2007. Evaluation methods are based upon OSM Directive AML-22 and a Performance Agreement (PA) between the Tribe and OSM. This agreement incorporates a shared commitment by the Tribe and OSM in determining how annual evaluations will be conducted. The Tribe takes an active role in the entire evaluation process. The process is designed to evaluate whether the Tribe, through its Abandoned Mine Land Reclamation (AMLR) program, is achieving the overall objective of Section 102 of the Surface Mining Control and Reclamation Act (SMCRA) which states that AMLR programs are to:

"... promote the reclamation of mined areas left without adequate reclamation prior to the enactment of this Act and which continue, in their unreclaimed condition, to substantially degrade the quality of the environment, prevent or damage the beneficial use of land or water resources, or endanger the health or safety of the public ..."

As a result of the PA, specific topics were identified for review and review methodologies were developed for the evaluation period, in concert with the Tribe. The review methodologies are described in detailed oversight work plans, developed for the review of each specific topic. The reviews were designed to result in an overall measure of the Tribe's success in achieving planned reclamation goals. By focusing on end results, OSM is able to determine the root causes of problems (if any) and concentrate its resources on prevention by providing assistance to the Tribe for any needed program improvement. The specified topics selected for review were those identified by OSM and the Tribe from past experience which have the most potential for preventing the Tribe from achieving their planned reclamation goals. At the end of the evaluation period, OSM prepared this annual report and gave the Tribe the opportunity to comment on its contents.

Part II. General Information on the Crow Program

SMCRA created OSM within the Department of the Interior to oversee the regulation of coal exploration and surface coal mining and reclamation operations and the reclamation of lands adversely affected by past mining practices. SMCRA provides that, if certain conditions are met, a State may assume primary authority for the reclamation of abandoned mine lands within its borders.

Because legislation for Tribes did not exist, a supplemental appropriations bill (Public Law 100-71) was enacted on July 11, 1987, to amend SMCRA and to authorize the Crow, Hopi, and Navajo tribes the right to obtain the Secretary of the Interior's approval of the AMLR programs without first having regulatory programs as required by Section 405 of SMCRA. Once a Tribe has an approved AMLR program, OSM has responsibility to make investigations, evaluations, and inspections necessary to determine if the Tribal program is being administered in accordance with approved program provisions. The Crow AMLR Program was approved by OSM on January 4, 1989. The Tribe established a Crow Office of Reclamation (COR) to

administer its abandoned mine land program.

The Crow Reservation, an area approximately 2,226,000 acres, is located in south-central Montana adjacent to the Wyoming border. Adjoining the reservation to the north is the 1,100,000 acre Crow Ceded Area, where the Crow Tribe of Indians holds extensive mineral rights. Prior to 1904, the Ceded Area was a part of the reservation. Congress required the Tribe to return the surface rights of the area to the United States through legislation enacted in 1904. The surface was then acquired by non-Indians. The Tribe retained ownership to the minerals, and has AMLR reclamation jurisdiction for the Ceded Area.

Numerous small abandoned mines are located on the reservation and the Ceded Area. Historically, coal was mined for local domestic use by residents of the area. Prior to the effective date of SMCRA, coal mining on the Crow reservation resulted in hazards relating to abandoned equipment and facilities and unreclaimed subsidence, vertical openings, portals, highwalls and impoundments. Unreclaimed environmental problems consisted of spoil piles, pits, gob piles, haulroads, and minor highwalls. Three deaths and six injuries are known to have occurred in association with abandoned mines. No deaths or injuries have occurred in recent years.

The Tribe concentrates its reclamation efforts on low priority coal sites due to the Tribe's inability to obtain access to the few remaining high priority coal sites on the Ceded Area. Landowners where the sites are located have denied access for various reasons. The Tribe continues to work with these landowners in an attempt to obtain consensual access. As a result, all accessible high priority sites on the Ceded Area have been reclaimed.

All reclamation funds to support the Tribe's program are generated from the one active mine located in the Ceded Area. During Calendar Year 2006, production from this mine was approximately 6.755 million tons. The FY2007 allocation to the Tribe was \$523,896 of Tribal share AML funds. This level of funding qualifies the Tribal program as a minimum program under SMCRA. Normally this would have resulted in a supplement of Federal Share funds of up to \$1.5 million if sufficient high priority coal projects existed on the Abandoned Mine Lands Inventory System (AMLIS). In past years, the Tribe has received and accumulated supplemental funds from the Federal share sufficient to reclaim all remaining hazardous abandoned coal mine related problems recorded in AMLIS. Therefore no additional Federal share funds were provided to the Tribe in the FY 2007 allocation.

The COR Abandoned Mine Lands Program (AMLPL) administrative staff is made up of 3.55 full time equivalent employees. This staff is responsible for the direction of all construction activities as well as all administrative functions of the program. To assure an acceptable level of control, OSM in their approval of the Crow Tribe AMLR program, required that the administrative functions such as grant application preparation, progress report preparation, payroll, procurement, property management, and all financial activities be separate from the Tribal systems.

All construction to date has been accomplished by manual labor using hand tools. During past evaluation years, the AML program has been a major employer on the reservation, hiring as many as 60 laborers and foremen. Due to decreased numbers of old abandoned coal mine sites and the inaccessibility to some, the number of construction sites was limited, resulting in a reduction of employment to approximately 28 laborers and foremen during this evaluation year. The construction season began in April and will continue through November.

The following is a list of acronyms used in this report:

AML Abandoned Mine Land

AMLIS	Abandoned Mine Land Inventory System
AMLP	Abandoned Mine Land Program
AMLR	Abandoned Mine Land Reclamation
COR	Crow Office of Reclamation
CFO	Casper Field Office
OIG	Office of the Inspector General
OSM	Office of Surface Mining
PA	Performance Agreement
SMCRA	Surface Mining Control and Reclamation Act

Part III. Results of Evaluation Year 2007 Review

The Crow Abandoned Mine Land PA was signed on February 24, 2006. It will apply to each year's evaluation through the 2007 evaluation year. The PA describes the team's purpose and the topics selected for review to evaluate the performance of the AML program. On-the-ground, performance-based results were the principal focus of program evaluation and documentation.

Results of the 2007 evaluations are summarized below. The evaluations included field visits to AML projects, interviews with COR-AMLP staff, and reviews of the AML Program's project specifications, grant applications and reports, and internal Tribe and AMLIS inventories. The evaluation results are described in greater detail in evaluation reports, written for each review topic. Those reports are on file in OSM's CFO. Each topic was reviewed according to the methodology described in detailed oversight work plans. This report and the supporting topic evaluation reports describe the 2007 evaluations of three topics selected for review during the 2007 evaluation year.

A. Summary Evaluation of Overall Reclamation Success

Our 2007 evaluation of overall reclamation success determined if COR-AMLP's reclamation met project goals. The 2007 review sample included five major reclamation projects completed during evaluation year 2007, one maintenance project completed during evaluation year 2007, one major reclamation project completed during evaluation year 2006, and three major reclamation projects completed during evaluation year 2005, one of which was redisturbed by the 2007 maintenance project. The projects completed during evaluation years 2005 and 2006 were evaluated to determine long-term reclamation success. The five major projects completed during evaluation year 2007 addressed exposed coal and eroding coal waste associated with abandoned surface mines. The maintenance project addressed revegetation of previously reclaimed pit and exposed coal areas associated with an abandoned surface coal mine. One of the major projects evaluated for long-term reclamation success addressed priority 3 highwall. The other projects evaluated for long-term reclamation success addressed exposed coal, pits and eroding coal waste.

We compared COR-AMLP's reclamation to project specifications, results of interagency consultation, and other information. Our evaluation focused on determining whether reclamation met project goals by implementing the scope of work to abate original hazards, complying with conditions (if any) resulting from interagency consultation, and improving overall site conditions compared to pre-reclamation conditions. Generally, we agreed projects met their goals if abatement and reclamation measures were intact and functional and if no problems compromising those measures were apparent. We considered site conditions improved overall if hazards to public health and safety were abated and associated reclamation reduced environmental problems such as erosion and sedimentation while promoting revegetation.

We concluded that the projects we visited met their respective goals. COR-AMLP met the goals of abating

hazards and improving site conditions at the ten projects. Highwall associated with an abandoned surface coal mine was stabilized to control erosion, exposed coal and eroding coal waste buried, drainage control was established and regraded areas revegetated. Utilization of straw netting for erosion control and vegetation establishment provided excellent results at several sites.

B. Summary Evaluation of Abandoned Mine Land Inventory System (AMLIS)

Our 2007 evaluation of AMLIS determined if the information the Tribe entered into AMLIS agrees with information in its files. This topic was mandated for review due to a September, 2004 report issued by Interior's Office of the Inspector General (OIG). The report criticized the accuracy of AMLIS data, based on the OIG review of AMLIS data for four eastern States' AML programs. The OIG's review concluded that AMLIS data did not match data in those States' files and recommended establishing "a quality control system that ensures that States, Tribes, and OSM, as applicable, review and certify the accuracy of data entered into AMLIS." In response to the OIG's recommendation, OSM required its field offices to implement two requirements. The first requirement is to "assure that each State and Indian Tribe AML program has procedures in place to ensure and certify the accuracy of data entered into AMLIS" as part of the FY2004 oversight (subsequently changed to FY2005). OSM Headquarters subsequently advised field offices to drop the certification requirement. As a result, the focus is to make sure States and Tribes have requisite systems in place. The CFO and COR-AMLPL chose to include this assurance as part of the evaluation year 2006 oversight. The evaluation year 2006 oversight determined the Crow Tribe has such a system in place that is adequate to ensure accurate data is entered into AMLIS.

The second requirement implemented by OSM in response to the OIG's recommendation stated, "[o]nce these State and Indian Tribe procedures are in place, OSM will annually review a random sample of [PADs] to see if the information entered into AMLIS agrees with the information in the PAD." As a result, the focus is to make sure the data States and Tribes entered into AMLIS PADs (an integral part of AMLIS) agrees with the information in their files. The CFO and COR-AMLPL chose to include this assurance as part of the evaluation year 2007 oversight. The evaluation goal was to determine if the information the Crow Tribe enters into AMLIS, for projects completed during the evaluation year, agrees with information in its files.

The COR-AMLPL compiles data from various sources for input into AMLIS. These sources include project information spreadsheets, project diaries and close-out reports. Project completion data is tracked on an EXCEL spreadsheet. Information in the spreadsheet includes project name, contracts, salary and fringe of reclamation crews, year of completion and costs.

Information entered into AMLIS is performed by the Project Coordinator on the COR-AMLPL staff. This information is based on the above-mentioned data sources. Since AMLIS data is not intended to include maintenance project information, maintenance project data is housed in a separate location from other project data.

Completion information entered into AMLIS for the five major reclamation projects completed during the evaluation year was analyzed and compared to the information contained within the COR-AMLPL files.

We concluded the information COR-AMLPL entered into AMLIS for completed projects agrees with the information in its files.

C. Summary Evaluation of Cultural Resources

Our 2007 evaluation of cultural resources was conducted as an ongoing review to ensure legal descriptions of AML project sites are accurately identified in Cultural Resources Inventory reports included with requests for Authorization to Proceed. Accurate legal descriptions in Cultural Resources Inventory reports enable OSM to properly coordinate consultation with the State Historic Preservation Officer, under Section 106 of the National Historic Preservation Act, regarding the protection of historic, cultural, and archaeological sites.

The 2007 review sample included all Cultural Resources Inventory reports, included with requests for Authorization to Proceed, submitted to CFO during the current evaluation year. During the evaluation year COR-AMLPL submitted two Cultural Resource Inventory reports with requests for Authorization to Proceed. The legal descriptions of AML project sites were not accurately identified in the Cultural Resources Inventory reports.

We concluded the COR-AMLPL failed to ensure legal descriptions of AML project sites are accurately identified in Cultural Resources Inventory reports to enable protection of historic, cultural and archaeological sites. However, the COR-AMLPL resubmitted the two Cultural Resources Inventory reports with the legal descriptions accurately identified. The COR-AMLPL has initiated Quality Assurance/ Quality Control procedures to ensure legal descriptions of AML project sites are accurately identified in Cultural Resources Inventory reports submitted to OSM-CFO.

Part IV. Public and Interagency Participation

The AMLPL goes to great lengths to develop and maintain a good working relationship with all the Tribal, State and Federal agencies it works with. This carries over into the relationship with local groups and to the landowners who have AML sites on their land. Habitat enhancement for wildlife and is incorporated into each project where it is feasible, and the retention of surface water for landowners is a high priority. Through collection of data contained in Cultural Resources Inventory reports the AMLPL has recorded a significant amount of the mining history of the Tribe.

Part V. Accomplishments and Inventory Reports

Since implementation of their approved AMLR program, the COR-AMLPL has eliminated safety hazards and threats to the environment posed by unreclaimed mines. Reclamation has involved coal and non-coal mines as provided for in SMCRA. The accomplishments of the Crow AML Reclamation Program since its inception and those problems that remain to be reclaimed are reflected in **Table 1**. The reclamation accomplishments reflected in this Table have enhanced surrounding areas and returned the land to a condition that is of greater use to the Crow Tribe and others.

TABLE 1

ABANDONED MINE LAND RECLAMATION NEEDS AND ACCOMPLISHMENTS SINCE PROGRAM APPROVAL							
Problem nature	Unit	Coal-related problems				Noncoal-related problems	
		Abatement status			Total	Abatement status	
		Unfunded	Funded	Completed		Funded	Completed
Priority 1 & 2 (Protection of public health, safety, and general welfare)							
Clogged streams	Miles	-	-	-	0.0	-	-
Clogged stream lands	Acres	-	-	1.0	1.0	-	-
Dangerous highwalls	Lin. Feet	-	-	1,915	1,915.0	-	352
Dangerous impoundments	Count	-	-	1	1.0	-	-
Dangerous piles & embankments	Acres	-	-	54.6	54.6	-	3.3
Dangerous slides	Acres	-	-	22.0	22.0	-	1
Gases: hazardous/explosive	Count	-	-	-	0.0	-	-
Underground mine fires	Acres	-	-	-	0.0	-	-
Hazardous equip. & facilities	Count	-	-	32	32.0	-	-
Hazardous water bodies	Count	-	-	1	1.0	-	-
Industrial/residential waste	Acres	-	-	-	0.0	-	-
Portals	Count	-	-	15	15.0	-	-
Polluted water: agric. & indust.	Count	-	-	3	3.0	-	-
Polluted water: human consumption	Count	-	-	-	0.0	-	-
Subsidence	Acres	-	-	16.0	16.0	-	-
Surface burning	Acres	-	-	-	0.0	-	-
Vertical opening	Count	-	-	5	5.0	-	-
Priority 3 (Environmental restoration)							
Spoil areas	Acres	-	-	25.7	25.7	-	3
Benches	Acres	-	-	5.6	5.6	-	-
Pits	Acres	-	-	33.5	33.5	-	4
Gob piles	Acres	0.3	-	36.3	36.6	-	-
Slurry ponds	Acres	-	-	0.1	0.1	-	-
Haul roads	Acres	-	-	11.7	11.7	-	-
Mine openings	Count	-	-	2	2.0	-	-
Slumps	Acres	-	-	3.6	3.6	-	-
Highwalls	Lin. Feet	-	-	1945	1945.0	-	300
Equipment/facilities	Count	-	-	-	0.0	-	-
Industrial/residential waste	Acres	-	-	-	0.0	-	-
Water problems	Gal./min.	-	-	-	0.0	-	-
Other	---	-	-	-	0.0	-	-
Note: All data in this table are taken from the Abandoned Mine Land Inventory System (AMLIS).							

Part VI. Photos

The following photographs have been attached to this report to further demonstrate the reclamation accomplished by the COR-AMLP to eliminate hazards in various areas of the Crow Reservation.



Matt Mine photos July 2007 showing excellent utilization of straw netting for erosion control and vegetation establishment





Luther 1 Mine
photo July
2007 showing
area of
wheat/native
grass
vegetation



Luther 1 Mine
photo July
2007 showing
excellent
utilization of
rock check
dams to
control runoff



Luther 5 Mine
photo July
2007 showing
excellent
mixture of
native grasses
in vegetation



Luther 5 Mine
photo July
2007 showing
vegetated
borrow area



Luther 2 Mine photos July 2007 showing excellent mixture of native grasses in vegetation



Luther 4 Mine photo July 2007 showing excellent mixture of native grasses in vegetation



Luther 3 Mine photo July 2007 showing vegetation of backfilled highwall



Luther 6 Mine photo July 2007 showing vegetation of backfilled highwall



Larance Mine Maintenance photos July 2007 showing use of straw netting to repair erosion on reclaimed outslope and road cut





Stops Mine photos July 2007 showing vegetation of reclaimed pit area



William T. Shaw Mine Maintenance photos July 2007 showing initial work to cover exposed coal and control erosion

APPENDIX A

Tribal Comments and Casper Field Office Responses

The COR-AMLPP e-mailed one comment on the "Draft Annual Evaluation Summary Report" dated August 15, 2007. The substantial comment is listed below with CFO's response.

AMLPP's Comment: Pg 4, last paragraph, 3rd sentence: Request the sentence be changed to, "Due to decreased numbers of old abandoned coal mine sites and inaccessibility to some, the number of construction sites"

CFO's Response: CFO incorporated the comment by changing the sentence to read, "Due to decreased numbers of old abandoned coal mine sites and the inaccessibility to some, the number of construction sites was limited, resulting in a reduction of employment to approximately 28 laborers and foremen during this evaluation year."