

***OFFICE OF SURFACE MINING RECLAMATION
AND ENFORCEMENT***

***Annual Evaluation Summary Report
for the
Abandoned Mine Lands Program
Administered by the Public Service Commission
of the State of
NORTH DAKOTA
for
Evaluation Year 1997
(October 1, 1996 to September 30, 1997)***

***Completed AML Custer Site located near the town of
Garrison in McLean Co., North Dakota***

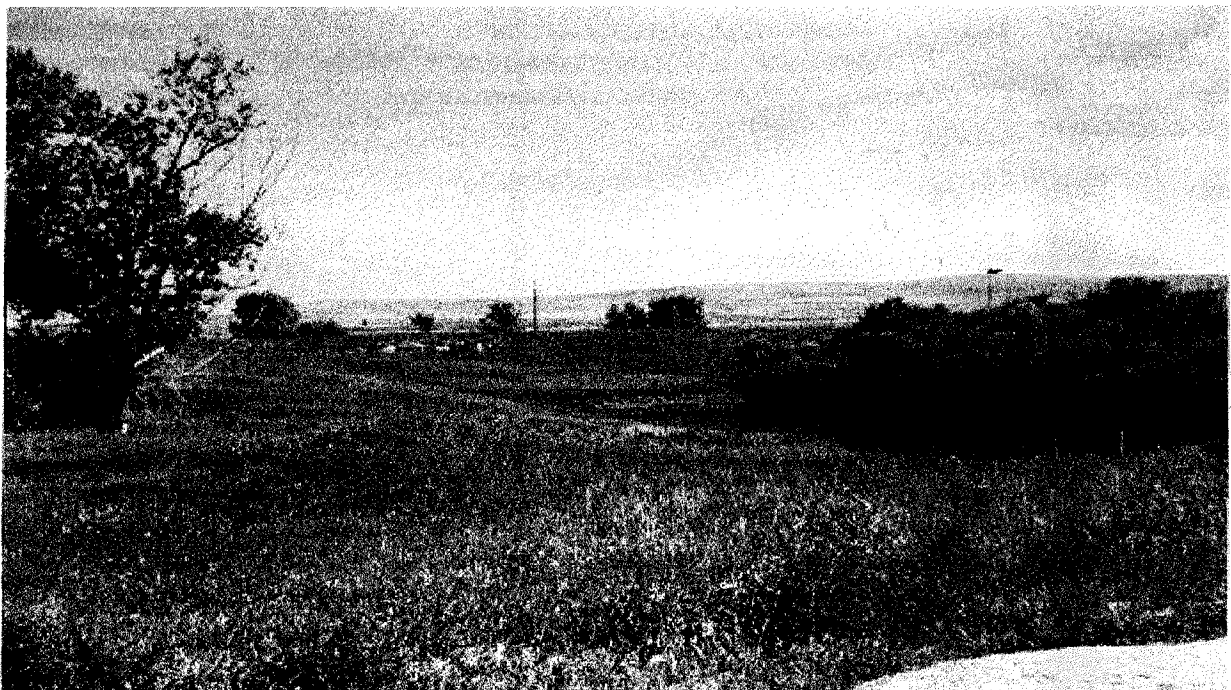


TABLE OF CONTENTS

I.	Introduction.....	1
II.	Noteworthy Accomplishments.....	2
III.	Project Construction.....	2
	A. Construction Management.....	2
	B. Post Construction Monitoring and Evaluation.....	2
IV.	Project Planning.....	3
	A. Project Selection.....	3
	B. Interagency Coordination.....	3
V.	Grants Management.....	3
	A. Reporting.....	3
	B. Drawdown Analysis.....	3
	C. Audits.....	4
	D. Other.....	4
VI.	Overall Reclamation Success.....	4

1997 ANNUAL REPORT FOR NORTH DAKOTA

Part I. Introduction

The North Dakota Abandoned Mine Land Reclamation (AMLR) program operates under the guidelines of the Surface Mining Control and Reclamation Act (SMCRA), an informal Programmatic Agreement (PA) between the State and the Casper Field Office (CFO) of the Office of Surface Mining (OSM), the Federal Assistance Manual, and associated rules, regulations and policies. North Dakota was granted primacy in 1981 and the State continues to administer an excellent AMLR program in full compliance with their approved AMLR Plan. The program is administered by the Abandoned Mine Land Division of the North Dakota Public Service Commission. Oversight of the program is conducted by the CFO, and the topics of the report were selected in a shared commitment process with the State. Evaluation methods are based on OSM Directive AML-22 and the informal PA. This report covers the period of October 1, 1996 to September 30, 1997.

The State still completes most of the design and specification work for project reclamation in-house with the existing staff. Construction is contracted to the lowest qualified bidder and project supervision and monitoring is accomplished by the staff and an additional inspector hired for the construction season. All work is completed in a very efficient and cost effective manner. Construction begins as soon as equipment can get to the sites in the spring and continues until it is halted by the severe weather conditions usually encountered during the winter. During the winter design and specification work is completed so that projects are ready for reclamation activities as soon as weather allows again in the spring.

The North Dakota AMLR staff experiences very little turnover. The State operates on minimum program funding, and staff personnel are experienced, knowledgeable and extremely dedicated. The minimum program status does not provide sufficient funding to adequately address all hazards, and some projects must be phased over a period of years to achieve complete reclamation. The CFO enjoys an excellent working relationship with the entire staff and the PSC, and the AML Division maintains a good relationship with other State and Federal agencies that must be contacted during the course of preparing projects for reclamation.

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

AML	Abandoned Mine Lands
AMLR	Abandoned Mine Land Reclamation
CFO	Casper Field Office
OSM	Office of Surface Mining
NRCS	Natural Resource Conservation Service
PA	Programmatic Agreement
PSC	Public Service Commission
SMCRA	Surface Mining Control and Reclamation Act

Part II. Noteworthy Accomplishments

Of the four full time AML personnel on the North Dakota staff, three of them were engaged in activities during this evaluation period that served to increase the nation wide awareness of the expertise of the North Dakota AMLR program. The program director continued his participation on the committee that is designing a Windows based user interface to replace the old Telnet access to the Abandoned Mine Land Inventory System. His computer expertise, in association with his AMLR knowledge, is instrumental in the development and testing of the new program.

One of the North Dakota staff members presented a paper at the National Association of Abandoned Mine Land Programs annual convention in West Virginia on the North Dakota process used to grout mine voids under occupied structures. This included the research completed by the North Dakota AML Division on the use of fly-ash in the grout mixture and the savings that resulted from using this material instead of a concrete based grout. Several States have expressed interest in using this technology in their AML programs.

Another staff member was recruited by the Federal Highway Administration to go to Columbus, Ohio to participate in a national conference on reclaiming underground voids under highways. Personnel from several states and federal agencies were in attendance at this conference. North Dakota was invited to participate because of the expertise developed in locating and reclaiming subsidence prone areas in roadways within their State.

Part III. Project Construction

A. Construction Management

North Dakota does an excellent job of using past experience to improve all aspects of their construction management program. Completing design work in-house with permanent staff allows the unrestricted use of previous successful design techniques, and elimination or modification of those techniques that do not work as well. In the small, close knit staff when a problem does occur with a contract or project, the entire staff is fully aware of the problem and duplication of it in the future is very unlikely. Construction on most projects is supervised by the staff member who was the principal design engineer, and this greatly increases the ability to effectively manage the project to a successful completion. The additional summer hire inspector is an experienced reclamation person who has held this position for several construction seasons. Project files are very well documented and all necessary permits are secured prior to the initiation of construction activities on any project.

B. Post Construction Monitoring and Evaluation

North Dakota monitors most projects on an annual basis until they are considered ready for release to the landowner. Some of the uraniferous projects completed in the late 1980's were

released to landowners during this evaluation period. Monitoring of the underground aquifer continued after the encapsulation and burying of radioactive material was completed, until the projects were deemed successful. The techniques used in these projects to remove a serious threat to human health and safety were proven to be efficient and the reclaimed land was returned to productive use. Excellent soil conditions are found in most areas of the State and successful revegetation usually occurs during the first or second growing season on a reclaimed project. Known subsidence prone areas are monitored several times a year, especially after freeze/thaw situations and periods of heavy precipitation.

Part IV. Project Planning

A. Project Selection

North Dakota continues to follow the provisions of their approved AML Plan in selecting the most hazardous projects from their inventory for reclamation. During this evaluation period several subsidence features in or adjacent to major transportation routes were reclaimed. This includes two such subsidences that were confirmed as emergencies and reclaimed under the emergency program. Public hearings are held for all proposed projects and public participation is well documented in the project files.

B. Interagency Coordination

The North Dakota AML Division enjoys excellent relationships with the various state and federal agencies that they work with in administering the AMLR program. Staff members are in contact with the U.S. Fish and Wildlife Service, U.S. Corps of Engineers, North Dakota Fish and Game Department, North Dakota Highway Department, Natural Resource Conservation Service (NRCS) and the State Historic Preservation Office several times a year. Wetland areas for waterfowl habitat are of prime importance in North Dakota and the expertise of private organizations such as Ducks Unlimited is also solicited during the design phase of some projects. North Dakota is one of the few states that still has an active Rural Abandoned Mine Program in progress during the past year. The NRCS and the AML Division sponsor an annual meeting to discuss and coordinate the reclamation programs with landowners and agencies involved.

Part V. Grants Management

A. Reporting

North Dakota submitted all AML financial reports on a timely basis. All reports were complete.

B. Drawdown Analysis

North Dakota agreed to report any overdraws from the U. S. Treasury or any instances where excess cash was held as a result of drawdowns. The CFO conducted a drawdown analysis

sampling drawdowns on two AML grants. In all cases, expenditures occurred before the drawdown and the amount of the draw coincided with the amount of the expenditure.

C. Audits

All audits prior to June 1994 have been completed with resolution to all findings. Another A-128 audit has been completed for the one year period ending June 30, 1996. There was one finding pertaining to OSM programs with disallowed costs for the AML program of \$3,271. North Dakota has reimbursed OSM for that amount. A two year audit will be conducted during 1998.

D. Other

The CFO conducted financial reviews of payroll, procurement, accounts payable, travel and property pertaining to the North Dakota AML program. Approvals, verifications, and backup information was reviewed. Internal controls were in place, were adequate, and were being applied.

Part VI. Overall Reclamation Success

The overall success of reclaiming AML hazards in North Dakota has been excellent. Inspection visits to completed sites will generally find them in better condition than adjacent property that was not mined, and revegetation of AML sites has been outstanding. During this evaluation period most of the reclamation work consisted of grouting underground voids and filling subsidence features. In both of these areas of reclamation the North Dakota AML Division has achieved national prominence. The accomplishments of the AML staff and their program are even more impressive when one considers that the State is located in a short growing season area, and that program funding is severely limited for the amount of reclamation that is still needed. All of the reclamation completed by the AML Division in North Dakota has been associated with abandoned coal mining, and the State does not expect to complete all reclamation on their inventory before the proposed expiration date of AMLR funding in 2004. The photos below are of the Fritz site located north of Belfield in Stark Co., North Dakota.

B
E
F
O
R
E



A
F
T
E
R

