OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Summary Report

for the

Regulatory

Program

Administered by the Public Service Commission

of the State of

NORTH DAKOTA

for

Evaluation Year 1997

(October 1, 1996 to September 30, 1997)

Mining and reclamation at BNI Coal LTD. Center Mine

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I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for State regulatory programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the North Dakota Program and the effectiveness of the North Dakota program in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the period of October 1, 1996 to September 30, 1997. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the Casper Field Office.

Comments regarding the oversight process, recommendations for additional review topics, and suggestions for improvement of future reports are encouraged and should be submitted to the Director of the Casper Field Office.

The following list of acronyms are used in this report:

AML	Abandoned Mine Land
AMLR	Abandoned Mine Land Reclamation
AVS	Applicant Violator System
BTTI	Branch of Technical Training and Information
CFO	Casper Field Office
CO	Cessation Order
EY	Evaluation Year
MOU	Memorandum of Understanding
NDAC	North Dakota Administrative Code
NDCC	North Dakota Century Code
NOV	Notice of Violation
PSC	Public Service Commission, Reclamation Division
OSM	Office of Surface Mining Reclamation and Enforcement
RSI	Random Sample Inspections
SHPO	State Historic Preservation Office
SMCRA	Surface Mining Control and Reclamation Act of 1977
SPATS	State Program Amendment Tracking System
TDN	Ten Day Notice
TIPS	Technical Information Process System

II. Overview of the North Dakota Coal Mining Industry

The coal fields in North Dakota are located in the Williston Basin, which is part of the Great Plains Coal Province. They underlie approximately 40 percent of the State's surface area. Most of the coal is produced commercially from three mining districts located in the western part of the State: (1) Beulah-Zap and (2) Hagel. Recoverable coal reserves in North Dakota are generally classified as lignite, which is characterized by low heating value (6,600 BTU), high moisture content (40 per cent) and low sulfur (less than 1.0 per cent). The minable beds in the Williston Basin vary in thickness from three to 30 feet; economic stripping ratios range from 1.5:1 to 11:1. All active mines in North Dakota are large-scale surface mines that provide coal for mine-mouth electrical generation facilities and a coal gasification facility located nearby.

The first commercial mine in North Dakota opened in Morton County in 1873. As the railroad developed across the State, demand for coal increased and was supplied by underground mines. North Dakota was one of the first states to shift from underground to large-scale commercial surface mining. By 1927, 40 per cent of the State's production was by surface mining methods, compared with 2 per cent for the nation. In 1959, 86 per cent of North Dakota's coal production was from surface mines, and since 1966, the State's total production has been from this mining method. In 1884, North Dakota produced 35 thousand tons of lignite; in 1997 it produced 29.4 million tons. North Dakota has a demonstrated recoverable coal reserve base of 35 billion tons.

In 1969, North Dakota enacted its first reclamation law and followed in 1973 and 1975 with major revisions to this law. A new law was enacted in 1979 that is consistent with SMCRA. Coal mining in North Dakota is concentrated around the western half of the State. This area consists of approximately 28,000 square miles, and has an estimated total resource of 350 billion tons, or about two-thirds of the total lignite reserves of the United States.

North Dakota mines provide employment for approximately 1,200 people in five counties. However, the coal industry's impact on the State's people and economy has secondary effects since most of the this coal production fuels electric power generation plants within the State.

III. Overview of the Public Participation Opportunities in the Oversight Process and the North Dakota Program

The CFO in cooperation with the PSC has developed an outreach program where the public and industry are encouraged to be involved in the oversight process. Specifically, the CFO initiated contacts with the Dakota Resource Council and the North Dakota Lignite Energy Council by phone and in person. These groups are notified of the CFO's activities and provided an opportunity to express concerns regarding the CFO's oversight role and North Dakota's regulatory program. Copies of the proposed and final 1997 Oversight Plan were furnished to them. The 1997 oversight plan was developed to reflect the concerns of the citizens living adjacent to the active mining operations in North Dakota. A public meeting on the oversight plan was held in June 1997. Also, the CFO met quarterly with the Dakota Resource Council during the 1997 oversight to discuss the ongoing oversight process and to solicit comments on the 1997 oversight.

The Public Service Commission, Reclamation Division has public participation on a daily basis. The PSC's outreach efforts include, but are not limited to, Public Service Commission hearings and meetings. The Public Service Commission met with the Dakota Resource Council and interested citizens to discuss their concerns. With each permitting and bond release decision there are notices of the proposed decision published and comments solicited. Previous oversight evaluations have found the Public Service Commission, Reclamation Division has been responsive to the public, citizen groups and industry.

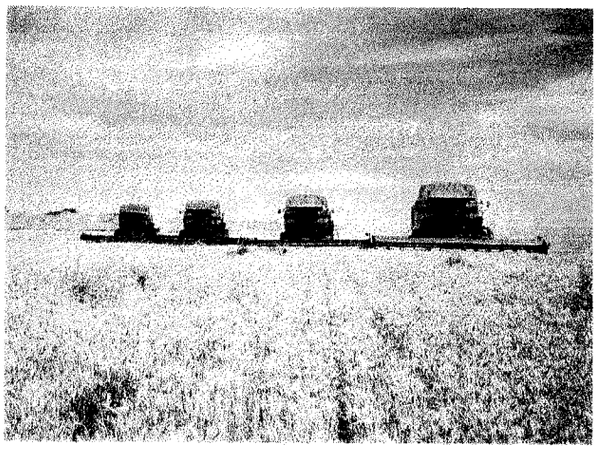
IV. Major Accomplishments/Issues/Innovations in the North Dakota Program

The North Dakota Public Service Commission, Reclamation Division continues to perform in an exemplary fashion in implementing its regulatory program as set forth in Section 102 of the Surface Mining Control and Reclamation Act of 1977.

One of the most noteworthy aspects of the North Dakota Regulatory program has been the pattern of excellence in mine land reclamation. In 1990, the Glenharold mine received an Excellence in Surface Mining Reclamation award for their reclamation of woody draws. The Freedom and Indian Head received Excellence in Surface Mining Reclamation awards for 1992. The Freedom mine's award was for reclamation of wetlands, rangelands, and reestablishment of prime farmlands. The Indian Head mine's award was for designing the mining operation as to avoid the disturbance of woody draws. In 1994 the Falkirk mine received an Excellence in Surface Mining award for their efforts in mitigating the impacts of mining on the cultural and historical values found within the permit area. In 1997 the Coteau Properties, Freedom Mine received the Director's Award for exemplary reclamation that has a direct benefit to the local community. The Bellaire Corporation's, Indian Head Mine received the Best of the Best

Award for its reclamation and preservation of wooded draws and the diverse wildlife habitat.

Coteau, Properties Freedom Mine
1997 Director's Award



Harvest of first wheat crop.

Bellaire Corporation's Indian Head Mine
1997 Best of the Best Award

Preservation of Wooded Draws in final reclamation.

With North Dakota's permanent regulatory program now in its seventeenth year of implementation, the PSC is experiencing an increased workload of bond release applications as more mines reach the point where reclamation efforts comply with all requirements necessary for release of bond or liability. The PSC has also shown its initiative and commitment to total reclamation of affected lands by using a four-stage bond release system. In comparison OSM has a three- stage bond release system. Each stage requires the operator to meet specific reclamation performance standards to ensure that reclamation be conducted in conformance with the approved reclamation plan.

Through effective implementation of permitting, inspection, and enforcement the PSC has been very successful in achieving compliance with SMCRA's intent.

The State administers an excellent Regulatory program. Various types of projects and problems have been addressed using technical expertise and professionalism. During this evaluation period the CFO found that reclamation is contemporaneous and complies with the performance standards in the state permanent regulatory program.

V. Success in Achieving the Purposes of SMCRA as Measured by the Number of Observed Off-Site Impacts and the Number of Acres Meeting the Performance Standards at the Time of Bond Release

During this evaluation period, the Casper Field Office (CFO) performed an extensive review of eight specific areas of North Dakota's approved state Regulatory program and three areas of Program Administration (Grants Management).

Performance standard evaluations are being collected for a national perspective in terms of the number and extent of observed off-site impacts and the number of acres that have been mined and reclaimed which 1) have received OSM Phase I, II and III bond release and 2) appear eligible for OSM Phase I, II and III bond release. Individual topic reports are available in the Casper Field Office which provide additional details on how the following evaluations and measurements were conducted.

A. Off-Site Impacts:

In past years landowners adjacent to two of the active mining operations have alleged that their farming operations have and are being affected by the mining operations. Specifically, that the timing and volume of water being discharged from the mining operations have prevented access to their cropland for the Spring planting and / or Fall harvest. The alleged damage was loss of crop production. The CFO inspected those mines in the Spring of 1997 to evaluate the mitigation measures implemented by the mining companies to prevent off-site impacts from their mining operations. This evaluation determined that Spring planting and Fall harvest were not impacted by the water discharges from those mines. However, during a routine PSC inspection an off-site impact (erosion / deposition of sediment) was observed and the company was issued a notice of violation.

The Freedom Mine opened a new mine area and as a result will be conducting mining operations in close proximity to occupied residences. The PSC conducted a review of the blasting operations at the Freedom Mine to determine if residences near the mine were being impacted by airblast and ground vibration . Airblast and ground vibration levels monitored did not exceed the detection levels of the seismograph. Blasting operations at the Freedom Mine are within the required limits and no adverse impacts are expected at those residences near the mining operation.

B. Bond Release:

The CFO did not evaluate the effectiveness of the State program based on the number of acres that have received bond release (Table 5). The CFO believes it does not apply due to the type of mining operations, size of mining operation and company policy (not to

apply for release until large tracts are eligible for final bond release). The CFO chose to evaluate the State program based on the number of acres on which the required reclamation has been completed. See optional Table 6 for a summary of the mining and reclamation activity in 1997. The CFO determined that the State program is effective in its goal of having all disturbed lands reclaimed to their approved postmining land use.

VI. OSM Assistance

The Office of Surface Mining is providing both financial and technical support to the PSC in the form of an Administrative and Enforcement (A&E). Technical support has been in the form of equipment, computers, software, assistance with the software and training (BTTI and TIPS).

VII. General Oversight Topic Reviews

A. Availability of Permit Records to the Public:

The CFO and PSC reviewed the mine permit files on record in Oliver and Mercer counties. It was determined that some companies have not forwarded all materials (minor revisions) to the county auditor's office. However, all of these materials are being maintained at the PSC offices in Bismarck and are available to the public. The PSC has committed to furnish copies at no cost of any materials not available to the public at the county auditors office to the public.

B. Water Replacement:

The CFO and PSC reviewed all approved permits for all mining operations in North Dakota and completed an inventory of all water supply systems that have been or are proposed to be eliminated by the mining operations. This inventory will be used to determine which systems must be replaced in the post mining reclamation.

C. Inspection:

The North Dakota Public Service Commission continues to conduct frequent and thorough inspections. North Dakota conducted 193 complete inspections and 720 partial inspections, exceeding the required number of inspections on all permits during the evaluation year. The Casper Field Office conducted 14 complete random sample inspections and 24 partial / focused inspections of coal mining operations in North Dakota.

The CFO's review of North Dakota inspection reports shows that reports are complete, accurately document site conditions and mine activity, give the status of any violations, and have continuity with previous reports. All performance standards were reviewed and documented during complete inspections and the reports contain a discussion of the current mine status. Each partial inspection report documents performance standards reviewed and permit requirements reviewed as well as the portions of the mine site inspected.

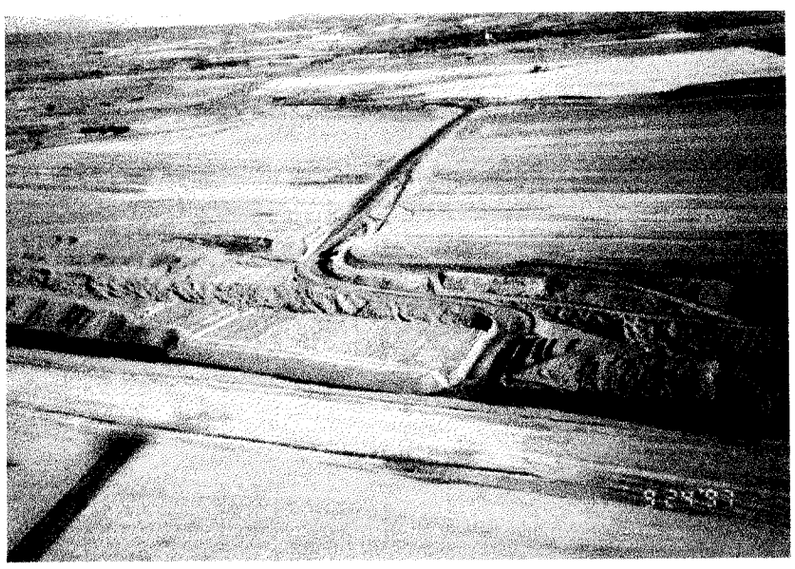
The PSC maintains an inspectable units list and a inspection data base sufficient to meet its program requirements.

D. Enforcement:

The PSC issued two Notices of Violation and no Cessation Orders during this evaluation period. No pattern of violation exists. No show cause hearings or alternative enforcement actions were initiate during this evaluation period.

The CFO did not issue any enforcement actions (TDN, NOV, CO) during this review period.

E. Contemporaneous Reclamation



Knife River Coal Mining Company's Beulah Mine

Contemporaneous reclamation was evaluated by a comparison of the acres disturbed to the acres reclaimed (backfilled, graded, topsoiled and seeded) on an annual basis and expressed as a ratio of lands reclaimed to lands disturbed.

Although the number of acres released from bond is relatively small, a substantial amount of reclamation has and is occurring in North Dakota. Tables 5 and 6 will indicate that while there are very few acres with bonds released compared to the number of acres being actively reclaimed in any given year, there are areas that may qualified for bond release. Roughly 54 per cent (approx. 20,470 acres) of the cumulative disturbed acreage (approx. 37,750 acres) has been backfilled and rough graded (OSM Phase I), 54 per cent (approx. 20,320 acres) have been resoiled and reseeded (OSM Phase II) to program standards and 9 per cent (approx. 3,300 acres) have been totally reclaimed for the minimum 10 year liability period and may be eligible for final (OSM Phase III) release. Most of these acres could be available for OSM Phase I, II and III bond release if the operators within the state chose to apply for such release. Reclamation in North Dakota is as contemporaneous as possible as indicated by the ratio of acres reclaimed to the acres disturbed in recent years. The CFO will continue to monitor this in EY98 oversight.

YEAR	ACRES DISTURBED	ACRES RECLAIMED	RATIO OF RECL. VS DIST.
1985	2030	1465	0.72
1986	1545	1255	0.81
1987	1500	1700	1.13
1988	1490	860	0.58
1989	1890	2090	1.11
1990	1500	1825	1.22
1991	1655	1305	0.79
1992	2360	1575	0.67
1993	1525	2480	1.63
1994	2170	1610	0.74
1995	1615	1875	1.16
1996	2735	1605	0.59

G. Program Administration (Grants):

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

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. CFO conducted a drawdown analysis sampling drawdowns occurring between January 1, 1996 and August 1, 1996. In all cases, expenditures occurred before the drawdown and the amount of the draw coincided with the amount of the expenditure.

A single A-128 Audit was completed for one year ending June 30, 1996, auditors found unallowable vehicle overcharges in the amount of $1,038.00. The PSC reimbursed OSM for this amount.

Another A-128 Audit is being conducted for the period ending June 30, 1996.

APPENDIX A

Tabular Summaries of Data Pertaining to Mining, Reclamation and Program Administration

These tables present data pertinent to mining operations, State and Federal regulatory activities within North Dakota. They also summarize funds provided by OSM and the North Dakota staffing. Unless otherwise specified, the reporting period for the data contained in all tables is the 1997 evaluation year (October 1, 1996 - September 30, 1997). Additional data used by OSM in its evaluation of North Dakota performance is available for review in the evaluation files maintained by the Casper Field Office.

TABLE 1

COAL PRODUCTION (Millions of short tons)			
Period	**Surface mines**	**Underground mines**	**Total**
Coal production[A] for entire State:			
1994	32.0	0.0	32.0
1995	30.2	0.0	30.2
1996	29.7	0.0	29.7
1997	29.4	0.0	29.4

[A] Coal production as reported in this table is the gross tonnage which includes coal that is sold, used or transferred as reported to OSM by each mining company. Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by States or other sources due to varying methods of determining and reporting coal production.

TABLE 2

INSPECTABLE UNITS
(As of September 30, 1997)

Coal mines and related facilities	Number and status of permits								Insp. Unit[D]	Permitted acreage[A] (hundreds of acres)		
	Active or temporarily inactive		Inactive		Abandoned		Totals					
			Phase II bond release									
	IP	PP	IP	PP	IP	PP	IP	PP		IP	PP	Total
STATE and PRIVATE LANDS REGULATORY AUTHORITY: STATE												
Surface mines	0	34	6	4	0	0	6	38	NA	9.5	711.1	720.6
Underground mines	0	0	0	0	0	0	0	0	NA	0	0	0.0
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0.0
Subtotals	0	34	6	4	0	0	6	38	0	9.5	711.1	720.6
FEDERAL LANDS REGULATORY AUTHORITY: STATE												
Surface mines	0	23	3	4	0	0	3	27	NA	0.9	97.4	98.3
Underground mines	0	0	0	0	0	0	0	0	NA	0	0	0.0
Other facilities	0	0	0	0	0	0	0	0	NA	0	0	0.0
Subtotals	0	23	3	4	0	0	3	27	0	0.9	97.4	98.3
ALL LANDS[B]												
Surface mines	0	34	6	4	0	0	6	38	NA	9.5	711.1	720.6
Underground mines	0	0	0	0	0	0	0	0	0	0	0	0.0
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0.0
Totals	0	34	6	4	0	0	6	38	0	9.5	711.1	720.6

Average number of permits per inspectable unit (excluding exploration sites) 1

Average number of acres per inspectable unit (excluding exploration sites) 1,638

Number of exploration permits on State and private lands: . 7 On Federal lands: 0 [C]

Number of exploration notices on State and private lands: . 0 On Federal lands: 0 [C]

IP: Initial regulatory program sites.
PP: Permanent regulatory program sites.

[A] When a unit is located on more than one type of land, includes only the acreage located on the indicated type of land.

[B] Numbers of units may not equal the sum of the three preceding categories because a single inspectable unit may include lands in more than one of the preceding categories.

[C] Includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to a Federal lands program. Excludes exploration regulated by the Bureau of Land Management.

[D] Inspectable Units includes multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.

TABLE 3

STATE PERMITTING ACTIVITY

Type of application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres[A]	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New permits	0	0	0	0	0	0	0	0	0	0	0	0
Renewals	3	3	11,203	0	0	0	0	0	0	3	3	11,203
Incidental boundary revisions	0	0	0	0	0	0	0	0	0	0	0	0
Revisions (exclusive of incidental boundary revisions)	34	32		0	0		0	0		34	32	
Transfers, sales and assignments of permit rights	0	0		0	0		0	0		0	0	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits	7	7		0	0		0	0		7	7	
Exploration notices[B]	0	0		0	0		0	0		0	0	
Totals	44	42	11,203	0	0	0	0	0	0	44	42	11,203

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions 0

[A] Includes only the number of acres of proposed surface disturbance.

[B] State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.

TABLE 4

OFF-SITE IMPACTS

RESOURCES AFFECTED			People			Land			Water			Structures		
DEGREE OF IMPACT			minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
TYPE OF INPACT AND TOTAL NUMBER OF EACH TYPE	Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
	Land stability	0	0	0	0	0	0	0	0	0	0	0	0	0
	Hydrology	1*	0	0	0	1*	0	0	1*	0	0	0	0	0
	Enroachment	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1	0	0	0	1	0	0	1	0	0	0	0	0

Total number of permits or mine sites with observed off-site impacts:
Permits 1 or Mine Sites 0

Total number of permits or mine sites evaluated:
Permits 44 or Mine Sites 0

Total number of observations made to evaluate mine sites or permits for off-site impacts 853

Report the degree of impact under each resource that was affected by each type of impact. More than one resource may be affected by each type of impact. Therefore, the total number of impacts will likely be less than the total number of resources affected; i.e. the numbers under the resources columns will not necessarily add horizontally to equal the total number for each type of impact. To report the number of mine sites or permits use the same criteria used to determine an inspectable unit in the State. Number of observations is based upon the criteria developed between each State and OSM and may include observations by both the State and OSM.

* State observations.

TABLE 5

ANNUAL STATE MINING AND RECLAMATION RESULTS		
Bond release phase	**Applicable performance standard**	**Acreage released during this evaluation period**
Phase I	•Approximate original contour restored •Topsoil or approved alternative replaced	80.1
Phase II	•Surface stability •Establishment of vegetation	248.8
Phase III	•Post-mining land use/productivity restored •Successful permanent vegetation •Groundwater recharge, quality and quantity restored •Surface water quality and quantity restored	540.60
	Total number of disturbed acres at end of last review period (December 31, 1996)[1]	37,750
	Total number of acres disturbed in calendar year 1996	3,440*
	Number of acres disturbed during this evaluation year that are considered remining	0

[1] Disturbed acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).

* Mine disturbances during this evaluation period were much higher than normal due to the development of three new mine areas at the Falkirk and Freedom Mines.

TABLE 6

North Dakota Reclamation Summary

Evaluation Year 1997

New Acres Permitted	0
Acres Disturbed	3,440
Acres Backfilled and Graded	1,435
Acres Seeded	1,655

Total Reclamation (as of 1-1-97)

TOTAL Acres Permitted	71,700
Total Acres Disturbed	37,750
Total Acres of Active Pit Area and Long Term Disturbance (a)	14,370
Total Acres Available for Reclamation (b)	2,910
Total Acres Backfilled and Graded (available for OSM Phase I bond release)	20,470
Total Acres that have received OSM Phase I bond release	5,410
Total Acres Seeded (available for OSM Phase II bond release)	20,320
Total Acres that have received OSM Phase II bond release	3,735
Total Acres that have been revegetated for 10 years (available for OSM Phase III release	3,300
Total Acres that have received OSM Phase III release	1,225

(a) Areas within the permit that are necessary to mining and require long term disturbance (Active Pit Area, Facilities, Haulroads, Railroads, Stockpiles, Ponds, Areas of temporary cessation, etc.).
Long term disturbance (14,380) = Total acres disturbed (37,750) - Total acres Backfilled & Graded (20,470) -Total acres Available for reclamation (2,910)
(b) Acreage estimated from mid-1997 areal photos of the active mine sites.

The information above was obtained from annual maps and reports for certain activities that occurred in the calendar year 1996 and the overall status on January 1,1997. (Data for calendar year 1997 will not be available until early 1998)

TABLE 7

STATE BOND FORFEITURE ACTIVITY
(Permanent Program Permits)

	Sites	Dollars	Acres
Bonds forfeited as of October 1,1996[A]	0	$0	0
Bonds forfeited during EY 1997	0	$0	0
Forfeited bonds collected as October 1, 1996[A]	0	$0	0
Forfeited bonds collected during EY 1997	0	$0	0
Forfeiture sites reclaimed during EY 1997	0		0
Forfeiture sites repermitted during EY 1997	0		0
Forfeiture sites unreclaimed as of September 30, 1997	0		0
Excess reclamation costs recovered from permittee	0	$0	0
Excess forfeiture proceeds returned to permittee	0	$0	0

[A] **Includes data only for those forfeiture sites not fully reclaimed as of this date.**

[B] **Cost of reclamation, excluding general administrative expenses.**

TABLE 8

STATE REGULATORY PROGRAM STAFFING (Full-time equivalents at end of evaluation year)	
Function	**EY 1997**
Regulatory program	8.85
Permit review	3.81
Inspection	2.04
Other (administrative, fiscal, personnel, etc.)	3

TABLE 9

REGULATORY FUNDS GRANTED TO STATE BY OSM		
Type of grant	**Federal funds awarded**	**Federal funding as a percentage of total program costs**
Administration and enforcement	$487,783.00	65.0
Small operator assistance	$0	0.0
Totals	$487,783.00	