

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Summary Report

for the

Regulatory Program

Administered by the Knoxville Field Office

of

Tennessee

for

Evaluation Year 1996

(January 1, 1996 to September 30, 1996)

(December/1996)

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Appendix A: Tabular Summary of Core Data to Characterize the Program

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. The Act also provides authority for OSM to implement a Federal regulatory program in the States without approved regulatory programs. In Tennessee, OSM implemented the Federal regulatory program in October 1984 when the State repealed its surface mining law. This report contains summary information regarding the Tennessee Federal Program and the effectiveness of the Federal Program in meeting the applicable purposes of SMCRA as specified in section 102. This report covers the period of January 1, 1996 to September 30, 1996. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the Knoxville, Tennessee OSM Office.

The following list of acronyms are used in this report:

ACSI	Appalachian Clean Streams Initiative
AMD	Acid Mine Drainage
BMP	Best Management Practice
DSM	Kentucky Division of Surface Mining
EIS	Environmental Impact Statement
EP	Electronic Permitting
EPACT	Environmental Policy Act
IUL	Inspectable Unit List
KFO	Knoxville Field Office
MEIR	Minesite Evaluation Inspection Report
MWP	Mining Without a Permit
NOI	Notice of Intent to Explore for Coal
NRCS	Natural Resource Conservation Service
OSM	Office of Surface Mining
PED/EIS	Petition Evaluation Document/Environmental Impact Statement
SMCRA	Surface Mining Control and Reclamation Act
TDEC	Tennessee Department of Environment and Conservation
TWRA	Tennessee Wildlife Resources Agency
TMHP	Toxic Material Handling Plan

II. OVERVIEW OF THE TENNESSEE COAL MINING INDUSTRY

Tennessee's coal resources are in 22 mining counties located in the Appalachian Region of the Eastern United States extending from the Kentucky border to the Alabama border in the east central portion of Tennessee. Mining in the northern counties is primarily in the steep slope areas of the Cumberland Mountain Range. Mining in the southern counties is confined to area-type operations due to the relatively flat terrain associated with the Cumberland Plateau.

Tennessee's recoverable coal reserves of 84.2 million short tons exist in bituminous coal beds 28 to 42 inches in thickness at depths of up to 1,000 feet. Tennessee coal is used primarily for the generation of electric power.

Tennessee ranks twentieth in production of coal among the 26 coal producing states thus far in calendar year 1996. Coal production has steadily declined from a high of 11,260,000 tons in 1972 to 2,980,000 tons in 1995. Currently, there are 27 active coal producing mines that have permitted 4,245 acres for mining. Underground mines have permitted 166.5 acres (excluding shadow areas) at the thirteen active mines and surface operations have permitted 4,078.5 acres at the fourteen active surface mines.

III. OVERVIEW OF THE PUBLIC PARTICIPATION OPPORTUNITIES IN THE TENNESSEE FEDERAL PROGRAM

The Tennessee Federal Program provides numerous public participation opportunities in its program activities. Efforts are made to encourage participation and to inform the public of the avenues to participate in the regulatory program.

- **Public Participation in the Regulatory Process**

Citizens, environmental groups, and industry representatives have complete access to all regulatory program files including permitting, inspection and enforcement, and bonding program files. Managers and staff have open-door policies for any segment of the public to discuss issues that may arise.

Several significant public participation opportunities were made available for the two lands unsuitable petitions that were being processed by KFO this year. The Public Hearing for the Fern Lake petition was held in March 1996 and public attendance at the meeting was light due in large part to previous hearings on Fern Lake by both OSM and the Commonwealth of Kentucky. The Draft Environmental Impact Statement (EIS) on the Fern Lake petition resulted in 110 letters of comment that were addressed by the Final EIS. In July 1996, Secretary Babbitt traveled to Middlesboro to announce the Fern Lake decision and he took the opportunity to meet with petitioners, residents, landowners, and industry representatives.

Public participation opportunities were also provided to the public in the review of 17

new permit applications processed by KFO this year. Two requests for informal conferences were received.

KFO provided the public with outreach opportunities on several new initiatives including Appalachian Clean Streams Initiative, Remining, Electronic Permitting, Field Modifications of Approved Permits, and the Citizens' Guide for Public Involvement which informs citizens on how to gain access to the regulatory functions of the Tennessee Federal Program.

The Field Office also provided participation opportunities in the development of regulatory policies and issues dealing with backfill settlement resulting in re-exposed highwalls, classification of impoundments, dewatering devices and valves in sedimentation ponds, trees on impounding embankments, and damage or failure of run-off control structures due to precipitation events.

- **Public Meetings**

During the evaluation year 1996, one "Open House" public meeting was held with eighteen members of the public in attendance. The meeting was held in Dunlap, Tennessee (the southern coal field area) with two more open houses planned for the middle and upper coal field areas during fiscal year 1997. The purpose of the meetings is to improve relationships with OSM's customers and stakeholders by providing information about OSM activities, by obtaining feedback on citizens' concerns and issues in the coal producing areas and by soliciting interest in the establishment of a Citizens' Advisory Council to the KFO.

- **Outreach Meetings with Individual Industry Stakeholders**

KFO initiated outreach meetings with all active coal mine permittees in the State in an effort to improve working relationships with the industry. Six meetings were held in 1996 where four agenda items were discussed. The agenda items were: (1) activities that are going well on company permits; (2) activities that have created concern or potential concern; (3) ways in which OSM and the companies can work better to alleviate the concerns; and (4) concerns/expectations the company has with respect to its operations and with working with OSM. As a result of this initiative, fewer violations are being issued, violations are being abated in a more rapid manner, and potential problems are resolved more easily when identified by inspection personnel.

- **Industry-Wide Meeting**

One industry-wide meeting was held to discuss issues affecting the industry, to obtain feedback from industry on regulatory issues, and to provide information on OSM and field office initiatives and activities. These meetings have provided suggestions for improvement of KFO's regulatory activities and improvements in the working relationships with industry. For example, KFO and industry are working on a plan to allow inspectors to approve field modifications of approved permit requirements in non-

engineering areas. KFO is also working with industry to improve the bond release process to reduce the number of bond release denials. Industry and KFO are working on the electronic transfer and processing of permit applications between the applicants and the KFO. Also, industry is very interested in OSM's "Remining for Real" initiative and the meetings provide an opportunity for thorough discussion and recommendations from industry representatives on this subject.

- **Outreach Meetings with Landowners**

Meetings have been held with two of the five major/large land holding companies in Tennessee to discuss coal issues that affect both landowners and operators. For example, the impacts of logging operations (third party disturbance) on permitted sites in reclamation has been discussed. One company agreed to try to avoid the sites until final release and to have contract loggers use best-management practices (BMPs) to reduce sedimentation of streams. KFO provided site locations for the permitted sites to facilitate the company's avoidance of these areas.

- **Outreach Meetings with State of Tennessee Stakeholders**

KFO met on four occasions during the period with the Tennessee Division of Water Pollution Control and the Tennessee Division of Mine Land Reclamation to discuss regulatory issues and concerns, to enhance information sharing, and to strengthen partnerships in protection of the environment.

IV. MAJOR ACCOMPLISHMENTS/ISSUES/INNOVATIONS IN THE TENNESSEE FEDERAL PROGRAM

- **Removal of Sites from the Inspectable Units List**

Due to reduced staff, the KFO initiated action to remove sites from the inspectable units list (IUL) that no longer needed inspections. Notices of Intent to Explore for Coal (NOI) and mining-without-permit sites (MWP) which had been referred to the Solicitor's Office for court action and had been closed by the Solicitor were removed from the IUL. Interim program, unbonded sites that had been fully reclaimed but had administrative violations, such as failure to perform water monitoring, were removed from the active IUL. These reductions to the IUL freed up inspection staff time for use at active mine sites where issues/concerns are more likely to occur.

- **Identification of Potential Problems**

To assist operators and reduce follow-up inspection hours, after issuance of notices of violation, the field office placed additional emphasis on inspectors identifying and advising operators of potential problems observed during inspections before they became citable violations. This initiative has reduced the number of notices of violation being issued and the number of required follow-up inspections.

- **Development of Standard Inspection Report Format**

To improve the level and consistency of information provided to operators, a standard narrative inspection report was developed which follows the format of the Minesite Evaluation Inspection Report (MEIR) form used for data collection. This change has also made the MEIR a more useful tool to the operator in providing information.

- **AMD Inspection/Evaluation Initiative**

The Knoxville Field Office continued its acid mine drainage (AMD) inspection/evaluation initiative of identification of potential AMD producers. During the period, three of the five inspections planned for calendar year 1996 were performed. Information from the inspections will be used to determine if mining practices need to be modified or if permit revisions are required.

- **Field Modification by Inspectors**

In an effort to assist operators and to reduce staff time required for review and approval of revisions, inspectors will be approving minor changes to permits under the field modification initiative. KFO staff members are developing a list of items that inspectors may approve during the field inspections instead of operators being required to submit an application for revision. Items approved by inspectors will consist of those not requiring bond adjustments or review by technical/engineering staff.

- **Appalachian Clean Streams Initiative (ACSI)**

Activities in Tennessee were focused on three project areas this year: North Chickamauga Creek, Bear Creek, and Laurel Creek. The North Chickamauga Creek is the most well-developed of the three projects since it has been ongoing for over three years. Two passive treatment systems have been installed and a third will be installed in the Fall of 1996. The Laurel Creek Project is the "Max Project" for Tennessee and the Tennessee Wildlife Resources Agency (TWRA) in cooperation with the Tennessee Department of Environment and Conservation (TDEC) has the lead on this project. This project will receive funding from OSM under the 1997 ACSI budget (approximately \$325,000) which will be awarded to TWRA. The Bear Creek Project involves a watershed that drains into the Big South Fork National River and Recreation Area. The Natural Resource Conservation Service (NRCS) has the lead for interagency coordination of Bear Creek, an initiative they are planning to submit for funding under their PL-566 watershed restoration program in the FY 98 budget.

- **Electronic Permitting (EP)**

To initiate the development of electronic permitting, a survey was conducted among the major coal companies/consultants to solicit their input, interest, and expectations regarding electronic permitting in Tennessee. Even though only four survey forms were completed and returned to the Knoxville office, they represented the vast majority of coal interests in Tennessee. The industry is very interested in EP as it will save time and money both for the industry and regulatory authority. A meeting was held in Knoxville with the Commonwealth of Kentucky in September 1996, to discuss EP items of mutual concern/interest and its relationship to electronic permitting. An OSM/industry information exchange forum will be held in February 1997, and the participants are expected to be: (1) Tennessee coal industry/consultants, (2) electronic permitting representatives from Texas and Wyoming that already have established EP procedures, (3) representatives from Kentucky, and (4) other interested parties.

- **Kentucky Cooperative Agreement for Federal Lands**

During the summer of 1996, the Kentucky Division of Surface Mining (DSM) made inquiries into gaining cooperative agreement status for Federal lands. A briefing was presented by the KFO Staff to Commissioner Carl Campbell on August 6, 1996, regarding KFO's Kentucky Federal lands workload, permitting procedures, Federal land management agency coordination and electronic permitting tracking. To date, DSM has not submitted a program amendment to acquire cooperative agreement status; however, a submission is expected during January or February 1997. Once the program amendment is received, it is expected to require at least 18 months to receive the final approval.

- **Lands Unsuitable for Mining**

Fern Lake Unsuitability Petition. A petition was filed on February 14, 1994, to designate the watershed of Fern Lake, Claiborne County, Tennessee, as unsuitable for all surface coal mining operations. Fern Lake is the only public water supply for the City of Middlesboro, Kentucky, and the petition area is also visible from the Cumberland Gap National Historic Park. The final petition evaluation document/environmental impact statement (PED/EIS) was published on August 9, 1996, and the Director issued a decision on September 13, 1996, designating the entire petition area as unsuitable for all surface coal mining operations but allowing underground mining from outside the petition area.

Fall Creek Falls Unsuitability Petition. A petition was accepted for processing on October 5, 1995, to designate the watershed and viewshed of Fall Creek Falls State Park and Natural Area as unsuitable for surface coal mining operations. The draft PED/EIS is scheduled for publication in July 1997. The petition area covers approximately 83,740 acres and encompasses the entire watershed and viewshed of Fall Creek Falls State Park. The central issue in the petition concerns disturbing the acid- and/or toxic-producing zone in the shale that overlies the Sewanee coal seam which is the dominant seam of importance in the Tennessee southern coalfields. Skyline Coal Company (Skyline) has formally intervened for the purpose of participating in the proceedings and objecting to

the petition designation. Skyline has leased approximately 120,000 acres for coal mining in the tri-county area surrounding its current operations and has approximately 30,000 acres leased within the petition area.

- **Inventory of Sites Causing Water Pollution Problems**

KFO is currently developing procedures for identifying, inventorying, and abating water pollution problems. Approximately 25 sites have been identified that are causing water pollution problems. Based on the evaluations by the KFO, the permittee may be required to revise the permit, as appropriate, to address long-term treatment of the water pollution problem. KFO will assess the costs associated with maintaining the approved treatment system and require the permittee to submit a financial guarantee for long-term mitigation of the water pollution problem.

- **Remining**

The KFO Remining Team was formed in May 1996. The Team has solicited suggested remining initiatives from industry, the environmental community, and the regulatory community. The suggested initiatives were analyzed and the Team determined which could be implemented under Tennessee Federal Program requirements. Details were developed for the initiatives and industry was provided guidance on implementation of the remining initiatives. KFO has developed an Information Memorandum detailing EPACT remining provisions and is developing an additional Information Memorandum on all initiatives available to industry. KFO also plans to submit suggested regulatory reform to Headquarters that would further enhance reclamation through remining. The field office will continue to work with the mining, environmental, and regulatory communities to identify additional remining initiatives.

- **Skyline Coal Big Brush #2 Permit**

The Big Brush #2 permit proposes to disturb 950 acres. The central issue in the technical analysis of the application is the adequacy of the toxic material handling plan (TMHP) and issuing a permit with reasonable certainty that material damage to the hydrologic balance will not occur outside the permit area. Skyline submitted the final geologic and hydrologic baseline data on October 25, 1996. Currently, the KFO is conducting a detailed technical analysis of the overburden chemistry to evaluate the TMHP and the potential effects on the surface- and ground-water regimes in and around the proposed permit area. It is anticipated that a decision will be reached on the proposed permit in January 1997.

- **Summary of Successes**

The Field Office is in the process of establishing a Model Federal Program in Tennessee through the incorporation of national components of excellence in its program areas. The objective of the initiative is improvement of the Federal Program in Tennessee so that it may serve as a model for other surface mining regulatory programs. This initiative concerns specific components of regulatory programs that represent a model approach to achieving the goals of SMCRA. The components were identified through an extensive outreach effort involving input from the Eastern and Western Support Centers, eight field offices, and fourteen states. Four initiatives discussed above are components of the Model Federal Program: 1) standard inspection report format, 2) AMD inspection/evaluation initiative, 3) Appalachian Clean Streams Initiative , and 4) electronic permitting. Thirty-three of the forty-nine model program components have been initiated and the remaining seventeen components are planned to be initiated by the end of FY 98.

In addition, the Knoxville Field Office is improving its relationships with its customers and stakeholders by providing increased opportunities for participation in the regulatory functions of the Field Office and by meeting with the State, with citizens, with landowners, and with industry to discuss concerns and to foster better working relationships. The results have produced improvements in compliance with respect to operators anticipating and addressing potential problems before they develop into violations. There have also been enhancements in communications with operators and landowners, based on industry feedback since the outreach efforts began. This feedback has consisted of improved oral communications as well as input in draft (written) field office policies and procedures that affect industry operations.

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**

To further the concept of reporting end results, the findings from 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 and which meet the bond release requirements for the various phases of reclamation. Individual topic reports are available in the Knoxville Office which provide additional details on how the following evaluations and measurements were conducted.

A. Off-Site Impacts

One of the intents of SMCRA is to prevent adverse effects to the public and to the environmental resources adjacent to a permitted surface coal mining operation. To determine if “off-site” impacts occurred in Tennessee, all notices of violation issued during the evaluation period (seventy) were reviewed. The inspection narrative and civil penalty assessment sheets were reviewed to determine the extent of damage that occurred, due to the violations, and to determine whether damage extended off the permit. Fifteen permits were identified as having twenty-two land and/or water impacts off the permits. The twenty-two impacts were found to be very minor in the degree of impact. There were two small slides originating on two permits that extended off the permits, affecting .5 acres at one and .2 acres at the other. There were eight occurrences of sediment-laden runoff that caused deposition of sediment off the permits for short distances (all being minor occurrences). There were twelve occurrences where effluent from sediment basins did not meet NPDES requirements with discharges entering streams. All were small discharges and all had minimal effects on the receiving stream. Since all problems identified were considered steep slope mining or high precipitation events related occurrences, improvements in regulatory functions or processes are not deemed necessary at this time.

B. Bond Release

During the period January 1, 1996 through September 30, 1996, the Field Office processed forty-five bond release requests. A total of thirty-six release actions were approved, consisting of eight Phase I, thirteen Phase II, and fifteen Phase III releases. These actions resulted in returning all or a portion of the bond on more than 1,922 acres of reclaimed mine lands (see attached table). During this same period six bond release requests were disapproved, consisting of two Phase I, one Phase II, and three Phase III releases. Also, three bond release requests were withdrawn by the permittees.

APPENDIX A:

These tables present data pertinent to mining operations and Federal regulatory activities within Tennessee. Unless otherwise specified, the reporting period for the data contained in all tables is January 1, 1996 to September 30, 1996. Additional data used by the Knoxville Field Office in its evaluation of performance is available for review in the evaluation files maintained by the Knoxville Office.

TABULAR SUMMARY OF CORE DATA TO CHARACTERIZE THE PROGRAM

Table 1: Coal Production

Table 2: Inspectable Units

Table 3A: Tennessee Permitting Activity

Table 3B: Federal Lands Permitting Activity

Table 4: Off-Site Impacts

Table 5: Annual State Mining and Reclamation Results

Table 7: State Bond Forfeiture Activity

Table 8: Tennessee Staffing

TABLE 1

TENNESSEE COAL PRODUCTION (Millions of short tons)			
Period	Surface mines	Underground mines	Total
Coal production^A for entire State:			
1994	1.10	1.83	2.93
1995	1.16	1.82	2.98
1996	1.35	1.30	2.65 ^B

^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 on form OSM-1 line 8(a). 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.

^B Period covers January 1, 1996 to September 30, 1996

TABLE 2

INSPECTABLE UNITS (As of September 30, 1996)													
Coal mines and related facilities	Number and status of permits								Insp. Units D	Permitted acreage ^A (hundreds of acres)			
	Active or temporarily inactive		Inactive		Abandoned		Totals			IP	PP	Total	
	IP	PP	Phase II bond release		IP	PP	IP	PP					
			IP	PP						IP	PP		
STATE and PRIVATE LANDS						REGULATORY AUTHORITY: STATE							
Surface mines	7	59	4	26	101	27	11	112	—	42	153	195	
Underground mines	2	70	1	13	19	23	22	106	—	2	15	17	
Other facilities	2	62	0	2	3	4	5	68	—	1	26	27	
Subtotals	11	191	5	41	123	54	13	286	9	45	194	239	
FEDERAL LANDS						REGULATORY AUTHORITY: STATE							
Surface mines	—	—	—	—	—	—	—	—	—	—	—	—	
Underground mines	—	—	—	—	—	—	—	—	—	—	—	—	
Other facilities	—	—	—	—	—	—	—	—	—	—	—	—	
Subtotals													
ALL LANDS^B													
Surface mines	7	59	4	26	101	27	11	112	—	42	153	195	
Underground mines	2	70	1	13	19	23	22	106	—	2	15	17	
Other facilities	2	62	0	2	3	4	5	68	—	1	26	27	
Totals	11	191	5	41	123	54	13	286	9	45	194	239	
Average number of permits per inspectable unit (excluding exploration sites)										<u>1</u>			
Average number of acres per inspectable unit (excluding exploration sites)										<u>49.</u> <u>4</u>			
Number of exploration permits on State and private lands:							<u>1</u>		On Federal lands:			<u>0</u>	C
Number of exploration notices on State and private lands:							<u>51</u>		On Federal lands:			<u>0</u>	C
<p>IP: Initial regulatory program sites. PP: Permanent regulatory program sites.</p> <p>^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</p>													

Management.

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

TABLE 3A

TENNESSEE 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	6	4	953.2	2	2	25.7	2	3	376.1	10	9	1,355
Renewals	1	0		8	6		14	10		23	16	0
Dental boundary revisions	1	1	4.3	2	3	25.74	3	4	9.6	6	8	39.64
Revisions (exclusive of dental boundary revisions)	24	25		17	11		22	23		63	59	
Transfers, sales and assignments of permit rights	5	4		2	9		4	11		11	24	
Well operator assistance	0	0		0	0		0	0		0	0	
Exploration permits	1	1		0	0		0	0		1	1	
Exploration notices ^B										0	0	
Totals	38	35	957.5	31	31	51.44	45	51	385.7	114	117	1,395

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

^A Includes only the number of acres of proposed surface disturbance.

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

NOTE - The "Issued" category represents applications received prior to 01/01/96 and between 01/01/96 and 09/30/96 but issued between 01/01/96 and 09/30/96.

TABLE 3B

FEDERAL LANDS 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	2	1	0	1	2	574.9	3	3	574.9
Renewals	0	0		2	2		0	0		2	2	0
Permit boundary revisions	0	0	0	0	0	0	1	0	0	1	0	0
Revisions (exclusive of permit boundary revisions)	0	0		9	6		1	1		10	7	
Transfers, sales and assignments of permit rights	0	0		1	1		1	0		2	1	
Full operator assistance	0	0		0	0		0	0		0	0	
Exploration permits	0	0		0	0		0	0		0	0	
Exploration notices ^B										0	0	
Totals	0	0	0	14	10	0	4	3	574.9	18	13	574.9

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

^A Includes only the number of acres of proposed surface disturbance.

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

NOTE - The "Issued" category represents applications received prior to 01/01/96 and between 01/01/96 and 09/30/96 but issued between 01/01/96 and 09/30/96.

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 IMPACT AND TOTAL NUMBER OF EACH TYPE	Blasting												
	Land Stability				2								
	Hydrology							12					
	Encroachment												
	Other				8								
	Total				10				12				
Total number of permits or mine sites with observed off-site impacts: Permits <u>15</u> or Mine Sites													
Total number of permits or mine sites evaluated: Permits <u>44</u> or Mine Sites													
Total number of observations made to evaluate mine sites or permits for off-site impacts <u>70</u>													

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.

TABLE 5

ANNUAL STATE MINING AND RECLAMATION RESULTS		
Bond release phase	Applicable performance standard	Acreage released during this evaluation period
Phase I	<ul style="list-style-type: none"> • Approximate original contour restored • Topsoil or approved alternative replaced 	935
Phase II	<ul style="list-style-type: none"> • Surface stability • Establishment of vegetation 	564
Phase III	<ul style="list-style-type: none"> • Post-mining land use/productivity restored • Successful permanent vegetation • Groundwater recharge, quality and quantity restored • Surface water quality and quantity restored 	423
	Total number of disturbed acres at end of last review period (December 31, 1995) ¹	14,468.3
	Total number of acres disturbed during this evaluation year	15,555.5
	Number of acres disturbed during this evaluation year that are considered remaining	0
<p>¹ Disturbed acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).</p>		

TABLE 7

STATE BOND FORFEITURE ACTIVITY (Permanent Program Permits)			
	Sites	Dollars	Acres
Bonds forfeited as of January 1, 1996 ^A	17	\$1,492,525	622
Bonds forfeited during EY 1996	2	73,305	19.5
Forfeited bonds collected as January 1, 1996 ^A	6	452,600	14.9
Forfeited bonds collected during EY 1996	2	73,305	19.5
Forfeiture sites reclaimed during EY 1996	0	0	0
Forfeiture sites repermited during EY 1996	0		0
Forfeiture sites unreclaimed as of September 30, 1996	7		440
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.			

