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 1997

(October 1, 1996 to September 30, 1997)

(November 1997)

TABLE OF CONTENTS

I. Introduction 2

II. Overview of Coal Mining Industry 3

III. Overview of Public Participation in the Program 3

IV. Major Accomplishments/Issues/Innovations 5

V. Success in Achieving the Purposes of SMCRA 10

A. Off-site Impacts 10

B. Bond Releases 11

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 In Tennessee, OSM implemented the Federal regulatory program in October 1984 when the State repealed its surface mining law.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 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 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 nineteenth in production of coal among the 25 coal producing states thus far in calendar year 1997. Coal production has steadily declined from a high of 11,260,000 tons in 1972 to 3,630,000 tons in 1996. Currently, there are 22 active coal producing mines that have permitted 5,382 acres for mining. Underground mines have permitted 116.4 acres (excluding shadow areas) at the nine active mines and surface operations have permitted 5,266 acres at the thirteen 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/Citizen 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.

  A meeting was held on August 14, 1996, between representatives of KFO, Tennessee Environmental Policy Office (TEPO) and the petitioners for the Fall Creek Falls State Park lands unsuitable for mining petition including Save Our Cumberland Mountains, Tennessee Citizens for Wilderness Planning, and individual citizens. The purpose of the meeting scheduled by the petitioners was for: (1) KFO to brief the petitioners on the status of the preparation of the Petition Evaluation Document/Environmental Impact Statement, (2) TEPO to explain its role in the National Environmental Policy Act (NEPA) process, and (3) petitioners to brief the KFO and TEPO on their concerns and provide additional information for consideration in the processing of the petition. All parties believed it was a productive meeting which provided an opportunity to improve communication between the KFO, TEPO, and petitioners during the petition process.

The KFO is meeting with individual citizens, during the permitting process, who have expressed concerns or have an interest in a pending permit. The purpose of these meetings are to answer questions relative to the concerns and to provide information/explanations with respect to the permitting actions at issue.

Public participation opportunities were also provided to the public in the review of 18 new permit applications processed by KFO this year. Three informal conferences were held.

KFO provided the public with outreach opportunities on several initiatives including the 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. KFO also provided outreach to Save Our Cumberland Mountains Strip Mine Committee by conducting a briefing on the Skyline Coal Company's Big Brush Mine No. 2, Permit OSM #2959. The Field Office provided participation opportunities in the development of regulatory policies and issues dealing with identifying lands eligible for remining.

- **Public Meetings**

  During the evaluation year 1997, two "Open House" public meetings were held with twenty-one members of the public in attendance. The meetings were held in Jamestown and Caryville, Tennessee, which are located in the middle and upper coal field areas. 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 continued its 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 fiscal year 1997 (FY 97) 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 Meetings**

  - Pre-Permit Application Meetings with the Industry.

    KFO began an initiative this year to meet with individual coal companies prior to

submittal of a permit application to discuss potential issues that might arise during the permitting process and to seek resolution of concerns/problems that address regulatory requirements as well as the needs of the industry stakeholder.

- Post-Permit Issuance Meetings.

  Following the issuance of permits, KFO technical staff are visiting these minesites to review the effectiveness of the approved plan and to discuss with the operator potential modifications/improvements to the approved plan. The purposes of this outreach effort are to improve the permitting process and to answer questions that the operator and/or the inspector might have about the mining operation and reclamation plan.

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

  KFO met on one occasion with the Army Corps of Engineers, on two occasions during the period with the Tennessee Division of Water Pollution Control, and on two occasions with 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

- **Identification of Potential Problems**

  To assist operators and reduce follow-up inspection hours, after issuance of notices of violation, the field office continued to place 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.

- **AMD Inspection/Evaluation Initiative**

  The Knoxville Field Office continued its acid mine drainage (AMD) inspection/evaluation initiative of identification of potential AMD producers. During fiscal year 1997, five inspections were completed at four surface mines and one underground mine. One surface mine evaluation was a follow-up inspection from the sites inspected in 1996 to further evaluate the site for acid producing conditions. The underground mine was included to evaluate the application of the AMD inspection methodology at underground mines. 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 response to an industry request, KFO modified the existing field modification procedure to include approving gravel surfacing for temporary roads that have been disturbed by third parties. This provision was added to facilitate bond release.

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

  Activities in Tennessee were focused on three stream improvement 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 three other treatment systems will be installed in the FY 98. 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. Six reclamation contract projects have been completed to date. Engineering and design efforts will begin on a seventh contract during FY 98. 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. Six reclamation project sites have been completed to date.

- **Electronic Permitting (EP)**

  KFO has formed an Electronic Permitting Team to complete this initiative. The Team, through its solicitations of comments from consultants and industry, identified a need for an electronic means to apply for and obtain a surface coal mining permit. The Team developed a plan to establish an electronic permitting process. KFO contracted with TriLogic, a Pennsylvania ADP consulting firm, to perform a requirements analysis to identify the elements required to implement electronic permitting in Tennessee. The requirement analysis has been completed. Currently KFO is working with Virginia DMLR to develop an electronic permitting application form that can be used by all states in the Appalachian Region. The form is scheduled for completion in the all of 1998.

- **Kentucky Cooperative Agreement for Federal Lands**

  The Commissioner of the Kentucky Natural Resources and Environmental Protection Cabinet submitted a proposed program amendment on May 2, 1997. This proposal was published on June 4, 1997, in the Federal Register, to become the regulatory authority for surface mining on Kentucky Federal Lands, with the public comment period ending on July 7, 1997. Several public comments were received and are presently being considered. The expected signing of the cooperative agreement by the Governor of Kentucky and Secretary of Interior is slated for late FY 98 or early FY 99.

- **Kentucky Federal Lands Acid Mine Drainage Review**

  There are nine Federal lands permits that have been identified as having acid mine drainage (AMD) discharging on the permit area or from the permit area. A strategy has been developed to evaluate the problems and reclaim the sites through a comprehensive program that includes pollution prevention technology, and State and Federal program issue resolution. The resolution will also include securing a financial guarantee for long-term pollution problems. Four of the nine sites have received ordered revisions that focus on the long-term treatment of acid drainage. The remaining five sites are under consideration for possible short and long-term reclamation/treatment options.

- **The Stearns Company Takings Case**

  The Stearns Company, LTD., has filed a suit in the United States Court of Federal Claims (Case No. 594-89L), alleging the takings by the United States of a mineral estate of approximately 38,000 acres located under the surface of the Daniel Boone National Forest (DBNF) in Kentucky. The claim is for $17 million plus interest.

  The law suit was filed in October 1989 alleging these takings based upon OSM's denial of valid existing rights (VER) to underground mine coal within the DBNF. Further, Stearns alleges that VER constitutes a physical and regulatory takings. Stearns has refused to seek a compatibility determination that would allow it to underground mine.

  The judge has asked the parties to focus on the reduction in value of the property because of the requirement to obtain a compatibility determination. The case is currently in the discovery phase with a trial date set for April 27, 1998.

- **Lands Unsuitable for Mining**

  Fern Lake Unsuitability Petition 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. On November 12, 1996, Appolo Fuels, Inc., and J. M. Huber Corporation filed a lawsuit in the United States District Court for the Eastern District of Tennessee appealing OSM's designation decision. The Office of the Field Solicitor anticipates that the plaintiffs will propose a motion to the court to dismiss the suit.

- Fall Creek Falls Unsuitability Petition The petition was accepted for processing on October 5, 1995. The petition area covers approximately 85,588 acres and encompasses the entire watershed and viewshed of Fall Creek Falls State Park and Natural Area. The Park and Natural Area includes 18,719 acres and is protected under Section 522(e) of SMCRA; therefore, the area considered for designation is 66,869 acres. The central issue in the petition concerns disturbing the acid-/toxic-forming material in the shale that overlies the Sewanee coal seam which is the dominant seam of importance in the Tennessee southern coal fields.

Skyline Coal Company (Skyline), Cane Tennessee, Inc., (Cane) and Colten Inc., (Colten) have formally intervened in the proceedings and object to designating the area unsuitable. Skyline has approximately 30,000 acres under lease within the petition area. Skyline has stated that the company has made very large capital investments in its mining facilities and its investment base is dependent upon realization of the low-sulfur compliance coal reserve base within the petition area. The company's long-range mine plans show progression of mining into the petition area.

Cane owns approximately 10,000 acres in fee simple in Bledsoe County, Tennessee. Cane purchased this property for the express purpose of having it mined. By conservative estimate, a reserve of over 7 million tons of minable coal is located on the property, almost all of which is located within the petition area. Cane has made a large capital investment in this property and its investment return is dependent upon its ability to mine the coal.

Colten owns an interest in approximately 2,000 acres in fee simple and the mineral rights to approximately 8,500 acres in Bledsoe and Van Buren Counties, Tennessee. Colten purchased this property for the express purpose of having it mined. By conservative estimate, a reserve of over 2 million tons of minable coal is located on the property, the majority of which is located within the petition area. Colten has made a large capital investment in this property and its investment return is dependent upon its ability to mine the coal.

Processing of the petition is drawing a high degree of public and media interest due primarily to the focus on protecting Tennessee's premier state park. The current schedule anticipates publication of a draft PED/EIS in February, 1998 and a final PED/EIS in August, 1998.

The petition is being processed by KFO's Technical Group with assistance in the areas of archaeology and socioeconomics from other OSM technical personnel. The Tennessee Department of Environment and Conservation provided assistance to OSM in conducting biological stream surveys within the petition area to determine the health of the watershed.

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

KFO has developed procedures for identifying, inventorying, and abating long-term water quality problems on sites for which it has inspection responsibilities. Currently, 33 sites have been identified that are causing water quality problems. Of the 33 sites, 20 are active and 13 are bond forfeited sites. KFO has evaluated the approved operation and reclamation plans for the 20 active sites and has determined that 19 of the sites have plans which contain approved treatment systems. For the 1 permit that does

not contain an approved treatment plan, KFO is issuing an ordered revision to the permittee requiring that the permit be revised accordingly.

KFO will prepare cost estimates for the 20 active sites based on the permittees' approved treatment method and require the permittees to submit a financial guarantee for long-term treatment of water quality problems.

- **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 State has recently begun working with industry on a case by case basis to modify effluent limit requirements in consideration of water quality improvements that result from remining.

  A meeting was held recently with industry representatives to discuss areas eligible for remining. Industry suggested that KFO research policy of other states before finalizing policy for Tennessee. KFO is currently contacting primacy states to determine their policies relative to remining.

  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 Skyline Big Brush #2 permit was issued in March, 1997. The site was controversial during the review stage because of its proximity to the proposed Fall Creek Falls petition area and the adequacy of its toxic material handling plan. Shortly after the permit was issued, Save Our Cumberland Mountains, a citizens advocate group, filed an appeal of the permit issuance which contested the number of monitoring wells on the permit. The case was heard by an Administrative Law Judge in late September and early October, 1997. A decision is not expected before March, 1998. 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.

- **Eastern Minerals Takings Case**

  The case concerns a "takings" claim by the plaintiffs against the United States. The plaintiffs allege the United States, through the Surface Mining Control and Reclamation Act, prevented coal mining operations in Tennessee and the plaintiffs are seeking compensation.

  There were two decisions rendered by the U.S. Court of Federal Claims during 1997 on this case. In February, 1997, the Court ruled that the United States is liable for the taking and that the United States has financial responsibility for the taking. The Court instructed parties to negotiate a financial settlement. The parties failed to reach a settlement and in May, 1997, the Court entered a judgement on the amount of compensation to be paid the plaintiffs. Motions for reconsideration of this judgement are pending.

- **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. 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 (forty-four) were reviewed. The inspection narratives 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. Thirteen permits were identified as having twenty-one land stability, hydrology, or other impacts off the permits. There were three land stability violations (slides) that caused moderate impacts to land and water off three permits. There were thirteen hydrology violations (mostly sediment laden runoff leaving the permits) at eight permits that caused three minor, seven moderate, and three major impacts to streams off the permits. There were five additional violations at three permits that caused minor to moderate impacts to off-permit areas. The three hydrology violations were considered to have major impacts due to the effects extending down the streams for long distances.

All violations were considered to be either permittee negligence or related to steep slope mining and high precipitation events, or both. For this reason, improvements in the regulatory functions or processes are not deemed necessary at this time.

B. Bond Releases

During the period October 1, 1996 through September 30, 1997, the Field Office processed sixty-nine bond release requests. A total of fifty-eight release actions were approved, consisting of ten Phase I, nine Phase II, and thirty-nine Phase III releases. These actions resulted in returning all or a portion of the bond on more than 7,150 acres of reclaimed mine lands (see attached table). During this same period seven bond release requests were disapproved, consisting of two Phase I, one Phase II, and four Phase III releases. Also, four 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 the same as the evaluation year. 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 OSM 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:			
Calendar Year			
1994	1.10	1.83	2.93
1995	1.16	1.82	2.98
1996	1.89	1.74	3.63

[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.

TABLE 2

INSPECTABLE UNITS
As of September 30, 1997

Coal mines and related facilities	Number and status of permits									Permitted acreage[A] (hundreds of acres)		
	Active or temporarily inactive		Inactive		Abandoned		Totals		Insp. Unit[D]			
			Phase II bond release									
	IP	PP	IP	PP	IP	PP	IP	PP		IP	PP	Total
STATE and PRIVATE LANDS	**REGULATORY AUTHORITY: FEDERAL**											
Surface mines	6	55	4	12	101	28	111	95	_	42	169	211
Underground mines	2	65	_	7	19	21	21	93	_	2	13	15
Other facilities	1	71	_	_	3	4	1	78	_	1	26	27
Subtotals	9	191	4	19	123	53	133	266		45	208	253
FEDERAL LANDS	**REGULATORY AUTHORITY: FEDERAL**											
Surface mines	_	_	_	_	_	_	_	_	_	_	_	_
Underground mines	_	_	_	_	_	_	_	_	_	_	_	_
Other facilities	_	_	_	_	_	_	_	_	_	_	_	_
Subtotals												
ALL LANDS[B]												
Surface mines	6	55	4	12	101	28	111	95	_	42	169	211
Underground mines	2	65	_	7	19	21	21	93	_	2	13	15
Other facilities	1	71	_	_	3	4	1	78	_	1	26	27
Totals	**9**	**191**	**4**	**19**	**123**	**53**	**133**	**266**		**45**	**208**	**253**

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

Average number of acres per inspectable unit (excluding exploration sites) 56.4

Number of exploration permits on State and private lands: 1 On Federal lands: 0 [C]

Number of exploration notices on State and private lands: 44 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

TENNESSEE PERMITTING ACTIONS
As of September 30, 1997

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	5	7	2,846	8	2	47.5	0	0	0	13	9	2,894
Renewals	3	3	671.5	12	11	214.3	10	10	504.1	25	24	1,390
Incidental boundary revisions	9	7	54.0	4	4	35.2	0	0	0	13	11	89
Revisions (exclusive of incidental boundary revisions)	69	61		27	22		12	14		108	97	
Transfers, sales and assignments of permit rights	0	2		1	0		0	0		1	2	
Small 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		0	0		0	0		0	0	
Totals	86	80		52	39		22	24		160	143	4,373

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions 29

[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 3B

FEDERAL LANDS PERMITTING ACTIONS
As of September 30, 1997

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	5	1	349.0	0	0	0	5	1	349
Renewals	0	0	0	1	1	49.3	0	0	0	1	1	49
Incidental boundary revisions	1	0	0	1	1	10.0	0	1	3.62	2	2	14
Revisions (exclusive of incidental boundary revisions)	1	1		6	7		0	0		7	8	
Transfers, sales and assignments of permit rights	0	0		4	3		0	1		4	4	
Small 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		0	0		0	0		0	0	
Totals	2	1		17	13		0	2		19	16	412

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

TA. .E 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	3					3			1				
	Hydrology	13	1						3	7	3			
	Encroachment													
	Other	5				2			2	1				
	Total	21	1	0	0	2	3	0	5	9	3	0	0	0

Total number of permits or mine sites with observed off-site impacts
Permits 13 or Mine Sites _____
Total number of permits or mine sites evaluated:
Permits 23 or Mine Sites _____
Total number of observations made to evaluate mine sites or permits for off-site impacts 44 or Mine Sites

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	●Approximate original contour restored ●Topsoil or approved alternative replaced	1,301
Phase II	●Surface stability ●Establishment of vegetation	731
Phase III	●Post-mining land use/productivity restored ●Successful permanent vegetation ●Groundwater recharge, quality and quantity restored ●Surface water quality and quantity restored	5,118
	Total number of disturbed acres at end of last review period (December 31, 1996)[1]	15,808.1
	Total number of acres disturbed during this evaluation year	396.7
	Number of acres disturbed during this evaluation year that are considered remining	139

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

TABLE 7

STATE BOND FORFEITURE ACTIVITY
(Permanent Program Permits)

	Sites	Dollars	Acres
Bonds forfeited as of September 30, 1996[A]	18	$1,512,425	626
Bonds forfeited during EY 1997	1	19,900	3.5
Forfeited bonds collected as September 30, 1996[A]	6	452,500	14.9
Forfeited bonds collected during EY 1997	1	19,900	3.5
Forfeiture sites reclaimed during EY 1997	0	0 [B]	0
Forfeiture sites repermitted during EY 1997	0		0
Forfeiture sites unreclaimed as of September 30, 1997	8		444
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

TENNESSEE STAFFING
(Full-time equivalents at end of evaluation year)

Function	EY 1997
Regulatory program	
Permit review	15
Inspection	15
Other (administrative, fiscal, personnel, etc.)	26
	56