

***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 1999**

**(October 1, 1998, to September 30, 1999)**

***(November 1999)***

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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. 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 In Tennessee, OSM implemented the Federal regulatory program in October 1984 when the State repealed its surface mining law.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, 1998, to September 30, 1999. 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
BTTI	Branch of Technical Training
CA	Cooperative Agreement
DBNF	Daniel Boone National Forest
DSMRE	Kentucky Department for Surface Mining Reclamation and Enforcement
EIS	Environmental Impact Statement
EP	Electronic Permitting
EPACT	Environmental Policy Act
IUL	Inspectable Unit List
KFO	Knoxville Field Office
LFO	Lexington Field Office
MEIR	Minesite Evaluation Inspection Report
MTR	Mountain Top Removal
MWP	Mining Without a Permit
NRCS	Natural Resources Conservation Service
NREPC	Kentucky Natural Resources and Environmental Protection Cabinet
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
SOCM	Save Our Cumberland Mountains
TDEC	Tennessee Department of Environment and Conservation
TWRA	Tennessee Wildlife Resources Agency
TMHP	Toxic Material Handling Plan
VER	Valid Existing Rights

## **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 78.2 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 1999. Coal production steadily declined from a high of 11,260,000 tons in 1972 to 2,680,888 tons in 1998. During 1999, coal production has been increasing, and is 29 percent higher for the first nine months than for the same period in 1998. Currently, there are 28 active coal producing mines that have permitted 5,480 acres for mining. Underground mines have permitted 218 acres (excluding shadow areas) at the 13 active mines and surface operations have permitted 5,232 acres at the 15 active 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.

The KFO meets 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 9 new permit applications processed/issued by KFO this year. One informal conference was requested in EY 1999 which will be heard in EY 2000.

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. The Field Office provided participation opportunities in the development of regulatory policies and issues dealing with incremental, rip rap specifications on drainage channels, bond adjustments, incidental boundary revisions, geology and hydrology permit requirements, public availability of Environmental Assessments and Findings of No Significant Impacts and Reforestation and Wildlife Enhancement.

### **Industry Meetings**

Pre-Permit Application Meetings with the Industry.

KFO began an initiative two years ago to meet with individual coal companies or their consultant 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. Because of the success of this initiative and the acceptance of this endeavor by the permit applicants, consultants, other participating agencies and OSM, this activity has been made a part of the normal permitting process.

Post-Permit Issuance Meetings.

Following the issuance of permits, KFO technical staff, as appropriate, 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 purpose of this outreach effort is 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, during initial stages of implementation.

### **Outreach Meetings with External Stakeholders**

During this evaluation year, KFO conducted eleven separate meetings with State and Federal stakeholders to discuss regulatory issues and concerns, to enhance information sharing, and to strengthen partnerships in protection of the environment. The participants at these meetings included the Tennessee Division of Natural Heritage, Tennessee Wildlife Resources Agency, U.S. Fish and Wildlife Service, Tennessee Water Pollution Control - Mining Division, Tennessee Department of Environment and Conservation, representatives from the Office of the State Historic Preservation Officer, U.S. Geologic Survey, Cumberland Coal Company, Kentucky DSMRE, Virginia DMLR, and Tennessee Federal GIS Users Group.

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

##### **Identification of Potential Problems**

To assist operators in preventing environmental problems 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. The purpose of these inspections is to determine if the approved toxic material handling plans are effective in preventing acid mine drainage. Information from these inspections is used to determine if mining practices need to be modified or if permit revisions are required.

During evaluation year 1999, five inspections were completed at five separate surface mines. Two sites were determined to have effective toxic material handling plans. The remaining three sites were recommended to the Technical Group for possible permit revisions.

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

The Federal Program in Tennessee participates in the Appalachian Clean Streams Initiative as facilitator with local watershed efforts to mitigate the effects of acid mine drainage being discharged into watersheds from abandoned coal mines. The majority of the on-the-ground work has been accomplished by the Tennessee Division of Water Pollution Control, Land Reclamation Section using monies provided to the State from OSM's AML fund. Three watersheds have been designated as ACSI watersheds:

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North Chickamauga Creek. This is a watershed near Chattanooga that has a formal citizens group leading the clean-up effort. The North Chickamauga Creek Conservancy has been the driving force behind the watershed restoration activities which include AMD treatment systems, land acquisitions for watershed preservation, stream bank stabilization projects, water monitoring programs, and Greenway trails and pathways. To date, the State of Tennessee has expended \$180,000.00 and OSM has expended \$275,570.00 for a total of \$455,570.00. During EY '99, OSM funding enabled the installation of a passive treatment system for AMD discharges in the watershed. In the past, the State of Tennessee has installed several passive treatment systems in the watershed at abandoned underground mines using OSM's AML funds.

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**Bear Creek.** This is a watershed near Oneida in Scott County that flows into Big South Fork National River and Recreation Area. Numerous passive treatment systems have been installed at abandoned coal mines in this watershed and others are to be installed as funds become available. A total of \$839,411.00 has been expended to date which consist of 50% funding by the State of Tennessee and 50% funding with EPA 319 dollars. During EY 98, OSM obligated AML funds (\$200,000) in a cooperative effort with the Natural Resources and Conservation Service (NRCS) and the National Park Service for construction of AMD mitigation projects over a two year period. During EY 99, the Knoxville Field Office provided technical assistance to the NRCS for design of AMD treatment facilities which are to be installed by the NRCS contractors.

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**Big Laurel Creek.** This is a watershed in Fentress County and is the Max Project for Tennessee. The Tennessee Wildlife Resources Agency, in cooperation with the Tennessee Division of Water Pollution Control is taking the lead for the mitigation projects. The State agencies have installed several passive treatment systems in the watershed using OSM's AML funds. To date, \$1,002,120.00 has been expended including 25% sharing by Tennessee Department of Environment and Conservation and 25% sharing by Tennessee Wildlife Resources Agency.

### **Electronic Permitting (EP)**

KFO formed an Electronic Permitting Team in August 1997 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 worked with Virginia DMLR to develop an electronic permitting application form that would be available for any interested states in the Appalachian Region. The draft form and its associated guidelines were finalized in the Spring of 1999. The Virginia DMLR is in the process of putting the permitting application form in an electronic format that is generic in its presentation of permit requirements. Following completion of this task, Virginia DMLR plans to make the electronic permit available to other states in the Appalachian Region, including the State of Tennessee. The projected date for completion of this task is December 31, 1999, at which time testing of the system will begin. The projected date for the availability of the electronic permit application to the coal industry is April 1, 2000.

### **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, to become the regulatory authority for mining on Kentucky Federal Lands. This proposal was published on June 4, 1997, in the Federal Register. The public comment period was scheduled to end on July 7, 1997. Two requests were received for an extension of the comment period, which was granted, establishing a deadline of August 4, 1997.

Written comments were received from members of the public, Federal agencies, and industry representatives. Because no one requested an opportunity to speak at a public hearing, no hearing was held. Several minor wording changes were made to the cooperative agreement in response to comments received. The agreement was signed by Paul E. Patton, for the Commonwealth of Kentucky on August 18, 1998, and by Bruce Babbitt, Secretary of the Interior, on September 24, 1998. The effective date of the cooperative agreement was November 1, 1998.

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

There are nine Federal lands permits that were identified as having acid mine drainage (AMD) discharging on the permit area or from the permit area. KFO, LFO and the State of Kentucky DSMRE developed a strategy for the evaluation and resolution of the issues related to these sites through a comprehensive program that includes pollution prevention technology, and the establishment of financial guarantees for long-term pollution problems, where appropriate. As a result of the Kentucky Cooperative Agreement, the Kentucky Department for Surface Mining Reclamation and Enforcement has assumed the lead for resolution of these problem areas.

### **The Stearns Company Takings Case**

The Stearns Company, LTD. 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 surface mine coal within the DBNF. Further, Stearns alleged 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 court case commenced in the Court of Federal Claims, in Washington D.C. on July 8, 1998, and due to a number of recesses continued into 1999. The trial has been concluded and a decision is expected in EY 2000.

### **Lands Unsuitable for Mining**

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Fall Creek Falls Unsuitability Petition A petition to designate the 85,588 acre watershed and viewshed of Fall Creek Falls State Park and Natural Area in Bledsoe and Van Buren counties, Tennessee, as unsuitable for mining was accepted for processing on October 5, 1995. The petitioners were Save Our Cumberland Mountains, Tennessee Citizens for Wilderness Planning, and 49 citizens.



The allegations in the petition primarily concern disturbing the acid- and/or toxic-producing zone in the shale that overlies the Sewanee coal seam, the dominant seam of importance in the southern Tennessee coal fields. Historical mining of the Sewanee coal seam has resulted, at times, in the production of acid mine drainage (AMD) and, on at least eight sites resulted water pollution problems requiring long-term treatment. The petitioners allege that the technology does not currently exist to mine the Sewanee coal seam and prevent AMD. The petitioners support the allegation by referring to the permits issued to Skyline Coal Company (Skyline) by the OSM which are now producing AMD, namely Pine Ridge Mine and Gladys Fork Mine. Consequently, the petitioners conclude that mining the Sewanee seam in the petition area without the technology to prevent AMD would result in adverse water quality impacts to the surface water regime within Fall Creek Falls State Park which, in turn, would impact other natural resources and the socioeconomics of the park.

Processing of the petition has drawn a high degree of public and media interest due primarily to the focus on protecting Tennessee's premier state park, Fall Creek Falls.

The notice of availability for the Fall Creek Falls draft Petition Evaluation Document/Environmental Impact Statement (PED/EIS) was published on May 1, 1998, in the Federal Register. Three public comment periods were open on the draft: May 1, 1998, to July 30, 1998; August 21, 1998, to September 16, 1998; and January 29, 1999, to April 29, 1999.

OSM anticipates issuing a decision on the Fall Creek Falls unsuitability petition at the end of calendar year 1999, or shortly thereafter.

### **Bonding Initiative for Long-Term Treatment to Abate Water Pollution**

KFO has prepared a draft Field Office policy describing proposed procedures for the adjustment of performance bonds on sites requiring long-term treatment of acid/toxic discharges. A meeting was held with industry on this policy and their comments are being reviewed. It is anticipated the KFO Field Policy will be finalized in January 2000. Shortly thereafter bond adjustments will be requested on those sites that require long-term treatment to abate water pollution.

KFO has established an inventory of mine sites for which there is the potential for long-term treatment to abate water pollution. The inventory is dynamic; in that, sites are added and removed based on the determination of the need for long-term treatment. Currently, KFO has identified 19 sites involving 9 companies where there is the potential for long-term treatment. KFO has reviewed the approved operation and reclamation plans for the 19 sites and has determined that all the permits contain approved treatment systems.

KFO has re-evaluated the performance bonds for eight of the sites in the inventory. On April 15, 1998, KFO mailed letters to three companies, involving the eight permits, requesting annual and capital treatment costs. KFO requested that the permittees submit

their costs to KFO by mid-May. For these sites, the costs for long-term treatment has been calculated and KFO is prepared to request the companies to provide financial assurance for long-term treatment after KFO's policy is finalized. The remaining 11 sites, involving six companies, are being monitored to evaluate whether, in fact, long-term treatment will be necessary beyond the liability period.

### **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 is working with industry and KFO on a case by case basis to modify effluent limit requirements in consideration of water quality improvements that would result from remining. KFO is currently in the process of reviewing a remining permit on which the State has agreed to relaxed NPDES requirements. This permit should be issued by the end of the calendar year.

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 Mine #2 has been controversial due to its close proximity to the Fall Creek Falls watershed which is being reviewed for a possible Lands Unsuitable designation. It is also controversial since Skyline Coal Company failed to prevent AMD at the adjacent Gladly Fork Mine and Pine Ridge Mines (Both mines are treating for AMD). OSM attempted to deny the Big Brush Mine #1 but lost a court decision that allowed mining to proceed. OSM issued the Big Brush Mine #2 (BB2) permit in March of 1997, which is contiguous to Big Brush Mine #1.

Save Our Cumberland Mountains (SOCM), a citizens advocate group, filed an appeal of the permit decision based on the argument that hydrologic monitoring plans were insufficient to identify impacts to the hydrologic balance. The case was heard by Administrative Law Judge Torbet in September/October 1997. A decision was made by Judge Sweitzer in August of 1998. The Judge agreed with SOCM that the Company must conduct water sampling at least every 90 days as opposed to 4 times a year. The Judge also agreed with SOCM that the monitoring plan narrative must be more specific as to how the monitoring data will be used to identify impacts to the hydrologic balance and the plan must list any other monitoring sites from adjacent operations that are to be used for this mine. The Judge did not agree with SOCM that any more monitoring sites were needed. Skyline Coal Company, SOCM and OSM reached a settlement agreement on November 20, 1998, resolving all matters.

### **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 were heard. In December 1998, the Court entered a final judgment in favor of Eastern Minerals. The United States (through The Department of Justice) filed an appeal to the U.S. Court of Appeals for the Federal Circuit. Oral arguments should occur in early 2000 and a decision is expected four to six months later.

### **Rith Energy Takings Case**

This case is another takings claim against the United States. The plaintiff, Rith Energy, Inc., alleges that its rights to mine coal were taken by the United States when OSM did not approve a permit amendment for a toxic materials handling plan, thus preventing further mining.

The Court of Federal Claims issued a decision on June 25, 1999, holding that the permit revision denial was a proper exercise of regulatory authority and did not cause a taking. Rith Energy has filed an appeal to the U.S. Court of Appeals for the Federal Circuit. The matter has not yet been briefed. A decision is expected in late 2000.

### **Summary of Successes**

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. TECHNICAL ASSISTANCE**

The Knoxville Field Office (KFO) had and continues to have a number of its employees serving on different projects, teams and assignments that are of common interest to all of OSM, not just the Tennessee Federal Program. Several of these technical assistance activities are cooperative efforts with PSD and ARCC. The projects/activities which involve

KFO employees are as follows:

Monongahela River Project in Pennsylvania and West Virginia.

Reasonably Available Spoil (RAS) experimental practices (EP) in Virginia.

Valley Fill Impact Study, Appalachian Region.

Technical Information Processing System (TIPS) operation and next generation.

Citizen Complaint Investigation (KY Well Complaint).

Appalachian Region Electronic Permitting (EP) Team.

Appalachian Region Technical Coordinating Committee.

Experimental Practices in Kentucky and Tennessee.

VER - Environmental Impact Statement

IMCC Remining Team

Regional Remining Team

West Virginia Permit Review Team

West Virginia Process Improvement Team

West Virginia Interagency Process Improvement Team

Permit Findings Team

Bond Handbook Committee

National Blasting Work Group

National Dam Safety Group

Instructors for BTTI Training Courses

Medical Requirements Team

AMD Bonding

Revegetation

AVS National ownership and control rule redesign team and the Appalachian Region EP Team, AVS-EP Interface Subteam

Tennessee GIS Work Group

Contemporaneous reclamation special study in West Virginia

Valley Fill Stability and Flooding Team (Part of the MTR EIS)

Succession Planning Core Team Member

Beech Creek Hydrologic Investigation

Technical Assistance to Evaluate Topsoil Substitute

BAT Steering Committee

An Inspection Group staff person assisted Headquarters and Field Offices with Aviation Safety Training, a safety training course required for all staff members using helicopters in OSM s missions. The course was provided in Charleston, Lexington, Knoxville and in Washington, D.C. with a total of 50 people in attendance.

**VI. 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 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**

Active Sites:

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. While conducting complete and partial inspections during EY 99 KFO Reclamation Specialists evaluated all active minesites for off-site impacts. Off-site impacts resulting from SMCRA violations were directly reported via the Minesite Evaluation Inspection Report (MEIR). The MEIR data was transferred to a database and a summary report was developed for year end reporting purposes. In addition to MEIR data collection,

citizen complaint files were evaluated and interviews with individual inspectors were conducted to determine if off-site impacts from other sources had occurred.

Nine permits and one exploration site were identified as having thirteen people, land, water and structure impacts. Seven off-site impacts (4 minor and 3 moderate) to water occurred due to changes in water chemistry during mining and sediment laden runoff leaving the sites for short distances. Two impacts (1 minor and 1 moderate) to land resulted at two separate permits due to off-site erosion. One minor impact to structures occurred when an exploration disturbance encroached into a cemetery and three nuisance impacts to people resulted from blasting and road traffic at two separate permits.

One violation for elevated manganese effluents has resulted in an ordered permit revision to address the situation. All other violations were considered to be either permittee negligence or related to high precipitation events. For this reason, improvements in the regulatory functions or processes are not deemed necessary at this time.

#### Bond Forfeiture Sites:

The Knoxville Field Office (KFO) is responsible for conducting inspections of bond forfeited sites at reduced frequencies including at least one complete inspection per year. Many of these sites have remained in abandoned status for several years and natural vegetative processes have stabilized the disturbances. KFO Reclamation Specialists were asked to report off-site impacts resulting from EY 98 complete inspections.

Two minor off-site impacts were reported during EY 99. Both impacts occurred from the same site and resulted when an impoundment failed releasing sediment deposits to land and contamination to receiving stream.

#### **B. Bond Releases**

During the period October 1, 1998, through September 30, 1999, the Field Office processed 77 bond release requests. A total of 75 release actions were approved, consisting of 29 Phase I, 20 Phase II, and 26 Phase III releases. These actions resulted in returning all or a portion of the bond on more than 6,998 acres of reclaimed mine lands (see attached table). During this same period two bond release requests were disapproved, consisting of one Phase I and one Phase III release.

## **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 9: Funds Granted to Tennessee by OSM (*Not Applicable to Tennessee*)

Table 10: Inspection Activity

Table 11: Enforcement Activity

Table 12: Lands Unsuitable Activity

**TABLE 1**

<b>COAL PRODUCTION (Millions of short tons)</b>			
<b>Period</b>	<b>Surface</b>	<b>Underground</b>	
<b>Calendar</b>	<b>Calendar</b>	<b>Calendar</b>	<b>Total</b>
<b>Year</b>	<b>Year</b>	<b>Year</b>	
<b>mines</b>		<b>mines</b>	
Coal Production <sup>A</sup> for entire State:			
1996	1.89	1.74	3.63
1997	1.75	1.58	3.33
1998	1.62	1.06	2.68

<sup>A</sup> 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**

<b>INSPECTABLE UNITS</b>													
<b>As of September 30, 1999</b>													
<b>Coal mines and related facilities</b>	<b>Number and status of permits</b>								<b>Insp. Unit<sup>D</sup></b>	<b>Permitted acreage<sup>A</sup> (hundreds of acres)</b>			
	<b>Active or temporarily inactive</b>		<b>Inactive</b>		<b>Abandoned</b>		<b>Totals</b>			<b>IP</b>	<b>PP</b>	<b>Total</b>	
	<b>IP</b>	<b>PP</b>	<b>Phase II bond release</b>										
			<b>IP</b>	<b>PP</b>	<b>IP</b>	<b>PP</b>							
<b>STATE and PRIVATE LANDS                      REGULATORY AUTHORITY: STATE</b>													
Surface mines	3	46	2	14	102	30	107	90		39	204	243	
Underground mines	1	50	0	6	20	24	21	80		2	12	14	
Other facilities	1	52	0	5	3	5	4	62		1	25	26	
<b>Subtotals</b>	<b>5</b>	<b>148</b>	<b>2</b>	<b>25</b>	<b>125</b>	<b>59</b>	<b>132</b>	<b>232</b>	<b>0</b>	<b>42</b>	<b>241</b>	<b>283</b>	
<b>FEDERAL LANDS    REGULATORY AUTHORITY: STATE</b>													
Surface mines													
Underground mines													
Other facilities													
<b>Subtotals</b>													
<b>ALL LANDS<sup>B</sup></b>													
Surface mines	3	46	2	14	102	30	107	90	0	39	204	243	
Underground mines	1	50	0	6	20	24	21	80	0	2	12	14	
Other facilities	1	52	0	5	3	5	4	62	0	1	25	26	
<b>Totals</b>	<b>5</b>	<b>148</b>	<b>2</b>	<b>25</b>	<b>125</b>	<b>59</b>	<b>132</b>	<b>232</b>	<b>0</b>	<b>42</b>	<b>241</b>	<b>283</b>	
<b>Average number of permits per inspectable unit (excluding exploration sites) . . . . .</b>											<u>1</u>		
<b>Average number of acres per inspectable unit (excluding exploration sites) . . . . .</b>											<u>66.5</u>		
Number of exploration permits on State and private lands: . . . . .									<u>0</u>	On Federal lands: <u>0</u>		<sup>C</sup>	
Number of exploration notices on State and private lands: . . . . .									<u>42</u>	On Federal lands: <u>0</u>		<sup>C</sup>	
<sup>I</sup> P : Initial regulatory program sites. <sup>PP</sup> : Permanent regulatory program sites. <sup>A</sup> When a unit is located on more than one type of land, includes only the acreage located on the indicated type of land. <sup>B</sup> 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 <sup>C</sup> 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. <sup>D</sup> 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  
As of September 30, 1999**

Type of application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres <sup>A</sup>	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New permits	3	2	870	2	3	103	0	0	0	5	5	973
Renewals	0	0	0	5	5	58.5	10	11	501	15	16	560
Transfers, sales and assignments of permit rights	0	2		2	2		1	1		3	5	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits	0	0		0	0		0	0		0	0	
Exploration notices <sup>B</sup>	42	43		46	44		47	44		135	131	
Revisions (exclusive of incidental boundary revisions)	34	34		35	31		33	31		102	96	
Incidental boundary revisions	5	5	31.0	2	3	-14.2	3	1	-2.5	10	9	14
<b>Totals</b>	<b>42</b>	<b>43</b>		<b>46</b>	<b>44</b>		<b>47</b>	<b>44</b>		<b>135</b>	<b>131</b>	<b>1,547</b>

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions 20

<sup>A</sup> Includes only the number of acres of proposed surface disturbance.

<sup>B</sup> Federal 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 ACTIVITY \*  
As of September 30, 1999**

Type of application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres <sup>A</sup>	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New permits	0	1	9.2	0	3	1577	0	0	0	0	4	1,586
Renewals	0	0	0	0	1	77.5	0	0	0	0	1	78
Transfers, sales and assignments of permit rights	0	0		0	1		0	0		0	1	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits	0	0		0	0		0	0		0	0	
Exploration notices <sup>B</sup>	0	0		0	0		0	0		0	0	
Revisions (exclusive of incidental boundary revisions)	0	0		1	4		0	0		1	4	
Incidental boundary revisions	0	0		0	0		0	0		0	0	0
<b>Totals</b>	<b>0</b>	<b>1</b>		<b>1</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>1,664</b>

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions 9

\* It should be noted that a Cooperative Agreement between the Office of Surface Mining and the Kentucky Department for Surface Mining Reclamation and Enforcement became effective on November 1, 1998.

<sup>A</sup> Total acreage permitted surface disturbance and shadow area.

<sup>B</sup> Federal 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 IMPACT AND TOTAL NUMBER OF EACH TYPE	Blasting	1	1											
	Land Stability	2			1	1								
	Hydrology	7						4	3					
	Encroachment	1									1			
	Other	2		2										
	Total	13	1	2	0	1	1	0	4	3	0	1	0	0
OFF-SITE IMPACTS ON BOND FORFEITURE SITES														
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	0												
	Land Stability	0												
	Hydrology	1						1						
	Encroachment	1				1								
	Other	0												
	Total	2	0	0	0	1	0	0	0	0	0	0	0	0

The objective of this table is to report all off-site impacts identified in a State regardless of the source of the information. Report the degree of impact under each resource that was affected by each type of impact. Refer to guidelines in Directive REG-8 for determining degree 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. As provided by the Table, report impacts identified on bond forfeiture sites separately from impacts identified on other sites. If bond forfeiture sites were not evaluated during the period, clearly note the table to indicate that fact. Impacts related to mine subsidence or to other areas where impacts are not prohibited are not included in this table. **Refer to report narrative for complete explanation and evaluation of the information provided by this table.**

**TABLE 5**

<b>ANNUAL STATE MINING AND RECLAMATION RESULTS</b>		
<b>Bond release phase</b>	<b>Applicable performance standard</b>	<b>Acreage released during this evaluation period</b>
Phase I	* <input type="checkbox"/> Approximate original contour restored * <input type="checkbox"/> Topsoil or approved alternative replaced	3,024
Phase II	* <input type="checkbox"/> Surface stability * <input type="checkbox"/> Establishment of vegetation	1,394
Phase III	* <input type="checkbox"/> Post-mining land use/productivity restored * <input type="checkbox"/> Successful permanent vegetation * <input type="checkbox"/> Groundwater recharge, quality and quantity restored * <input type="checkbox"/> Surface water quality and quantity restored	2,580
	<b>Bonded Acreage Status<sup>A</sup></b>	<b>Acres</b>
	Total number of bonded acres at end of last review period (September 30, 1998) <sup>B</sup>	19,555.7
	Total number of bonded acres during this evaluation year	17,948.7
	Number of acres bonded during this evaluation year that are considered remaining, if available	(Not Available)
	Number of acres where bond was forfeited during this evaluation year (also report this acreage on Table 7)	124.7
<sup>A</sup> Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations. <sup>B</sup> Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).		

**TABLE 7**

<b>STATE BOND FORFEITURE ACTIVITY</b>			
<b>(Permanent Program Permits)</b>			
	<b>Number of Sites</b>	<b>Dollars</b>	<b>Disturbed Acres</b>
Bonds forfeited as of September 30, 1998 <sup>A</sup>	39	2,508,851 47	1555.0
Bonds forfeited during EY 1999	7	576,000 00	152.3
Forfeited bonds collected as September 30, 1998 <sup>A</sup>	37	2,438,451 47	1,510
Forfeited bonds collected during EY 1999	5	317,300 00	124.7
Forfeiture sites reclaimed during EY 1999	3	267,760 <sup>B</sup>	122.4
Forfeiture sites repermited during EY 1999	2	76,300 00	29
Forfeiture sites unreclaimed as of September 30, 1999	7	860,425 29	625.8
Excess reclamation costs recovered from permittee	0	0	0
Excess forfeiture proceeds returned to permittee	0	0	0
<sup>A</sup> Includes data only for those forfeiture sites not fully reclaimed as of this date. <sup>B</sup> Cost of reclamation, excluding general administrative expenses.			

**TABLE 8**

<b>STATE STAFFING</b> <b>(Full-time equivalents at end of evaluation year)</b>	
Function	EY 1999
Regulatory program	
Permit review .....	15
Inspection .....	15
Other (administrative, fiscal, personnel, etc.) .....	24
<b>TOTAL</b>	<b>54</b>

**TABLE 10**

<b>STATE OF TENNESSEE</b>		
<b>INSPECTION ACTIVITY</b>		
<b>PERIOD: October 1, 1998 - September 30, 1999</b>		
<b>Inspectable Unit Status</b>	<b>Number of Inspections Conducted</b>	
	<b>Partial</b>	<b>Complete</b>
Active*	576	267
Inactive*	411	465
Abandoned*	61	184
Exploration	27	110
<b>TOTAL</b>	1075	1026

\* Use terms as defined by the approved State program.

In addition to the inspections for the State of Tennessee identified above, the Knoxville Field Office conducted six complete inspections and one partial inspection at six abandoned minesites located in the State of Georgia.



**TABLE 11**

<b>STATE OF TENNESSEE</b>		
<b>ENFORCEMENT ACTIVITY</b>		
<b>PERIOD: October 1, 1998 - September 30, 1999</b>		
<b>Type of Enforcement Action</b>	<b>Number of Actions*</b>	<b>Number of Violations*</b>
Notice of Violation	14	16
Failure-to-Abate Cessation Order	7	14
Imminent Harm Cessation Order	0	0

\* Do not include those violations that were vacated.

State should provide the enforcement data to OSM annually, at a minimum, and maintain on a continual basis. OSM offices responsible for Federal and Indian Programs need not complete this table since data will be queried from the I & E tracking System.

**TABLE 12**

<p style="text-align: center;"><b>LANDS UNSUITABLE ACTIVITY STATE OF TENNESSEE</b></p> <p style="text-align: center;"><b>PERIOD: October 1, 1998 - September 30, 1999</b></p>			
Number of Petitions Received	0		
Number of Petitions Accepted	0		
Number of Petitions Rejected	0		
Number of Decisions Declaring Lands Unsuitable	0	Acreage Declared as Being Unsuitable	0
Number of Decisions Denying Lands Unsuitable	0	Acreage Denied as Being Unsuitable	0

State should provide lands unsuitable data to OSM annually if there is any activity in this program area. **OSM offices responsible for Federal and Indian Program States must also complete this table.**