

Office of Surface Mining

Annual Evaluation Summary Report

for the

Regulatory and Abandoned Mined Land Programs

Administered by the Land Reclamation Program

of

Missouri

for

Evaluation Year 1999

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

November 1999

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1999 MISSOURI ANNUAL EVALUATION REPORT

I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for State regulatory programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Missouri Land Reclamation Program (MLRP) and the effectiveness of the Missouri program in meeting the applicable purposes of SMCRA as specified in Section 102. The evaluation period covered by this report is October 1, 1998, to September 30, 1999.

OSM implemented a new oversight policy during the 1996 evaluation period. The primary focus of the new policy is an on-the-ground results oriented strategy that evaluates the end result of State program implementation; i.e., the success of the State program in ensuring that areas off the mine site are protected from impacts during mining, and that areas on the mine site are contemporaneously and successfully reclaimed after mining activities are completed. The new policy emphasizes a shared commitment between OSM and the States to ensure the success of SMCRA through the development and implementation of a performance agreement (PA). Also, the new policy continues to encourage public participation as part of the revised oversight strategy. Besides the primary focus of evaluating end results, the oversight guidance makes clear OSM's responsibility to conduct inspections to monitor the State's effectiveness in ensuring compliance with SMCRA's environmental protection standards.

During the 1996 evaluation period, OSM refocused oversight to emphasize off-site impacts and final reclamation. This new oversight focus was phased in during the evaluation year (EY), while issues identified in prior evaluation years continued to be addressed. The revised oversight strategy required OSM and Missouri to modify their respective roles and interactions so that the new policy could be successfully implemented. The two organizations cooperatively developed a Missouri specific PA which documented the annual oversight evaluation program.

The new oversight guidance emphasized that oversight is an ongoing process. To further the idea of continuous oversight, this annual report is structured to report on OSM and Missouri's progress in conducting evaluations, completing oversight activities, and on their accomplishments at the end of the evaluation period. Background information and finding reports for the program elements evaluated during the period are available for review and copying at the OSM Office in Alton, Illinois.

The following list of acronyms are used in this report:

ACSI	Appalachian Clean Streams Initiative
AMD	Acid Mine Drainage
AML	Abandoned Mine Land

AMLIS	Abandoned Mine Land Inventory System
BTU	British Thermal Unit
EY	Evaluation Year
MCRCC	Mid-Continent Regional Coordinating Center
MLRP	Missouri Land Reclamation Program
MLRC	Missouri Land Reclamation Commission
PA	Performance Agreement
OSM	Office of Surface Mining
SMCRA	Surface Mining Control and Reclamation Act of 1977
TIPS	Technical Information Processing Systems
U.S.	United States

II. Overview of Coal Mining Industry

Missouri's coal ranges from lignite to high volatile A bituminous. The demonstrated coal reserve base is estimated to be six billion tons, or 1.26 percent of the United States (U.S.) coal reserves. The coal-bearing areas cover about 23,000 square miles, or 33 percent of the State. Twelve of the 20 coal seams have been actively mined. The coal has a high heat value averaging 22 million British Thermal Units (BTU) per short ton. The sulphur content of 95 percent of these reserves is relatively high, greater than 2.5 pounds of sulphur per million BTU and averaging 4 percent by weight. Economics limit production to beds greater than 28 inches thick. Coal production is confined to the western and north-central areas of the State.

Missouri was the first State west of the Mississippi River to produce coal commercially. Coal deposits were first mined in the late 1840's. Most of the early coal mines in the State were underground. Surface mining began in the mid-1930's and since the 1960's has accounted for virtually all the coal produced in the State. Missouri's coal production has been declining since a peak of nearly seven million tons in 1984. A sharp decline occurred in 1993 to 627,774 tons, down from the 1992 production level of 2,908,012 tons. This reduction resulted from the State's largest operator ceasing production in early 1993. Missouri's 1997 production declined significantly from a 1996 production of 775,882 tons (Table 1). The decline was a result of changes in the Midwestern coal market. Coal production in 1998 increased 85 percent over the 1997 tonnage. Coal production in late 1999 and 2000 is expected to increase, as another coal company begins operation. Missouri helps supply coal to the Midwestern market for blending with western coal. The current primary use of the coal is for power generation.

Approximately 67,000 acres were affected by coal mining in 48 Missouri counties before enactment of the SMCRA. The resulting hazardous conditions recorded in OSM's Abandoned Mine Land Inventory System (AMLIS) includes the following: 93,831 feet of dangerous highwalls; 47 portals; 680 acres of dangerous piles and embankments; 634 acres of surface subsidence; 150 vertical openings; and 63 incidents of polluted water that adversely affects public health, safety, or welfare. Since the program was fully approved in 1982, Missouri has reclaimed 117 vertical mine shafts, 26 portals, 10.8 miles of clogged streams, 142 acres of gob,

48 instances of polluted water, approximately 3 acres of subsidence, and 63,502 feet of dangerous highwalls. Several years ago a death occurred as individuals were four-wheeling and drove over a highwall into an impoundment and drowned. No deaths on Abandoned Mine Lands (AML) have occurred since that time.

III. Overview of Public Participation in the Program

Historically, the State has rarely held special public meetings for the sole purpose of gathering input from industry and local citizens on the State regulatory processes. During the 1995 evaluation year, OSM and Missouri jointly held two informal public meetings to solicit comments on the effectiveness of the State's regulatory and AML programs and answer questions about OSM's oversight process. There was minimal participation from industry and local landowners. The landowners voiced concerns with not having their land returned to them in a timely manner and industry shared concerns that permit and bond release applications were not being processed timely. While no public meetings were held during EY 1996 or EY 1997, the PAs for those years were sensitive in addressing the concerns voiced during the 1995 public meeting.

As part of a Citizen's Outreach Initiative, OSM held a public meeting during March 1998, in Moberly, Missouri. The primary focus of the meeting was to solicit public input regarding the AML program as part of OSM's preparation of budget submittals to Congress. All attendees were encouraged to discuss any concerns they might have about Missouri's AML and Regulatory programs. Due to an overnight snow storm, industry and citizen participation was very limited. Those attending the meeting voiced concern for expediting the bond release application process, and they supported increased funding of the AML program. Missouri and OSM considers the bi-monthly Missouri Land Reclamation Commission (MLRC) meetings the principal forum for participation from industry, landowners, citizen groups, and other interested parties. No OSM sponsored public meetings were held in Missouri during 1999. A component of the past two and current PAs contains a required provision on Customer Service (Outreach) which monitors the public participation element of the Missouri program.

On August 31, 1999, the MLRP conducted a tour of the Upper Cedar Creek site, one of Missouri's Appalachian Clean Streams Initiative (ACSI) projects. The intent of the tour was to inform the public and all interested parties about the project, and satisfy the public outreach and education goals of the 319 Grant obtained under the Clean Water Act. Approximately 40 people attended the tour and the overall response was positive.

IV. Major Accomplishments/Issues/Innovations

During 1997 and 1998, in cooperation with the MCRCC, Missouri developed and submitted two acid mine drainage (AMD) cleanup projects for possible ACSI funding. The projects are the Upper Cedar Creek watershed and the Tebo Creek site. However, the ACSI monies Missouri received were not tied directly to these two proposals. The ACSI monies are being used to supplement 319 funds at Upper Cedar Creek watershed and to mitigate AMD at the Old Bevier

site. Missouri initially received \$22,130 in funding to begin work in the Upper Cedar Creek watershed. To date, Missouri has received grant monies totaling \$186,915 to mitigate acid mine drainage (AMD) at both sites.

The State has submitted a grant proposal to obtain additional funding under Section 319 of the Clean Water Act. Use of these monies was recently approved for the Upper Cedar Creek project. The Old Bevier site will not receive Section 319 funding, but the Missouri National Guard will provide in-kind services during the initial and final construction phases of the project. Cedar Creek is a scenic prairie stream that winds 44 miles through the countryside east of Columbia, Missouri, meeting the Missouri River upstream of Jefferson City, Missouri's capitol. The stream has been severely polluted by AMD for over 30 years. No fish kills have been noted in Cedar Creek since reclamation was initiated in the mid 1980's. Three to five miles of Cedar Creek are still impacted by high sulfates and acidity at times. The objective of the ACSI funding, along with the 319 grant, is to reduce the miles of stream affected by 50 percent.

This problem area has been the subject of extended AML project funding. While reclamation has resulted in significant restoration of many segments of the stream, the upper watershed of the stream continues to be affected by AMD and significant sediment loading.

The Old Bevier area is a 1992 AML project that was designed to eliminate dangerous highwalls and to abate water quality problems, including AMD. A wetland created to serve as a treatment facility was only partially successful. To stop degradation of the water quality in the adjacent creek, the treatment facility will be redesigned and constructed utilizing design concepts that increase the likelihood of abating the AMD problem.

Missouri continues to design and construct AML reclamation projects in an efficient and environmentally sound manner, and in accordance with project approval documents. Missouri is a minimum program State, receiving only \$1.5 million annually to operate its program. Projects are monitored and maintained to achieve long term stability, and eventual release from State management. Missouri continues to carry out its AML Reclamation Success Management process, initiated during EY 1996. In this process, the reclamation project goals are stated up-front in the environmental assessment. The process also provides new mechanisms for evaluating project design changes and change orders, against previously defined goals of the project. This process is a significant aid in assuring that reclamation projects achieve long term success and stability.

A staff member of the Missouri AML program participated on OSM's Reforestation Steering Committee. The purpose of the committee was to determine the best formats to bring people together to discuss current policies related to reforestation, and to exchange information on technical issues related to tree planting. As a result, a Public Outreach Symposium was held in Washington D.C. on January 14, 1999. Following the symposium, a Technical Interactive Forum was held in Ft. Mitchell, Kentucky on March 23 and 24, 1999. The staff member attended both meetings and continues to serve on the committee, where he provides valuable input.

The State continues to maintain its part in AMLIS. Funded and completed project data is entered at appropriate times. New problem sites are entered into the database as they are identified. Missouri maintains internal systems to track contract obligations and expenditures, public inquiries, and project ranking and selection data. In EY 1999, the State received 15 inquiries from the public related to the AML program. All inquiries were handled and addressed in a timely and professional manner.

This evaluation year, Missouri abated health and safety problems by clearing 0.2 miles of clogged streams, sealing five vertical mine shafts, mitigating six acres of polluted water, reclaiming 2,500 feet of dangerous highwall, and 2.2 acres of gob piles. Since program approval, Missouri has reclaimed 117 vertical mine shafts, 26 portals, 10.8 miles of clogged streams out of 12.8 miles of clogged streams, 142 acres out of 254 acres of gob, 48 out of 63 instances of polluted water, approximately three acres of subsidence out of an available 633 acres, and 63,502 feet of dangerous highwalls. Missouri has worked on other problem types as well. On July 1, 1998, the State assumed the AML Emergency Program. All applicable protocols and procedures have been reviewed and approved. No emergencies have been declared since Missouri assumed the program.

The State continues to experience bond forfeitures on an annual basis. Last year, Missouri initiated bond forfeiture action and permit revocation against Amoret Coal Company. Following settlement negotiations with the company and its failure to complete the reclamation work, the reclamation bonds were collected during this reporting period. The MLRP also revoked the permits for the North American Resources Foster Mine, the North American Resources Silver Creek Mine, and the Reidel mine sites, and declared the bonds forfeited. Missouri continues to negotiate with the Sureties for reclamation on these sites, rather than pursue collection of the bonds. The total disturbed acreage of these five companies exceeds 2,150 acres.

Bond forfeiture reclamation was completed on Yates, Bill's Coal Company, Central West, the Midwestern Mining & Reclamation Company/AmEarth Corporation, and Universal Coal and Energy's Renick Mine. The reclamation contracts provided for reclamation of a coal processing facility and a railroad load-out facility, correction of AMD problems, establishing surface water control structures, grading of spoil piles and open pits, and for revegetating all the disturbed areas. Minor repair maintenance continues to be conducted on most of the areas. The design work on the Midwestern Mining & Reclamation Company/AmEarth Corporation was Missouri's first attempt at total in-house project design. Reclaimed areas at Central West received release of liability. Missouri intends to release all liability on the remaining sites during the year 2000.

OSM and the MLRP conducted a joint tour of several bond forfeiture reclamation projects and a potential forfeiture site during June 1999. Management of both agencies met and discussed positive and negative aspects of the reclamation observed in the field. As a consequence of the meeting, the MLRP and OSM remain committed to jointly evaluating forfeiture projects before, during, and after the construction phase. The joint team will focus on determining if applicable performance standards have been met in relation to the approved reclamation plan. The team

approach is the preferred method for problem resolution. All field reviews will be conducted before the State proposes liability release before the MLRC.

Historically, Missouri has experienced a significant backlog of bond release applications. In order to reduce the backlog, the State negotiated a contract with a consulting firm to help with file reviews associated with bond release applications. In addition, a joint State/OSM Total Quality Management Team was formed to evaluate Missouri's inspection and bond release process and identify ways to streamline it. The Team completed its review and concluded that the inspection staff must change its methodology in evaluating and documenting performance standards related to bond releases, industry must be better informed of what is required in submitting an appropriate bond release package, and that industry must take more responsibility in evaluating the field conditions against the approved reclamation plans prior to submitting any request for release of bond. The recommendations were forwarded to the Director of the MLRP.

The Director of the MLRP reviewed and approved the Team findings. Industry and the public were consulted for input into the bond release process and on recommendations that were submitted to the Director. Even though industry was a major participant in the development of the guidelines, they recommended that the guidelines not be adopted. However, this year the guidelines were submitted to and approved by the MLRC. Implementation of the current guidelines should result in the majority of concerns voiced by industry and the public at the public meetings being effectively addressed.

During EY 1999, Missouri and OSM found that several recent bond release applications filed by industry did not follow the guidelines agreed upon by all parties. Until industry follows the guidelines they endorsed and aided in developing, the bond release process will be hindered. Missouri's bond release reviews are still not conducted within the approved regulatory time frames. Due to funding restrictions, the State program eliminated two staff positions. Even so, the State continues to decrease the review time and is expected to meet required time frames in the near future.

The MLRP restructured itself to direct emphasis toward functional areas of high priority. Program demands have shifted in recent years toward accomplishing reclamation at mine sites where permits were revoked, as well as performing more timely liability release reviews at the active sites. The staff functions of permitting and liability release reviews were combined into one organizational unit. This unit is assigned to the active mining section of the program. The functions of engineering and geohydrology have been placed into a separate unit that serves both the Title IV and Title V areas.

Reorganization of the program has allowed Missouri to fill key vacancies. The MLRP now has a full complement of staff. Recently hired staff, filling permitting and inspection positions, are expected to be fully trained within the next year.

Previous PAs included a long standing unresolved issue. A significant downward trend in the State's ability to cite all observed violations was identified for a number of years. During EY

1999, OSM could not statistically demonstrate that the concern had been resolved, but did determine the State is making progress toward resolving the issue. OSM and Missouri have met and discussed the issue in detail, and it remains a component of the EY 2000 PA.

During EY 1997, OSM conducted a topic review on Missouri's use of alternative enforcement to obtain compliance with environmental requirements. The review found that use of the consent agreement process, as allowed by Missouri's regulations, had not achieved timely operator compliance. A review could not be conducted during EY 1998 because no additional settlement agreements or consent agreements were finalized during the review period. This subject was again reviewed in EY 1999 with similar findings. OSM believes that the ineffectiveness of Missouri's consent agreement process is a serious issue that must be resolved. The EY 2000 PA includes provisions for quarterly discussions between Missouri and OSM concerning the status of operator compliance with consent agreements and appropriate State action for noncompliance by an operator.

During the first six months of 1999, Missouri submitted one formal amendment and one informal amendment. The formal amendment responded to a required State program amendment codified at 30 CFR 925.16 relating to normal husbandry practices. The informal amendment responded to OSM's June 17, 1997, 30 CFR Part 732 letter relating to multiple topics. It also responded to the remaining 14 outstanding State program amendments required by 30 CFR 925.16. The State provided a schedule for formal rule making based on its informal amendment. Missouri also provided a schedule of proposed rule making for OSM's May 20, 1996, 30 CFR Part 732 letter concerning subsidence control and water replacement, and OSM's January 6, 1997, 30 CFR Part 732 letter concerning ownership and control. Missouri was not able to meet the milestones identified in the proposed schedules.

V. Success in Achieving the Purposes of SMCRA

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 that provide additional details on how the following evaluations and measurements were conducted are available at the MCRCC, in Alton, Illinois.

A. Off-site Impacts

During EY 1999, the MLRP conducted 264 inspections on 29 inspectable units and OSM conducted 44 inspections on 44 individual permits, including inspections on the majority of abandoned sites. All OSM and State inspections evaluated the sites for off-site impacts. During four of the inspections on non-forfeited sites, four violations were observed that resulted in four off-site impacts. The impacts were determined to have affected two resources. The impacts were encroachment in nature, and related to land and water resources (Table 4). Environmental damage was determined to range from

moderate to minor. No permanent damage to the environment is expected to result from the off-site impacts. Off-site impacts observed by Missouri on the non-forfeited sites were immediately addressed and the underlying causes of the impacts have been corrected.

During seven of OSM's inspections on forfeited or abandoned sites, seven off-site impacts were determined to exist. The impacts were found to be hydrologic in nature and affected land and water resources. OSM found the degree of the impacts to range from moderate to minor. No permanent environmental damage is expected to result from the observed violations. Missouri is not known to have inspected and reported on these abandoned sites during EY 1999. Missouri corrected two of the off-site impacts during this evaluation year.

Missouri recognizes that the potential for off-site impacts still exists on some of the forfeited sites and is working to address these in a timely manner. On future problems found at forfeited sites that could have large off-site impacts, such as a failing spillway on a pond, Missouri will work with OSM to address these in an emergency manner.

Based on the number of mine sites reviewed, the data suggest that a relatively small number of off-site impacts exist in the Missouri coal fields. OSM believes the State program is effective in protecting the public and environment from off-site impacts resulting from surface coal mining and reclamation operations.

B. Reclamation Success

OSM conducted one joint bond release inspection. The release was for Phases I and III. In addition, OSM reviewed the hydrology and revegetation productivity data applicable to all Phase III releases approved by Missouri during the 1999 evaluation period. The State conducted six bond release inspections and OSM reviewed those bond release applications.

The field review found that the majority of the applicable performance standards had been met but some deficiencies were noted. Considering the nature of the observed deficiencies, the operator either withdrew the request for release or was able to mitigate the problem(s) prior to any MLRC meeting. The MLRC is the governing body that approves or disapproves the MLRP's recommendations on the areas requested for release. OSM's review of the hydrology and productivity data found no discrepancies that would prevent approval of the bond release request.

As of September 30, 1998, Missouri had 13,704 acres of mined land that had not received Phase III release. During the 1999 evaluation period, Missouri approved bond releases on 130 disturbed acres, of which 43 were for Phase I and 87 were for Phase II and III release. This represents a final liability release of approximately 0.6 percent of the total number of unreleased mined acres existing at the end of 1998 (Table 5).

Based on the sample inspection and other data sources, OSM believes the State program is requiring bond release performance standards to be met before approval of bond releases. Missouri's adherence to all applicable performance standards ensures successful reclamation.

C. Customer Service

During this evaluation period, customer service was evaluated in terms of Missouri citizens' ability to participate in the bond release process. The approved Missouri program contains stringent requirements for obtaining release of liability in the bond release process. The process provides for citizen participation and requires protection of the rights of those citizens. For the six bond releases conducted by the State during EY 1999, all affected citizens were contacted, made aware of their rights, and afforded the opportunity to be involved in the release process. Missouri received no significant input. In all instances, Missouri addressed the citizens' involvement in a timely and forthright manner.

The MLRP responds to public inquiries about the AML program in a timely manner. State management monitors public inquiries and responds with a computerized tracking system. Missouri received and responded to 15 citizen inquiries.

VI. OSM Assistance

The MCRCC is available to provide support to the State through its Technology Development and Transfer Program. This program provides direct technical assistance in project design and analysis, permitting assistance, development of technical guidelines, and other technical training and support. The Technical Information Processing Systems (TIPS) provides hardware, software, training and systems support, development and facilitation of electronic permitting initiatives, electronic data exchanges, and dissemination of the newest computer technology. TIPS also includes the development and coordination of interactive forums, workshops, and technology outreach programs.

During the review period, OSM provided Missouri with the following assistance:

OSM provided technical assistance in water monitoring and analysis at the Old Bevier AML site. Additional assistance is being rendered in the form of design work on a wetland treatment system.

Training was provided to MLRP staff on The Applicant Violator System: Ownership and Control requirements, current issues, and related topics. OSM trained selected staff members in using the ARC / INFO program.

Supplemental training of MLRP inspection staff in the fundamentals of inspection and enforcement procedures was provided by MCRCC staff.

OSM supplied staff for permit reviews on blasting information. Due to the loss of technical personnel, the State does not have a trained individual to complete the reviews.

TIPS provided a Dell NT Workstation for the TIPS conversion from Unix to Windows NT. TIPS also provided a Trimble Geo-Explorer II Global Positioning System with Pathfinder software. Under Missouri's Electronic Permitting and Geographical Information System initiatives, OSM provided AutoCAD 2000 and four beacons with associated hardware for Missouri's Garmin Global Positioning System units. This will give Missouri real-time field locations without post-processing the data.

VII. General Oversight Topic Reviews

The following oversight topics were reviewed during the 1999 evaluation period. The detailed finding reports are available at the MCRCC in Alton, Illinois.

A. Alternative Enforcement

This review topic was designed to evaluate the effectiveness of the State program in using consent agreements to obtain environmental compliance.

B. Customer Service

The review topic was designed to evaluate the effectiveness of the State program in addressing citizens rights and participation as it relates to the bond release process.

C. Identification and Citation of Violations

This review topic was designed to evaluate the effectiveness of the State program in identifying and citing observed violations.

ppendix A: Tabular Summaries of Data Pertaining to Reclamation, and Program Administration

These tables present data pertinent to mining operations, State and Federal regulatory activities, and the reclamation of abandoned mines within Missouri. They also summarize funding provided by OSM and Missouri staffing levels. Unless otherwise specified, the reporting period for the data contained in all tables is October 1, 1998, to September 30, 1999. Additional data used by OSM in its evaluation of Missouri's performance is available for review in the evaluation files maintained by the MCRCC Office in Alton, Illinois.

TABLE 1

COAL PRODUCTION (Millions of short tons)			
Period	Surface mines	Underground mines	Total
Coal production ^A for entire State:			
1996	0.78	0.00	0.78
1997	0.20	0.00	0.20
1998	0.37	0.00	0.37

^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, 1999)**

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														
	IP	PP	Phase II bond release																				
			IP	PP	IP	PP	IP	PP		IP	PP	Total											
STATE and PRIVATE LANDS												REGULATORY AUTHORITY: STATE											
Surface mines	0	48	1	14	15	48	16	110	29	1	138	139											
Underground mines	0	0	0	0	0	0	0	0	0	0	0	0											
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0											
Subtotals	0	48	1	14	15	48	16	110	29	1	138	139											
FEDERAL LANDS												REGULATORY AUTHORITY: STATE											
Surface mines	0	0	0	0	0	0	0	0	0	0	0	0											
Underground mines	0	0	0	0	0	0	0	0	0	0	0	0											
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0											
Subtotals	0	0	0	0	0	0	0	0	0	0	0	0											
ALL LANDS^B																							
Surface mines	0	48	1	14	15	48	16	110	29	1	138	139											
Underground mines	0	0	0	0	0	0	0	0	0	0	0	0											
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0											
Totals	0	48	1	14	15	48	16	110	29	1	138	139											
Average number of permits per inspectable unit (excluding exploration sites)											2.2												
Average number of acres per inspectable unit (excluding exploration sites)											47.9												
Number of exploration permits on State and private lands:											1	1	On Federal lands: 0 ^C										
Number of exploration notices on State and private lands:											0	0	On Federal lands: 0 ^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 Management. ^D Inspectable Units includes multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.</p>																							

TABLE 3

**STATE PERMITTING ACTIONS
As of September 30, 1999**

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	1	0	205	0	0	0	0	0	0	1	0	205
Renewals	0	0	0	0	0	0	0	0	0	0	0	0
Transfers, sales and assignments of permit rights	0	0		0	0		0	0		0	0	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits	1	1		0	0		0	0		1	0	
Exploration notices ^B		0			0			0			0	
Revisions (exclusive of incidental boundary revisions)		95			0			0			0	
Incidental boundary revisions		0	0		0	0		0	0		0	0
Totals	2	96	205	0	0	0	0	0	0	2	1	205

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

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

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

TABLE 4

OFF-SITE IMPACTS														
RESOURCES AFFECTED			People			Land			Water			Structures		
DEGREE OF IMPACT			minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE	Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
	Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0
	Hydrology	0	0	0	0	0	0	0	0	0	0	0	0	0
	Encroachment	4	0	0	0	1	3	0	1	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	4	0	0	0	1	3	0	1	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0
	Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0
	Hydrology	7	0	0	0	1	2	0	1	4	0	0	0	0
	Encroachment	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	7	0	0	0	1	2	0	1	4	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. More than one resource may be affected by each type of impact. Impacts related to mine subsidence or 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

<p align="center">ANNUAL STATE MINING AND RECLAMATION RESULTS As of September 30, 1999</p>		
Bond release phase	Applicable performance standard	Acreage released during this evaluation period
Phase I	<ul style="list-style-type: none"> * <input type="checkbox"/> Approximate original contour restored * <input type="checkbox"/> Topsoil or approved alternative replaced 	43
Phase II	<ul style="list-style-type: none"> * <input type="checkbox"/> Surface stability * <input type="checkbox"/> Establishment of vegetation 	87
Phase III	<ul style="list-style-type: none"> * <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 	87
Bonded Acreage Status^A		Acres
Total number of bonded acres as of September 30, 1998 ^B		13,704
Total number of acres bonded during this evaluation year		0
Number of acres bonded during this evaluation year that are considered re mining, if available		0
Number of acres where bond was forfeited during this evaluation year (also report this acreage on Table 6)		151
<p>^A Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations</p> <p>^B Bonded acres in this category are those that have not received a Phase III or other final bond release (Missouri maintains jurisdiction).</p>		

TABLE 6

**STATE BOND FORFEITURE ACTIVITY EY 1999
(Permanent Program Permits)**

	Sites	Dollars	Acres
Bonds forfeited as of September 30, 1998 ^A	9	\$4,154,529	5,820
Bonds forfeited during EY 1999	1	\$85,344	151
Forfeited bonds collected as of September 30, 1998 ^A	9	\$3,601,629	5,820
Forfeited bonds collected during EY 1999	1	\$85,343	151
Forfeiture sites reclaimed during EY 1999	1	\$22,476 ^B	146
Forfeiture sites repermited during EY 1999	0		0
Forfeiture sites unreclaimed as of September 30, 1999	9		5,825
Excess reclamation costs recovered from permittee	0	\$0	
Excess forfeiture proceeds returned to permittee	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 7

MISSOURI STAFFING (Full-time equivalents at end of evaluation year)	
Function	EY 1999
Regulatory program	
Permit review	5.75
Inspection	4.65
Other (administrative, fiscal, personnel, etc.)	3.00

TABLE 8

FUNDS GRANTED TO MISSOURI BY OSM
 (Millions of dollars)
 10/01/98 to 09/30/99

Type of grant	Federal funds awarded	Federal funding as a percentage of total program costs
Administration and Enforcement	\$0.42	50%
Small Operator Assistance Program	N/A	N/A
Totals	\$0.42	

Appendix B: State Comments on Report

MLRP provided comments that included correction of numbers and dates in the text, sentence and/or topic clarification, correction of typographical errors, and word changes. OSM incorporated the majority of the changes into the final report.

Attached is MLRP s November 29, 1999, letter, included at their request, addressing additional comments on the 1999 year in review. During EY 2000, OSM and Missouri will be holding periodic meetings as part of the PA to explore options to resolve any concerns raised by either MLRP or OSM.