

**OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT**



**ARKANSAS**

**Annual Evaluation Report**

**Regulatory and Abandoned Mine Land Reclamation Programs**

**Evaluation Year 1997**

**(October 1, 1996 through September 30, 1997)**

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**I. Introduction**

The Surface Mining Control and Reclamation Act of 1977 created the Office of Surface Mining 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 Arkansas program and the effectiveness of the Arkansas program in meeting the applicable purposes of SMCRA as specified in Section 102. The evaluation period covered by this report is October 1, 1996 to September 30, 1997.

OSM continued to implement the new oversight policy initiated in the 1996 evaluation year. 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 programs in ensuring that areas off the minesite are protected from impacts during mining, and that areas on the minesite 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. Also, the new policy continued 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.

Oversight is a continuous and ongoing process. To further the idea of continuous oversight, this annual report is structured to report on OSM's and Arkansas' progress in conducting evaluations and completing oversight activities. It also reports accomplishments during the evaluation period. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the Office of Surface Mining, Tulsa Field Office, 5100 E. Skelly Drive, Suite 470, Tulsa, Oklahoma 74135-6547.

The following acronyms are used in this report:

ADPCE	Arkansas Department of Pollution Control and Ecology
AMD	Acid Mine Drainage
AMLR	Abandoned Mine Land Reclamation
AVS	Applicant Violator System
EY	Evaluation Year
NOV	Notice of Violation
OSM	Office of Surface Mining
SMCRA	Surface Mining Control and Reclamation Act of 1977
TFO	Tulsa Field Office
TIPS	Technical Information Processing System

## **II. Overview of Coal Mining Industry**

Arkansas has reserves of bituminous, semianthracite, and lignite coal. The original bituminous and semianthracite coal reserves were estimated at approximately 2.2 billion tons, half of which is recoverable. Prior to the 1950's, much of the coal was mined by underground mining methods. Since then, most Arkansas coal has been mined by area surface mining methods. Remining, especially surface mining methods to remove coal left in pillars in old underground mines and removing coal from old coal mine waste piles, has been common. Lignite, potentially a major energy resource in Arkansas, was mined in southern Arkansas before the Civil War and used as a fuel by local industries. The Arkansas lignite deposits are estimated as high as 9 billion tons. In 1988, an exploratory operation confirmed that Arkansas lignite could be used in the State's coal-fired energy plants. In 1996, the 5 coal-producing operations in the State produced approximately 19,400 tons of bituminous coal using conventional methods. Permitted acreage was 1,561 acres. In 1997, the number of producing operations has dropped to 4 and permitted acreage to 1,395. Because coal operations in Arkansas are small and the demand for coal unsteady, the industry employs fewer than 25 on a daily basis.

## **III. Overview of Public Participation in the Program**

The State allows public participation in a number of ways including commenting on permit and major revision applications and State rule making. The public can also participate in the informal and formal review process of many State decisions related to permitting and inspection and enforcement matters. The public can further participate in the State inspection and enforcement process through bond releases and citizen's request for inspections.

## **IV. Major Accomplishments/Issues/Innovations**

### **A. Regulatory Program**

During EY 1997, OSM found that ADPCE had not incorporated into its revegetation rules cover standards necessary for the appropriate evaluation of Phase II and Phase III bond release applications. OSM anticipates that the needed rule changes will be submitted in a formal State program amendment during the next evaluation period.

ADPCE completed reclamation on 384 acres using collected bond funds.

The formal program amendment, AR-027-FOR, Arkansas previously submitted on its own initiative was approved by OSM's Director during the evaluation period. The

amendment changed State rules to address changes in Federal rules on re-mining, subsidence damage and compensation and water replacement. Corrections and other changes to several Arkansas rules were also made.

OSM anticipates ADPCE's continued successful implementation of its approved program throughout EY 1998.

**B. Abandoned Mine Land Reclamation Program**

ADPCE is the agency designated by the State to administer the Abandoned Mine Land Reclamation Program. It operated in EY 1997, with a grant of \$1.50 million and 6.3 staff members. Project selection has been based on a system that considers protection of the public health, safety and general welfare, and property from extreme danger of adverse affects of coal mining practices. ADPCE solicited citizen input for projects selected for construction. Priority selection complied with Section 403 of SMCRA. No program deficiencies were noted during this evaluation period.

In EY 1997, ADPCE's construction of AML projects consisted of its annual appropriation plus carry-over projects started in previous years. Most planning and design is done with in-house staff. Projects selected for construction met eligibility requirements under the approved AML program. The majority of health and safety features on approved projects were open strip pits with dangerous high walls and associated water impoundments that are located near the general public. Where possible, the pits were filled in with mine spoil and the high walls reclaimed to eliminate the hazard. ADPCE involved the general public and local citizens in project selection before construction was initiated. No citizen complaints were received.

ADPCE followed standard construction practices using State approved contracting procedures. Inspection of completed projects indicated ADPCE completed projects on time with no significant problems. There were four projects completed for a total of 199 acres, 10 open portals and 10 vertical openings closed this EY. Since program approval, ADPCE has reclaimed 2,167 acres of abandoned mine land.

**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, which

meet the bond release requirements for the various phases of reclamation. Individual topic reports are available in the Tulsa Field Office that provide additional details on how the following evaluations and measurements were conducted.

**A. Off-Site Impacts**

Using both State and Federal inspections, three off-site impacts were observed from 214 opportunities for observations. An observation is defined as an inspection, either State or Federal, partial or complete. When a Federal observation led to a State observation, the observation was counted only once; no types of sites were excluded from observations; and all observations were those that resulted in an NOV. Two of the three off-site impacts identified were impacts to water with minor impact. The conclusion is that off-site impacts from coal mining and reclamation in Arkansas were negligible in EY 1997.

**B. Bond Releases**

OSM is evaluating reclamation success by comparing the number of acres released in comparison with acres disturbed. At the end of EY 1996, Arkansas had 1,167 disturbed acres with an additional 4.7 acres disturbed during EY 1997. During EY 1997, 61.8 acres were approved for Phase I bond release (19.25 acres were undisturbed) and 133.0 acres were approved for Phase III bond release (77.59 acres were undisturbed). No Phase II bond releases were approved during the evaluation period (See Table 5, Appendix A). Three of the four Phase III bond release sites were evaluated for hay production. Production of hay exceeded premine production on all three sites. During the evaluation period, OSM identified one problem in the State's bond release procedures in that ADPCE does not have approved cover standards and statistical evaluation methods for evaluating vegetation success. The State began working on the necessary rule revisions needed to correct the problem.

The number of acres disturbed and released are too small to use to draw meaningful conclusions, however, OSM has participated in all the bond release inspections that took place during the evaluation period, and through observations on those and on routine oversight inspections, has not identified problems with Arkansas obtaining reclamation success.

**VI. OSM Assistance**

As part of OSM's national emphasis on AMD, OSM assisted the State in the development of an AMD plan with the dual goals of preventing AMD from future coal extraction and the

cleanup of AMD impacts from previous coal mining activities. During EY 1997, OSM assisted the State in implementing its AMD plan, jointly identifying sites that warranted additional study. With the site identification phase completed, OSM will continue providing technical assistance as sites identified as potential AMD producers are reviewed and if necessary, plans are developed for the mitigation of impacts from AMD and changes in ADPCE's permitting procedures to prevent future AMD.

In addition to TIPS training, OSM provided ADPCE with training in wetland evaluation techniques and design of AML projects. OSM provided one half of ADPCE's administrative and enforcement budget for its approved regulatory program. OSM provided 100 percent funding for ADPCE's AMLR program (See Table 8, Appendix A).

## VII. General Oversight Topic Reviews

Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the Office of Surface Mining, Tulsa Field Office, 5100 E. Skelly Drive, Suite 470, Tulsa, Oklahoma 74135-6547.

**Mine-site Evaluation:** During EY 1997, TFO conducted 8 complete inspections and 5 bond release inspections on Arkansas mines. All inspections were conducted jointly with ADPCE. All violations that were observed were cited during the inspections; therefore, no TDN's were needed or issued. Two concerns were identified as a result of OSM's inspections.

- A wood processing operation was disposing bark and other combustible wood waste in a pit, part of which is pre-SMCRA and part is permitted and forfeited.
- Arkansas' approved program lacks approved cover standards and statistical sampling methods for use in evaluating vegetation for bond release applications.

**Off-site Impacts:** The off-site impacts study was conducted with data from the State and Federal inspection reports, enforcement documents, and inspector statements. Three off-site impacts were observed.

**Appendix A: Tabular Summaries of Data**

These tables present data pertinent to mining operations and State and Federal regulatory activities within Arkansas. They also summarize funding provided by OSM and Arkansas staffing. Unless otherwise specified, the reporting period for the data contained in all tables is October 1, 1996 to September 30, 1997. Additional data used by OSM in its evaluation of Arkansas' performance is available for review in the evaluation files maintained by TFO.

**TABLE 1**

<b>COAL PRODUCTION (Millions of short tons)</b>			
<b>Period</b>	<b>Surface mines</b>	<b>Underground mines</b>	<b>Total</b>
<b>Coal production<sup>A</sup> for entire State:</b>			
Calendar Year			
1995	0.0374	0	0.0374
1996	0.0194	0	0.0194
1997 <sup>B</sup> (01/01/97 - 06/30/97)	0.00942	0	0.00942

<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.

<sup>B</sup> Indicate period if other than a full calendar year.

TABLE 2

INSPECTABLE UNITS (As of September 30, 1997)														
Coal mines and related facilities									Insp. Unit <sup>D</sup>	Permitted acreage <sup>A</sup> (hundreds of acres)				
	Active or temporarily inactive		Inactive		Abandoned		Totals			IP	PP	Total		
	IP	PP	Phase II bond release		IP	PP	IP	PP						
<b>STATE and PRIVATE LANDS</b> REGULATORY AUTHORITY: STATE														
Surface mines	0	11	0	0	2	3	2	14		1.15	11.9	13.05		
Underground mines	0	1	0	0	0	0	0	1		0	0.7	0.70		
Other facilities	0	1	0	0	0	0	0	1		0	0.2	0.20		
<b>Subtotals</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>16</b>	<b>0</b>	<b>1.15</b>	<b>12.8</b>	<b>13.95</b>		
<b>FEDERAL LANDS</b> REGULATORY AUTHORITY: STATE														
Surface mines	0	0	0	0	0	0	0	0		0	0	0		
Underground mines	0	0	0	0	0	0	0	0		0	0	0		
Other facilities	0	0	0	0	0	0	0	0		0	0	0		
<b>Subtotals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>ALL LANDS<sup>B</sup></b>														
Surface mines	0	11	0	0	2	3	2	14	0	1.15	11.9	13.05		
Underground mines	0	1	0	0	0	0	0	1	0	0	0.7	0.7		
Other facilities	0	1	0	0	0	0	0	1	0	0	0.2	0.2		
<b>Totals</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>16</b>	<b>0</b>	<b>1.15</b>	<b>12.8</b>	<b>13.95</b>		
Average number of permits per inspectable unit (excluding exploration sites) .....											1			
Average number of acres per inspectable unit (excluding exploration sites) .....											77.5			
Number of exploration permits on State and private lands: . . . . .											2		On Federal lands: 0 <sup>C</sup>	
Number of exploration notices on State and private lands: . . . . .											2		On Federal lands: 0 <sup>C</sup>	
<sup>IP</sup> : 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 the preceding categories. <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 3

STATE PERMITTING ACTIVITY  
(As of September 30, 1997)

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	0	0	0	0	0	0	0	0	0	0	0
Renewals	0	0	0	0	0	0	0	0	0	0	0	0
Incidental boundary revisions	0	0	0	0	0	0	0	0	0	0	0	0
Revisions (exclusive of incidental boundary revisions)	0	0	0	0	0	0	0	1	0	0	1	0
Transfers, sales and assignments of permit rights	0	0	0	0	0	0	0	0	0	0	0	0
Small operator assistance	0	0	0	0	0	0	0	0	0	0	0	0
Exploration permits	0	0	0	0	0	0	0	0	0	0	0	0
Exploration notices <sup>B</sup>	0	0	0	0	0	0	0	0	0	0	0	0
Totals	0	0	0	0	0	0	0	1	0	0	1	0

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions   3  

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

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

**TABLE 4**

<b>OFFSITE IMPACTS</b>														
<b>RESOURCES AFFECTED</b>		<b>People</b>			<b>Land</b>			<b>Water</b>			<b>Structures</b>			
<b>DEGREE OF IMPACT</b>		<b>Total</b>	<b>Min</b>	<b>Mod</b>	<b>Maj</b>	<b>Min</b>	<b>Mod</b>	<b>Maj</b>	<b>Min</b>	<b>Mod</b>	<b>Maj</b>	<b>Min</b>	<b>Mod</b>	<b>Maj</b>
<b>TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE</b>	Blasting	0												
	Land Stability	0												
	Hydrology	2							2					
	Encroachment	1				1								
	Other	0												
	<b>Total</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total number of permits or mine sites with observed off-site impacts:    Permits 2    Mines 2 Total number of permits or mine sites evaluated:    Permits 23    Mines 23 Total number of observations made to evaluate mine sites of permits for off-site impacts:    214														

**TABLE 5**

ANNUAL STATE MINING AND RECLAMATION RESULTS		
Bond release phase	Applicable performance standard	Acreage released during this evaluation period
Phase I	<ul style="list-style-type: none"> <li>•Approximate original contour restored</li> <li>•Topsoil or approved alternative replaced</li> </ul>	61.80
Phase II	<ul style="list-style-type: none"> <li>•Surface stability</li> <li>•Establishment of vegetation</li> </ul>	0.00
Phase III	<ul style="list-style-type: none"> <li>•Post-mining land use/productivity restored</li> <li>•Successful permanent vegetation</li> <li>•Groundwater recharge, quality and quantity restored</li> <li>•Surface water quality and quantity restored</li> </ul>	133.00
	<b>Disturbed Acreage Status<sup>A</sup></b>	<b>Acres</b>
	Total number of disturbed acres at end of last review period (September 30, 1996) <sup>B</sup>	1167.00
	Total number of acres disturbed during this evaluation year	4.70 0.00
	Number of acres disturbed during this evaluation year that are considered remaining	0.00
<sup>A</sup> Disturbed acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).		

**TABLE 6**

<b>STATE BOND FORFEITURE ACTIVITY (Permanent Program Permits)</b>			
	<b>Sites</b>	<b>Dollars</b>	<b>Acres</b>
Bonds forfeited as of September 30, 1996 <sup>A</sup>	4	\$1,634,571	728
Bonds forfeited during EY 97	0	\$0	0
Forfeited bonds collected as October 1, 1996 <sup>A</sup>	4	\$1,259,186	728
Forfeited bonds collected during EY 1997	1	\$187,500	102
Forfeiture sites reclaimed during EY 1997	1	\$983,684 <sup>B</sup>	384
Forfeiture sites repermited during EY 1997	0		0
Forfeiture sites unreclaimed as of October 1, 1997	4		344
Excess reclamation costs recovered from permittee	0	\$0	0
Excess forfeiture proceeds returned to permittee	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 7

<b>ARKANSAS STAFFING</b> <b>(Full-time equivalents at end of evaluation year)</b>	
Function	EY 1997
Regulatory program	
Permit review .....	0.75
Inspection .....	1.70
Other (administrative, fiscal, personnel, etc.) .....	3.90
Sub-total	6.35
AML Program	6.30
TOTAL	12.65

**TABLE 8**

<p align="center"><b>FUNDS GRANTED TO ARKANSAS BY OSM</b> (Millions of dollars)</p>			
<p align="center"><b>Type of grant</b></p>		<p align="center"><b>Federal funds awarded</b></p>	<p align="center"><b>Federal funding as a percentage of total program costs</b></p>
Regulatory	Administration and enforcement	\$0.15	50%
	Small operator assistance	\$0.00	100%
<p align="center"><b>Regulatory Totals</b></p>		\$0.15	
AMLR	Administration and construction	\$1.50	100%
<p align="center"><b>AMLR Total</b></p>		\$1.50	
<p align="center"><b>Total Regulatory and AMLR</b></p>		\$1.65	

## Appendix B: State Comments on Report

TELEPHONE RECORD

DECEMBER 1, 1997

Dan Trout [Regulatory Program Specialist, TFO] called Floyd Durham [Arkansas Department of Pollution Control and Ecology] inquiring about State comments on the Draft EY 1997 Annual Report TFO had provided Arkansas. Durham stated he and members of his staff had reviewed the report and had no substantial comments and had not planned on providing OSM with comments. Trout asked Durham if the State was satisfied with the report as it stood and was ready for it to be finalized and distributed. Durham stated Arkansas was ready to receive its copy of the final Annual Report.

A handwritten signature in cursive script that reads "Dan Trout". The signature is written in black ink and is positioned below the main text of the document.