



# OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Report

for the

Regulatory and Abandoned Mine Land Reclamation Programs

Administered by the State

of

Arkansas

for

Evaluation Year 2004

(July 1, 2003, through June 30, 2004)

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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. 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 July 1, 2003, to June 30, 2004.

The primary focus of OSM's oversight policy is an on-the-ground, result-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. Public participation is encouraged as part of the 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.

OSM's oversight guidance emphasizes that 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, and on their accomplishments at the end of 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 (TFO), 5100 East Skelly Drive, Suite 470, Tulsa, Oklahoma 74135-6547.

The following acronyms are used in this report:

ADEQ	Arkansas Department of Environmental Quality
AMD	Acid Mine Drainage
AML	Abandoned Mine Land
AMLR	Abandoned Mine Land Reclamation
AVS	Applicant Violator System
EY	Evaluation Year
FTE	Full Time Equivalents
MCRCC	Mid-Continent Regional Coordinating Center
OSM	Office of Surface Mining Reclamation and Enforcement
SMCRA	Surface Mining Control and Reclamation Act of 1977
SWDP	Storm Water Discharge Permit
SWPPP	Storm Water Pollution Prevention Plan
TFO	Tulsa Field Office
TIPS	Technical Information Processing System

## **II. Overview of the Arkansas 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 of 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 State's coal-fired energy plants. As yet, the lignite field has not been developed. In 2003, the 2 coal-producing operations in the State produced approximately 7,667.32 tons of bituminous coal using conventional surface mining methods. Permitted acreage remained static at 1,142.8 acres. Because coal operations in Arkansas are small and the demand for coal erratic, the industry employs fewer than 25 people on a daily basis.

## **III. Overview of the Public Participation Opportunities in the Oversight Process and the State 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 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. Each public notice of an AML project includes an invitation for members of the public to provide input on the need for the proposed project, how the proposed project should be carried out, what the post reclamation use of the project should be, and suggestions of other possible coal-related reclamation sites in Arkansas.

## **IV. Major Accomplishments/Issues/Innovations in the Arkansas Program**

### **A. Regulatory Program**

ADEQ operated with 50 percent Federal funding with a grant from OSM of \$149,353. ADEQ had a staff of 3.95 FTE's devoted to its regulatory program.

During the evaluation period ADEQ changed its system for permit numbering departmental wide. Existing coal mining permit numbers were revised to conform with the new permit number standards. As an example of the conversion to the new permit numbering system, Scott Branch H.E.S. P423-M-CO became Scott Branch H.E.S. 0423-M-C.

During the previous evaluation period ADEQ used collected reclamation performance bond funds supplemented with ADEQ trust monies to complete grading, planted temporary vegetation, and treated the acidic pond at the Scott Branch H.E.S. 0423-M-C site. The pH of the water discharging from the site has remained within compliance during EY 2004. Planting of permanent grass and legumes and additional application of lime was completed on the Scott Branch site in EY 2004. Planting of pines is scheduled for EY 2005.

During the previous evaluation period, ADEQ collected the available reclamation bond funds and secured AML funding to cover the remaining reclamation liability at the abandoned Frank E. Sims Construction Company interim program site. Bond forfeiture reclamation work was nearing completion at the end of EY 2004.

Arkansas issued a new mining permit to Farrell-Cooper Mining Company in the last quarter of EY 2004. This is the first time in several decades that the Fort Smith, Arkansas, based company has held a permit to mine coal in Arkansas. The new permit should dramatically increase the State's coal production. At the close of the evaluation year the permit was not yet active.

OSM anticipates ADEQ's successful implementation of its approved program throughout EY 2005.

## **B. Abandoned Mine Land Reclamation Program**

ADEQ is the agency designated by the State to administer the AMLR Program. Since program approval, ADEQ has reclaimed 3,191 acres of abandoned mine land. In EY 2004 it operated with a grant of \$1,515,000 and 6.75 staff members. The grant included \$15,000 to fund ADEQ's approved AML emergency program. Project selection is based on a system that considers protection of the public health, safety and general welfare, and property from danger of the adverse affects of past coal mining practices. ADEQ solicited citizen input for projects selected for construction.

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 highwalls and associated water impoundments that are located near the general public. Pits were filled in with mine spoil and the highwalls reclaimed to eliminate the hazard. Some water-filled pits were partially filled with spoil and inslopes reshaped to form lakes with gentle slopes leading to shallow water around the edges of impoundments. ADEQ involved the general public and local citizens in project selection before construction was initiated.

ADEQ followed standard construction practices using State approved contracting procedures. Inspection of projects indicated ADEQ completed projects with no significant problems. ADEQ completed the Shady Grove East project. One small underground mine project that addressed three openings and a vertical shaft was

initiated and completed. Most of the construction activities occurred on the Interim Program FESCO and Yarbrough sites, which were surface mines. The FESCO project included the elimination of a prelaw pit adjacent to U.S. HWY. 64.

ADEQ's AML program properly implemented interagency/intergovernmental coordination. Required AVS checks were completed on successful bidders. Goals for completed projects met the goals of the project proposals. Construction on the 1 completed project reviewed was completed ahead of schedule and within the performance period.

SWPPP compliance problems were found on both AML projects reviewed that were in the construction phase. The contractor for the FESCO project did not maintain a copy of the SWDP and SWPPP onsite as required. Sections of perimeter silt fence on the Yarbrough project exhibited installation and maintenance problems. ADEQ responded that its AML program will continue to make improvements on procedures to insure AML contractors are in compliance with SWPPP's and SWDP's. The State AML Program indicated it will notify the ADEQ Water Division when AML inspectors believe on-ground violations may have occurred.

ADEQ did not follow its approved State Reclamation Plan for project selection on all projects reviewed. Under the Arkansas State Reclamation Plan, ADEQ is to provide the Arkansas Reclamation Review Committee a list for final approval of proposed projects it intends to seek AML funding for. The Reclamation Review Committee consists of several State agencies. The Reclamation Review Committee is to scrutinize all the projects considered for funding by ADEQ and narrow the selection using evaluation criteria and funding ability and present its findings to the Director of ADEQ. The Reclamation Review Committee was not notified of the Victor Coal Company Project. The Reclamation Review Committee member, the Arkansas Game and Fish Commission, was not included in the notification of the Yarbrough and FESCO Projects.

During the closing days of EY 2004, ADEQ investigated an emergency complaint concerning the failure of a vertical shaft closure that resulted in a dangerous vertical opening. Project construction commenced during the opening days of EY 2005.

## **V. Success in Achieving the Purposes of SMCRA Determined by Measuring and Reporting End Results**

To further the concept of reporting end results, the findings from performance standards and public participation 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 and the effectiveness of customer service provided by the State.

Individual topic reports are available in TFO that provide additional details on how the following evaluations and measurements were conducted.

**A. Off-Site Impacts**

An observation is defined as an inspection, either State or Federal, partial or complete. When a Federal observation leads to a State observation, the observation is counted only once. Using information from State and Federal inspection reports and State inspector statements and civil penalty assessment documents, it was determined that out of 164 opportunities, no new off-site impacts were observed. This is down from the one off-site impact observed for the previous year and the 8 off-site impacts observed in EY 2002.

Off-site impacts from coal mining and reclamation activities in Arkansas continued to be minimal in EY 2004 (See Table 5).

**B. Reclamation Success**

OSM is evaluating reclamation success by comparing the number of acres released in comparison with acres disturbed. At the end of EY 2003, Arkansas had 1,095.54 disturbed acres. ADEQ approved no bond releases during EY 2004. An additional .5 acres of new disturbance occurred. (See Table 5).

**C. Customer Service**

The Customer Service topic for this year's review was handling of citizen's complaints. As in the last several years, there were no citizen's complaints filed during the evaluation period.

**VI. OSM Assistance**

In addition to TIPS training, OSM provided ADEQ with training in erosion and sediment control, enforcement tools and applications, reclamation performance bonding, subsidence abatement design, permit findings, and acid-forming materials planning and prevention. OSM provided one half of ADEQ's administrative and enforcement budget for its approved regulatory program. OSM provided 100 percent funding for ADEQ's AMLR program (See Table 8).

**VII. General Oversight Topic Reviews**

OSM intends the oversight reviews and reports be used as a basis for continuing joint efforts in assisting the State in meeting its regulatory responsibilities. 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 East Skelly Drive, Suite 470, Tulsa, Oklahoma 74135-6547.

**Mine-Site Evaluation:** During EY 2004, TFO conducted six complete oversight inspections on Arkansas mines. All inspections were conducted jointly with ADEQ.

**Bond Forfeiture Reclamation:** The review was completed by a joint ADEQ/OSM team and included four sites on which ADEQ has forfeited and collected the available reclamation performance bonds. The team found improvements on three of the four forfeited sites. Previously OSM assisted ADEQ with asset determinations for the principals of two of the forfeited sites where remaining reclamation liability significantly exceeds collected bond forfeiture funds. At the end of EY 2004, ADEQ had yet to make a determination on pursuing AEA against the company's principals to recover funds for reclamation of the abandoned unreclaimed sites. No additional work was completed on the Great National Corp. site. The State plans to place additional limestone in gullies and mow part of the Great National Corporation site for weed control in EY 2005. ADEQ applied additional lime and fertilizer and planted permanent grasses and legumes at the forfeited and collected Scott Branch H.E.S. site.

**Acid Mine Drainage:** The AMD project is being addressed by a joint ADEQ/TFO AMD Team that was formed in 1997 in response to an OSM National emphasis on repairing the impacts of past and current AMD and prevention of future AMD occurrences. Six sites were identified as acid producing. MCRCC completed initial sampling in December 2001 with follow-up sampling during December 2002. The current sampling phase is intended to determine the long-term nature of the low pH water previously documented on these sites, develop treatment costs, and provide the basis for adjustments to reclamation performance bonds were applicable. One additional site was added during the evaluation period. It historically produced acidic water in one pond, but had maintained compliance pH for a few years. The pond turned acidic again. Four of the seven sites sampled during EY 2004 were producing water with a pH of less than 6.0. During the next year, the joint AMD Team will evaluate if it has minimum background data to develop long-term AMD treatment costs for some of the sites and continue background sampling on sites that lack adequate background water quality data. Where water quality background data is deemed adequate, the AMD Team will begin to develop long-term treatment plans and estimate the associated costs of implementing the plans by a third party.

## **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 July 1, 2003, to June 30, 2004. Additional data used by OSM in its evaluation of Arkansas' performance is available for review in the evaluation files maintained by TFO.

## **Appendix B: State Comments on Report**

Changes were made to this report as requested by letter dated September 2, 2004, from ADEQ.