

## 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 2007

(July 1, 2006, through June 30, 2007)

Arkansas August 10, 2007

## **TABLE OF CONTENTS**

I.	Introduction	1
II.	Overview of the Arkansas Coal Mining Industry	2
III.	Overview of the Public Participation Opportunities in the Oversight Process an State Program	
IV.	Major Accomplishments/Issues/Innovations in the Arkans as Program	3
	A. Regulatory Program	3
	B. Abandoned Mine Land Reclamation Program	3
V.	Success in Achieving the Purposes of SMCRA Determined by Measuring and Reporting End Results	5
	A. Off-Site Impacts	5
	B. Reclamation Success	6
	C. Customer Service	6
VI.	OSM Assistance	7
VII.	General Oversight Topic Reviews	7
Appe	ndix A: Tabular Summaries of Data	13
Appe	ndix B: State Comments on Report	14

#### I. Introduction

The Surface Mining Control and Reclamation Act of 1977 created the Office of Surface Mining Reclamation and Enforcement 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 effective ness 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, 2006, to June 30, 2007.

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 Reclamation and Enforcement, Tulsa Field Office, 1645 South 101<sup>st</sup> E. Ave., Suite 145, Tulsa, Oklahoma 74128-4629.

The following acronyms are used in this report:

ADEQ Arkansas Department of Environmental Quality

AEA Alternative Enforcement Action

AMD Acid Mine Drainage AML Abandoned Mine Land

AMLR Abandoned Mine Land Reclamation

ASCMRC Arkansas Surface Coal Mining Reclamation Code

ATP Authorization to Proceed

ATV All Terrain Vehicle

AVS Applicant Violator System

EY Evaluation Year

FTA CO Failure to Abate Cessation Order

FTE Full Time Equivalent

FWS U.S. Fish and Wildlife Service MCR Mid-Continent Regional Office NEPA National Environmental Policy Act NOV Notice of Violation

NTTP National Technical Training Program

OSM Office of Surface Mining Reclamation and Enforcement

RFO Russellville Field Office

SMCRA Surface Mining Control and Reclamation Act of 1977

T&E Threatened and Endangered Species

TDN Ten-Day Notice TFO Tulsa Field Office

TIPS Technical Innovation and Professional Services

## 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 considered 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 nine billion tons. In 1988, an exploratory operation confirmed that Arkansas lignite could be used in the State's coal-fired energy plants. As yet, the lignite field has not been developed, but with the current energy boom there is renewed interest in lignite mining in eastern Arkansas. In EY 2007, three coal-producing operations produced approximately 38,144 tons of bituminous coal. The majority of the production, 26,903 tons, was from an underground operation located in Sebastian County, in western Arkansas. At the start of the evaluation period there were two surface operations and one underground mine producing coal. One of the producing surface mines completed mining and went into temporary cessation status pending development of an underground mine at the site. Acres under reclamation performance bonds decreased slightly from 907 acres during EY 2006 to 903 acres in EY 2007. The coal industry in Arkansas employs approximately 35 to 50 people on a daily basis. By the end of the evaluation period the number of Arkansas inspectable units had decreased from 13 to 10. ADEQ has not tracked disturbed acres cumulatively since the program originated.

# 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, 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. Given the various opportunities, the general public has historically participated in the oversight process and the State program on a minimal level.

## 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 \$145,457. ADEQ had a staff of 4.05 FTE's devoted to its regulatory program.

The ADEQ contractor completed backfill, grading, and seeding of grass and legumes on the Titan Mining, Ltd. site. In May 2007, the State terminated its outstanding enforcement actions at the Titan Mining, Ltd. site. This abandoned interim site is being reclaimed predominately with AML funds which are being used to make up the difference between bond funds forfeited and collected and the actual cost of reclaiming the site. The performance bond of \$80,240.67 was collected on April 12, 1988. In its program narrative for its AML grant request, ADEQ estimated the AML funding needed to complete the reclamation for this site at approximately \$220,000. The State determined the site was a Priority 2. On February 2, 2006, OSM issued an ATP for ADEQ to use AML funds for reclamation construction activities. 30 CFR 874.12 allows the use of AML funds for reclamation at interim sites provided any funds for reclamation or abatement that are available pursuant to a bond or other form of financial guarantee or from any other source are not sufficient to provide for adequate reclamation or abatement at the site. The site must qualify as a Priority 1 or 2. Priority will be given to those sites that are in the immediate vicinity of a residential area or that have an adverse economic impact upon a community. When the reclamation of a site covered by an interim permit is carried out under the AML program, the permittee of the site is required to reimburse the AML fund for the cost of reclamation that is in excess of any bond forfeited to ensure reclamation. On June 15, 2005, ADEQ Legal Division completed its review for possible AEA and determined an attempt to recover additional funds for reclamation of the site from Titan's principals would not be cost effective.

ADEQ continued to make progress in reclaiming a backlog of old abandoned Title V sites and removing them from its inspectable units list.

## B. Abandoned Mine Land Reclamation Program

ADEQ is the agency designated by the State to administer its AMLR Program. In EY 2007 it operated with a grant of \$1.51 million and a staff of 6.7 FTE's. Project selection is based on a system that protects 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 health and safety hazards addressed on the completed projects were open strip pits with dangerous highwalls, hazardous water bodies, industrial or residential waste, and dangerous spoil piles and embankments located near areas accessed by the general public. Pits were filled in with mine spoil and highwalls reclaimed to eliminate the hazard. The industrial/residential waste was removed to a designated landfill. Dangerous spoil piles and embankments were graded to reduce the hazard. ADEQ has invited involvement of the general public and local citizens in project selection before construction activities commenced.

ADEQ consistently followed standard construction practices using State approved contracting procedures. ADEQ completed a large project located in Johnson County, Arkansas. The 115 acre Priority 2 project eliminated 1,000 linear feet of dangerous highwall, 1 hazardous water body, and graded 10 acres of dangerous piles and embankments. This project also eliminated 67 acres of Priority 3 spoils. Also in Johnson County, ADEQ completed a project that eliminated 3,000 linear feet of dangerous highwall.

A completed project located in Huntington, Arkansas, eliminated 1,000 linear feet of dangerous highwall and removed 400 tons (3 acres) of industrial/residential waste. Also, approximately 100' of a 14-inch waterline that extended through a portion of the filled-in pit was replaced by the South Sebastian County Water Users Association, the owner of the waterline.

With the completion of the three projects, ADEQ added 5,000 linear feet of dangerous highwall, one hazardous water body, three acres of industrial/residential waste, 10 acres of dangerous piles and embankments, and 67 acres of spoils to the count of coal-related problems abated by its AML program.

ADEQ's AML program properly implemented interagency/intergovernmental coordination. All necessary rights-of-entry were obtained from landowners prior to construction. All required AVS checks were completed on successful bidders prior to award of the contracts. The completed projects successfully met the goals of the project proposals.

ADEQ followed its approved reclamation plan for project ranking and selection by including all members of the Reclamation Review Committee in obtaining guidance, input, and project approval of proposed AML projects.

During EY 2007, ADEQ investigated and completed one emergency project consisting of grouting a large subsidence under Highway 71 just north of Huntington, Arkansas. The abatement of the emergency was completed without

having to shut down the highway for extended periods of time. ADEQ requested assistance from MCR to help determine if there were more possible voids under the highway. Any additional voids found will be placed on the AML inventory.

ADEQ has no written procedures for post project review. However, field visits show evidence of post project inspections. ADEQ needs to include documentation of their post project inspections in the AML project files.

## 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 at TFO that provide additional details on how the following evaluations and measurements were conducted.

#### A. Off-Site Impacts

An off-site impact is an adverse effect that extends beyond the permit boundary and is a violation of the State program. A potential observation of an off-site impact 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. Information was gathered from State and Federal inspection reports and State off-site impact forms. All recorded off-site impacts were related to a bond forfeiture site and a site with a low pH discharge on which the State had previously issued an FTA CO. The off-site impacts did not generate new enforcement actions, therefore no new State inspector statements or civil penalty assessment documents were prepared. Since all Federal inspections were joint inspections with the State, the number of opportunities to observe off-site impacts were equal to the number of State inspections during the evaluation period. ADEQ conducted a total of 140 inspections on 13 sites during EY 2007. The 13 off-site impact observations is the same number of off-site impact observations recorded during the previous year. The 13 off-site impacts observed were from two permits, which was the same number of permits generating off-site impact observations the previous year. This was the third year in a row that the majority of the observations came from the Russ and Sons, Inc. 0420-MC site. The Phase I bond released surface mine operation was responsible for 12 of the 13 off-site impacts observed in EY 2007. In response to a Federal TDN, ADEQ issued an NOV in August 2004, for failure to meet effluent limitations and failure to remove acid/toxic-forming material from the material used for the pond embankment. The operator made no attempt to abate the violations and the State issued a FTA CO in September 2004. ADEQ has initiated bond forfeiture action

on the Russ and Sons, Inc. site. The other Arkansas site producing an off-site impact was the bond forfeiture site, Scott Branch H.E.S., Inc. 0423-MC.

Eleven sites, which is 84.6 percent of Arkansas inspectable units, were free from off-site impacts.

For the third year in a row, Arkansas produced a significant number of off-site impacts. It is anticipated that once the Russ and Sons, Inc. site producing the bulk of off-site impacts is successfully reclaimed with bond forfeiture money the numbers will decline. All 13 off-site impacts reported were hydrologic, impacting water resources. All were caused by low pH discharges. Seven of the impacts were judged as minor and six were judged as moderate. Twelve off-site impacts were judged as repairable. One State off-site impact form did not address whether the impact was reparable or irreparable. (See Table 4).

#### **B.** Reclamation Success

OSM is evaluating reclamation success by comparing the number of acres released in comparison with acres disturbed. Arkansas approved one bond release, a Phase III release of 26.64 acres, and reported 18.9 acres of new disturbance during the evaluation period. Although the numbers are small, they do indicate success with achievement of reclamation of disturbed bonded acres based on bond release results. (See Table 5).

#### C. Customer Service

The Customer Service topic for this year's review was handling of bond releases. Arkansas processed one bond release request during the evaluation period. The request was for a Phase II and III bond release on 26.64 acres. At the time of OSM's review it concluded ADEQ's processing of the release request met the requirements of ASCMRC 800.40 with one exception. ASCMRC 800.40(b)(4) requires the ADEQ Director to notify in writing certain parties of its decision to release or not release the bond within 60 days of receiving the request for bond release. To meet the notification standard, ADEQ needed to make a decision and send the notifications prior to the end of 2006. ADEQ postponed making its determination on the bond release request until February 2007, pending the outcome of a revision seeking to change the approved postmine land use from pastureland to industrial/commercial use. At the time of the bond release request, ADEQ and OSM determined the operator had successfully met postmine land use requirements for the approved postmine land use of pastureland except on a small area where the landowner was storing two draglines. OSM concluded it was unlikely any party to the release was injured by the State's delay in making its decision on the bond release approval and sending the required notifications.

#### VI. OSM Assistance

ADEQ staff attended NTTP training courses in Underground Mining Technology, AML Reclamation Projects, and Principles of Inspection. ADEQ staff also attended the following TIPS courses; Introduction to ArcGIS for Mining and Reclamation and Underground Mine Mapping Technology with GIS. OSM provided \$145,457, which was 50 percent 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).

MCR serviced several technical assistance requests from ADEQ's AML program. MCR used its borehole camera to investigate and document underground mine voids beneath U.S. Highway 71 at Huntington, Arkansas. MCR used its borehole camera again at the proposed Mine #6 AML project to investigate the physical condition of two water-filled shafts. MCR has also conducted water sampling/testing of both shafts as well as water and biological sampling of the local stream system impacted by an artesian shaft at the Mine #6 site. The data MCR has generated will be used in assisting ADEQ's development of plans to treat the AMD discharge and remediate hazards associated with the open vertical shafts.

The Joint OSM/ADEQ AMD Team requested MCR assistance with water sampling on three Title V sites and development of AMD treatment plans for the sites. During the evaluation period, MCR visited two of the sites, conducting sampling and testing. The data MCR collected could be used in the design and selection of practical methods to treat long-term AMD.

## VII. General Oversight Topic Reviews

OSM intends that oversight reviews and reports be used as a basis for continuing joint efforts in assisting the State to meet 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 Reclamation and Enforcement, Tulsa Field Office, 1645 South 101<sup>st</sup> E. Ave., Suite 145, Tulsa, Oklahoma 74128-4629.

**Mine-Site Evaluation:** During EY 2007, TFO conducted two complete oversight inspections on Arkansas mines. All inspections were conducted jointly with ADEQ. No Federal enforcement actions were taken as a result of these inspections.

**Bond Forfeiture Reclamation:** The review was completed by a joint ADEQ/OSM team and included two sites on which ADEQ has forfeited and collected the available reclamation performance bonds.

As reported in previous years, the ADEQ Legal Division has not made a determination on whether to proceed with an AEA against responsible principals of Sugarloaf Mining

Company. State inspection reports documented continued use of the Sugarloaf site by ATV riders and trash dumping. A property owner's statement requesting retention of SP-3B as a permanent impoundment was signed in September 2006.

When the Joint Bond Forfeiture Team made its site visit in October 2006, the reclaimed portion of the Travis Lumber property had fair to good ground cover dominated by sericea lespedeza over most of the area. Travis Lumber was still using the eastern end of its property to dispose of waste material from its sawmill operations. The amount of trash and appliances dumped with the organic material had increased. Travis Lumber had not been keeping up with pushing the piles of bark, log yard cleanings, etc. into the pits. In some areas the piles had mature vegetation growing on them. No significant changes were noted for the Central Natural Resources property.

In April 2007, OSM received a proposal from ADEQ to use one of the pits on Area C of the Sugarloaf site as a gob disposal area. The Acid-Forming material would come from a nearby AML site. ADEQ proposes to place the AML gob material into the Title V pit and complete backfilling of the pit with AML spoil located near the Title V pit. At the end of the evaluation period ADEQ's proposal was still under review by OSM pending receipt of ADEQ's AEA determination for the Sugarloaf permit and a permit revision allowing the pit to be used as a gob disposal area. ADEQ believes that if it can use the AML material and funding to backfill the pit, it will be able to find funds to complete the remainder of the outstanding reclamation liability at the Sugarloaf site.

One of the recommendations the Joint Bond Forfeiture Team made in its October 2006, progress report was, "The Team encourages ADEQ's Legal Division to complete its review of the potential to pursue AEA on the Sugarloaf site and make a determination in the near future. The longer an AEA determination is postponed the less likely funds for site reclamation will be recovered." At the end of the EY 2007 evaluation period, ADEQ's Legal Division had not completed its 4-year review of the potential to pursue AEA on the Sugarloaf site.

At the time of the Joint Bond Forfeiture Team's site visit in October 2006, the area was still under drought conditions and the pH of the discharge pond on the Hydro-Extraction Systems, Inc. (Scott Branch) site was still above 6.0. During the second half of the evaluation period rain returned to the site and with it acid seeps. The pH of the discharge pond dropped below the allowable effluent limitations. Due to high tree mortality, ADEQ has considered exploring a land use change from commercial forest to pastureland. The lower eastern end has a short eroded slope of exposed coal refuse material. All collected bond funds have been spent on the Scott Branch site.

Acid Mine Drainage Title V: 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: one forfeiture, one in reclamation, and four active. MCR completed initial sampling in December 2001 with follow-up sampling during December 2002. The sampling phase is intended to determine the long-term nature of the low pH water documented on sites, develop treatment plans

and costs, and provide the basis for adjustments to reclamation performance bonds where applicable. During EY 2005, ADEQ completed bond forfeiture reclamation on the Great National Corporation site and terminated its jurisdiction over the site. The AMD Team conducted additional background sampling on the remaining sites during EY 2005. All sites were producing water with a pH below 6.0.

During EY 2007, the Joint AMD Team decided to discontinue work at two active sites that have onsite operators. These sites will be monitored through ADEQ's normal regulatory inspection and enforcement activities. One other site was placed in an "inactive" status due to its low potential for discharge. Sampling was planned at the three remaining sites. With technical assistance from MCR in November 2006, field measurements were made and water samples collected at the Russ & Sons site for MCR and independent laboratory analysis. At the B & J Coal Company site field measurements were taken and water and soil samples collected for MCR testing. Due to time constraints the third site, Scott Branch, H.E.S., was not visited.

The operator at the Russ & Sons site has made no attempt to correct the problem that results in a continuous, normally low volume discharge that is out of compliance with pH and metal limitations. The site appears to be abandoned and ADEQ has initiated bond forfeiture efforts against the operator. It is believed most of the problem stems from using Acid/Toxic Forming Materials in the construction of a sediment pond embankment.

The November 2006, sampling at the B & J site amounted to field reconnaissance. No independent laboratory testing was completed. As normal for the site, no discharge was occurring. Due to several months of low precipitation, water levels in the nine impoundments were low. A spot check of the impounded water resulted in pH readings ranging from 3.39 to 6.13.

**Reclamation Performance Bonding:** The evaluation was a follow up on OSM's required actions and recommendations from its previous year's review findings. The purpose of the review is to determine whether the amounts of posted reclamation performance bonds are adequate to cover the costs of third party reclamation, and whether they conform to regulatory and industry standards.

Based on its EY 2006 review, OSM <u>recommended</u> that ADEQ revise its forms for filing performance bonds to require the operator to identify what the bond covers (amount of new acreage, amount of increase/decrease in acreage, type of changes in operation and/or reclamation plans). In EY 2007, ADEQ successfully completed the recommended action.

## OSM's EY 2006 study required the following actions:

Each bond calculation must include a 5-year inflation factor on the direct costs or
each bond calculation must be reviewed on a periodic basis using updated costs in
order to ensure that the amount of bond is adequate to cover increased
reclamation costs. These periodic reviews must occur, at a minimum, at midterm
and permit renewal. During EY 2007, ADEQ indicated it was considering

development of a written policy on reviewing bond amounts, and that it was going to review reclamation performance bonds at any revision or at mid-term reviews. At the time of the review, there had not been enough permitting activity for OSM to evaluate ADEQ's implementation of its new procedures to review amounts of reclamation performance bonds. OSM recommended that for consistency in implementation, ADEQ should develop written policy on reviewing reclamation performance bonds.

• Indirect costs should be factored into the calculations similar to methods shown in the "Handbook for Calculation of Reclamation Bond Amounts." ADEQ responded that it did not agree with OSM and was using an alternative method. During the EY 2007 evaluation, OSM requested ADEQ to provide a written explanation on how it calculates and applies indirect costs to reclamation performance bond calculations. The explanation should include details on how ADEQ handles mobilization and demobilization costs, contingencies, costs associated with engineering design, contractor profit and overhead, and project management fees. ADEQ provided OSM with the following explanation of how it arrives at indirect costs for reclamation performance bonds:

Costs were calculated by ADEQ using current AML unit prices, which includes contractor overhead and profit. Therefore, use of these as indirect costs creates a redundancy that overstates total construction costs when utilizing contracting unit pricing for bond calculation. ADEQ contracts under Arkansas state laws. These laws do not require a project management contractor to be included in the general contract as oversight. Engineering redesign would be done in-house with existing ADEQ engineers. Mobilization is a bid item in ADEQ calculations.

Based on ADEQ's explanation, OSM determined that it had not received enough information concerning how ADEQ calculates its mobilization and demobilization costs to evaluate ADEQ's procedures for determining mobilization/demobilization expenses for the reclamation performance bond estimate. Also, OSM had not received enough information addressing how ADEQ takes into account contingencies, to review ADEQ's procedures for arriving at its reclamation performance bond estimate. ADEQ plans to charge project management and engineering redesign costs to its grant from OSM instead of charging the costs to a project specific account funded by bond forfeiture funds. OSM concurred that the use of current AML contract unit costs can be an appropriate method of determining current cost of reclamation including contractor overhead and profit. OSM notified the State that it must still provide OSM with a written explanation on how it calculates and applies costs related to mobilization, demobilization, and contingencies to reclamation performance bond calculations. ADEQ must also revise its reclamation performance bond calculation procedures to adequately cover the costs associated with bond forfeiture reclamation project management and engineering design work or reduce its Title V grant requests by an amount adequate to cover its costs associated with the work.

• In EY 2006, OSM determined that the bond amount for Hartshorne Carbon Company (now Heidtman Mining, LLC) was inadequate, and ADEQ needed to require the operator to increase the bond to an amount that will ensure that the reclamation can be accomplished in the event of bond forfeiture. ADEQ had the operator post a bond in the amount of \$489,800. In EY 2007, OSM found the new bond exceeds the amount OSM calculated in EY 2006 to be adequate for third party reclamation.

**Implementation of 1996 Biological Opinion:** As a topic of national concern, the purpose of the review was to determine if T&E species and their critical habitats are properly addressed during the permitting and permit revision process.

In 1996, OSM and FWS signed a Biological Opinion, which states that the Endangered Species Act Section 7 Consultation will be met if SMCRA is fully implemented. This means that the State Regulatory Authorities must:

- Require T&E species information in permit documents;
- Use that information to determine whether the mining operations will pose a threat to threatened and endangered species;
- Provide the mining and reclamation plans to State and Federal fish and wildlife agencies for comment and recommendations; and,
- Ensure that the approved mining and reclamation plans provide protection for threatened and endangered species.

In 2002, OSM in cooperation with FWS and State Coal Mining and Reclamation Regulatory Authorities developed training to ensure the OSM, State Regulatory Authority, and FWS staff know what the Biological Opinion requires. That training was provided in 2003.

This topic was reviewed during the previous evaluation period to ensure that the Biological Opinion has been incorporated into State Program procedures and to ensure that T&E species have been afforded protection from coal mining and reclamation operations. TFO reviewed Arkansas' permitting documents to determining whether ADEQ had implemented its approved State regulatory program by requiring appropriate information and plans to identify the presence of T&E species and protect those that are found. The study sample population was all permits that mined coal within the last year. Three permits were evaluated. For all three permits the resource agencies responsible for T&E and associated critical habitats determined T&E and critical habitats were not present on the permitted areas. State and Federal fish and wildlife agencies were given the opportunity to comment and provide recommendations on the presence of T&E species. The approved permit for the Farrell-Cooper Mining Company surface mine included a commitment by the operator to conduct yearly surveys for the Federally listed American burying beetle beginning prior to any disturbances and continuing until the

completion of mining. Any beetles trapped were to be relocated. RFO had no records of the surveys. OSM determined that without copies of the annual American burying beetle surveys it is not possible to draw conclusions concerning compliance with the approved permit provisions addressing the Federally listed insect. OSM stated ADEQ needs to obtain copies of Farrell-Cooper Mining Company's yearly surveys and any correspondence between FWS and Farrell-Cooper Mining Company regarding the American burying beetle and its Bates mine. The EY 2006 oversight findings report contained the following recommendations:

- None of the permit files reviewed contained documentation of whether FWS requested information contained under ASCMRC 780.16(a) and (b) or if ADEQ provided the information as required under ASCMRC 780.16(c). ADEQ should include in its permitting files documentation as to the status of FWS requests for fish and wildlife resource information, when requests are made, and documentation of its response under ASCMRC 780.16(c).
- Vegetative types and locations for the permitted areas and the surrounding areas should be clearly indicated on maps prepared for ASCMRC 779.19. Permit boundaries should be included and labeled on the maps.

The EY 2007 evaluation found ADEQ had not obtained copies of Farrell-Cooper Mining Company's yearly surveys or any correspondence between FWS and Farrell-Cooper Mining Company regarding the American burying beetle and its Bates mine. At the time of the study, there were no new permitting actions to review to evaluate if the State had taken actions to implement OSM's recommendations. Therefore, OSM's findings and recommendations are essentially unchanged from the previous year's review.

## **Appendix A: Tabular Summaries of Data**

When OSM's Directive REG-8, Oversight of State Programs, was revised in December 2006, the reporting period for coal production on Table 1 was changed from a calendar year basis to an evaluation year basis. The change was effective for EY 2007. In addition to coal production figures for the current year, Table 1 also contains the coal production figures from annual evaluation reports for the 2 most recent prior years. Therefore, for the 2007 annual evaluation report, coal production figures are provided for 2005, 2006 and 2007. In order to ensure that coal production for these 3 years are directly comparable, the calendar year production figures from the 2005 and 2006 annual evaluation reports were recalculated on an evaluation year basis (July 1 – June 30). This should be noted when attempting to compare coal production figures from annual evaluation reports originating both before and after the December 2006 revision to the reporting period.

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, 2006, to June 30, 2007. 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**

#### Loretta F. Self

From: Alfred L. Clayborne

Sent: Thursday, September 13, 2007 9:50 AM

To: Loretta F. Self

Subject: FW: Revised Annual Report

Alfred L. Clayborne Field Office Director Office of Surface Mining Tulsa Field Office

Email: aclayborne@osmre.gov

Phone: 918-581-6431 ext. 23| Fax: 918-581-6419

From: Stephens, Jim [mailto:STEPHENS@adeq.state.ar.us]

Sent: Thursday, September 13, 2007 8:20 AM

To: Alfred L. Clayborne

Subject: RE: Revised Annual Report

AI.

The proposed changes are fine with us.

#### James F. Stephens, P.G.

Chief, Surface Mining and Reclamation Division Arkansas Department of Environmental Quality

----Original Message----

From: Alfred L. Clayborne [mailto:aclayborne@osmre.gov]

Sent: Wednesday, September 12, 2007 3:29 PM

To: Stephens, Jim Cc: Daniel H. Trout

Subject: Revised Annual Report

Mr. Stephens – We have slightly revised the draft Reclamation Performance Bonding section contained on pages 9 and 10 of the draft Annual Report. Essentially some grammatical corrections were made; the only substantive changes of note were that language stating that ADEQ was required to consistently apply indirect cost calculations shown in the "Handbook for Calculation of Reclamation Bond Amounts" was revised to indicate that such costs **should be factored into the calculations similar to methods** shown in the Handbook". Also, the fourth sentence of the first full paragraph on page 10 was deleted, as well as the last two sentences of the second (last) full paragraph on page 10. The revised section reads:

**Reclamation Performance Bonding:** The evaluation was a follow up on OSM's required actions and recommendations from its previous year's review findings. The purpose of the review is to determine whether the amounts of posted reclamation performance bonds are adequate to cover the costs of third party reclamation, and whether they conform to regulatory and industry standards.

Based on its EY 2006 review, OSM <u>recommended</u> that ADEQ revise its forms for filing performance bonds to require the operator to identify what the bond covers (amount of new acreage, amount of increase/decrease in acreage, type of changes in operation and/or reclamation plans). In EY 2007, ADEQ successfully completed the recommended action.

OSM's EY 2006 study required the following actions:

9/13/2007

- Each bond calculation must include a 5-year inflation factor on the direct costs or each bond calculation must be reviewed on a periodic basis using updated costs in order to ensure that the amount of bond is adequate to cover increased reclamation costs. These periodic reviews must occur, at a minimum, at midterm and permit renewal. During EY 2007, ADEQ indicated it was developing a written policy on reviewing bond amounts, and that it was going to review reclamation performance bonds at any revision or at mid-term reviews. At the time of the review, there had not been enough permitting activity for OSM to evaluate ADEQ's implementation of its new procedures to review amounts of reclamation performance bonds. OSM recommended that for consistency in implementation, ADEQ should develop written policy on reviewing reclamation performance bonds.
- Indirect costs should be factored into the calculations similar to methods shown in the "Handbook for Calculation of Reclamation Bond Amounts." ADEQ responded that it did not agree with OSM and was using an alternative method. During the EY 2007 evaluation, OSM requested ADEQ to provide a written explanation on how it calculates and applies indirect costs to reclamation performance bond calculations. The explanation should include details on how ADEQ handles mobilization and demobilization costs, contingencies, costs associated with engineering design, contractor profit and overhead, and project management fees. ADEQ provided OSM with the following explanation of how it arrives at indirect costs for reclamation performance bonds:

Costs were calculated by ADEQ using current AML unit prices, which includes contractor overhead and profit. Therefore, use of these as indirect costs creates a redundancy that overstates total construction costs when utilizing contracting unit pricing for bond calculation. ADEQ contracts under Arkansas state laws. These laws do not require a project management contractor to be included in the general contract as oversight. Engineering redesign would be done in-house with existing ADEQ engineers. Mobilization is a bid item in ADEQ calculations.

Based on ADEQ's explanation, OSM determined that it had not received enough information concerning how ADEO calculates its mobilization and demobilization costs to evaluate ADEO's procedures for determining mobilization/demobilization expenses for the reclamation performance bond estimate. Also, OSM had not received enough information addressing how ADEQ takes into account contingencies, to review ADEQ's procedures for arriving at its reclamation performance bond estimate. ADEQ plans to charge project management and engineering redesign costs to its grant from OSM instead of charging the costs to a project specific account funded by bond forfeiture funds. OSM concurred that the use of current AML contract unit costs can be an appropriate method of determining current cost of reclamation including contractor overhead and profit. OSM notified the State that it must still provide OSM with a written explanation on how it calculates and applies costs related to mobilization, demobilization, and contingencies to reclamation performance bond calculations. ADEQ must also revise its reclamation performance bond calculation procedures to adequately cover the costs associated with bond forfeiture reclamation project management and engineering design work or reduce its Title V grant requests by an amount adequate to cover its costs associated with the work.

In EY 2006, OSM determined that the bond amount for Hartshorne Carbon Company (now Heidtman Mining, LLC) was inadequate, and ADEQ needed to require the operator to increase the bond to an amount that will ensure that the reclamation can be accomplished in the event of bond forfeiture. ADEQ had the operator post a bond in the amount of \$489,800. In EY 2007, OSM found the new bond exceeds the amount OSM calculated in EY 2006 to be adequate for third party reclamation.

It is my understanding that you informed Dan Trout that ADEQ had no comments on the first draft of the report; please advise if you concur or disagree with the proposed changes (if you disagree, please specify what

9/13/2007

issues you have). If everything is satisfactory, these proposed changes will be incorporated into the final report. Thank you. Al.

Alfred L. Clayborne

Field Office Director

Office of Surface Mining

Tulsa Field Office

Email: aclayborne@osmre.gov

Phone: 918-581-6431 ext. 23| Fax: 918-581-6419

This message and any files transmitted with it are sensitive, but unclassified and intended solely for the use of the individual or entity to which they are addressed. Please note that any views or opinions presented in this message are solely those of the author and do not necessarily represent those of the Department of the Interior or the Office of Surface Mining. If you have received this message in error, please notify the sender immediately by e-mail and delete all copies of the message.

9/13/2007