

**OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT**

**Annual Evaluation Summary Report**

**for the**

**Regulatory and Abandoned Mine Land Reclamation Programs**

**Administered by the State**

**of**

**ALABAMA**

**for**

**Evaluation Year 2007**

**July 1, 2006 to June 30, 2007**

**July 2007**



## EXECUTIVE SUMMARY

During the 2007 Evaluation Year (EY), the Office of Surface Mining Reclamation and Enforcement (OSM), Birmingham Field Office (BFO), conducted oversight evaluations of the Alabama Surface Mining Commission (ASMC) and the Alabama Department of Industrial Relations (ADIR), the State coal mine regulatory and abandoned mine land (AML) program agencies, respectively. The oversight studies focused on the success of these agencies in meeting the Surface Mining Control and Reclamation Act's goals for environmental protection and prompt, effective reclamation of lands mined for coal. An evaluation (performance) plan for each agency was cooperatively developed by the BFO and the State to tailor the oversight activities to the unique conditions of each State program. Through oversight activities, the need for financial, technical, and other program assistance to the State is identified and provided to strengthen its programs.

In support of OSM's national initiatives, studies were conducted in the areas of off-site impact, reclamation success, and customer service.

- There is a slight increase in off-site impacts as compared to impacts recorded in EY 2006. The off-site impact study indicated that 87.5 percent of Alabama's inspectable units were free from off-site impacts. Forty-two off-site impacts were identified on 27 inspectable units.
- The BFO's review of seven bond release actions demonstrated that the ASMC continues to follow all program requirements for releasing bonds. Phase III bond releases on 1,021 acres were approved by the ASMC.
- The BFO's customer service review concentrated on the ASMC's procedures and permitting actions relative to public participation in the permit renewal process. Based on this review, the ASMC is meeting the requirement of insuring that permit renewal applications are made available to the public for review and comment. The ASMC addresses comments and/or objections regarding permit renewal applications and resolves any issues before the permit is renewed.

General oversight topic reviews were conducted on both the State regulatory and AML programs.

- The BFO conducted a study to review the ASMC's procedures for approval of road closures, relocations, and/or set-back waivers to public roads. The BFO found that the ASMC defers public road relocations, closures, and set-back waivers to the public road authority in the particular county where mining is to take place. The public road authority, as cited in 880-X-7B-.09(c), approves permittee requests to impact any public road. The ASMC receives all documentation from the permittee and all approvals from the public road authority before the State approves road relocation, closure, or set-back waivers.
- As a follow-up to an EY 2005 enforcement actions study, the BFO conducted a review to determine the progress in the implementation of the recommendations made as a result of the EY 2005 review. The EY 2007 review indicated a reduction in the number of

violations extended beyond the 90-day timeframe. Rationale and decisions regarding extensions and vacations appeared to be consistently implemented and documented. Based on this review, the ASMC has implemented the recommendations of the EY 2005 study.

- During EY 2004, the BFO completed a study on the removal and reclamation of sediment ponds. In response to the study, the ASMC committed to ensuring ponds were removed in accordance with the approved plans. The follow-up review found all ponds recently removed and reclaimed were in accordance with the plans and commitments of the ASMC.
- As a follow-up to an EY 2005 study regarding findings on significant revisions, the BFO conducted a review to determine the implementation of recommendations of the EY 2005 study. It was determined that all of the significant revisions in this review contained a written statement addressing findings. Based on this review, we determined that the ASMC fully implemented the recommendations regarding findings on significant revisions as outlined in the EY 2005 review.
- A study to evaluate the accuracy and completeness of Alabama Abandoned Mine Land Inventory System (AMLIS) entries was conducted by the BFO. This review indicated that information entered into AMLIS was complete and accurate.
- A review of the ADIR's administration of its AML emergency reclamation program was performed during the evaluation year. In every instance, the reclamation successfully abated the emergency condition. All projects were completed within the required timeframe, and all documentation requirements were satisfied.
- The BFO conducted an on-the-ground review to evaluate whether Best Management Practices (BMPs) used by ADIR on abandoned mine lands projects were successful in preventing environmental damage caused by either erosion/sedimentation, and/or organic compounds commonly used during reclamation, and/or acid mine drainage. This review revealed that the BMPs utilized by ADIR assure long-term reclamation success.

In addition to national initiative reviews and topical studies, OSM engaged in activities that provided assistance to ASMC and/or ADIR.

- OSM is providing technical assistance to the ADIR in the design of a passive treatment system for the Camp Cherry Austin AML project.
- OSM Mid-Continent Regional Office (MCR) conducted local workshops for the ASMC and ADIR. At each workshop, MCR staff provided presentations on multiple aspects of technology development and transfer, technical assistance, and training opportunities available from OSM.
- In response to an EY 2006 review, the ASMC endorsed the need to improve and strengthen the adequacy and appropriateness of documentation supporting Probable Hydrologic Consequence (PHC) determinations and the ensuing Cumulative Hydrologic Impact Assessments (CHIAs). The ASMC initiated the development of a workplan to implement actions to address the recommendations of the EY 2006 review. OSM has provided assistance by reviewing and providing PHC/CHIA guidance documents and publications. OSM also is providing ongoing training to ASMC personnel in the review and expectations of adequate PHCs.

- Due to the large number of permit applications and the recent change in technical personnel within the ASMC, OSM provided immediate technical assistance in the form of simultaneous permit reviews with ASMC personnel.
- OSM provided technical assistance to the ASMC on a domestic well investigation.

In order to conduct a thorough program evaluation and follow-up, some topics will be carried over into EY 2008.

- In EY 2007, the BFO elected to review ASMC's compliance with 880-X-8M-.06 concerning the permitting of acreage by revision and policy guidance concerning revisions. As the study developed, the BFO determined that more data was required to gain a better understanding of the ASMC's policy concerning the addition of acreage through permit revisions. A workplan and schedule will be submitted to the ASMC for EY 2008.
- In EY 2006, the BFO completed a study concerning particle size in topsoil substitution. As a result of this study, the ASMC agreed to develop and submit a new guidance document concerning topsoil substitution. The BFO, in conjunction with the MCR and the ASMC, is in the process of developing a joint workgroup to review the methods used to determine suitable topsoil substitution and supplemental materials.
- As a result of an EY 2006 follow-up study on subsidence control plans, the BFO conducted a review to determine if the subsidence control plan of one company identified in the earlier follow-up study had provided a new subsidence control plan in accordance with current subsidence regulations. The ASMC is currently reviewing the subsidence control plan submitted by the company. After the ASMC's review, the BFO will review the plan and complete the follow-up study in EY 2008.

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Appendix A: Tabular Summary of Core Data to Characterize the Program

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## **LIST OF ACRONYMS USED IN THE REPORT**

*ADEM* – Alabama Department of Environmental Management  
*ADIR* – Alabama Department of Industrial Relations  
*AMD* – Acid Mine Drainage  
*AML* – Abandoned Mine Land  
*AMLIS* – Abandoned Mine Land Inventory System  
*AOC* – Approximate Original Contour  
*ASMC* – Alabama Surface Mining Commission  
*BFO* – Birmingham Field Office  
*BMP* – Best Management Practice  
*CHIA* – Cumulative Hydrologic Impact Assessment  
*CO* – Cessation Order  
*EY* – Evaluation Year  
*FTACO* – Failure-to-Abate Cessation Order  
*GIS* – Geographic Information System  
*GPRA* – Government Performance Results Act  
*GPS* – Global Positioning System  
*MCR* – Mid-Continent Regional Office  
*NEPA* – National Environmental Policy Act  
*NOV* – Notice of Violation  
*NPDES* – National Pollutant and Discharge Elimination System  
*NTTP* – National Technical Training Program  
*OSM* – Office of Surface Mining Reclamation and Enforcement  
*PAD* – Problem Area Description  
*PHC* – Probable Hydrologic Consequence  
*PSD* – Program Support Division  
*Rules* – Rules of the Alabama Surface Mining Commission  
*The Board* – Walker County Soil and Water Conservation District Board  
*TIPS* – Technical Innovation and Professional Services  
*SMCRA* – Surface Mining Control and Reclamation Act

## **I. INTRODUCTION**

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created OSM in the U.S. Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for State regulatory and abandoned mine land programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Alabama Regulatory and AML Programs and the effectiveness of the Alabama programs in meeting the applicable purposes of SMCRA as specified in section 102. These programs are administered by the ASMC and the ADIR. This report covers the period of July 1, 2006, to June 30, 2007. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at OSM's Birmingham Field Office, 135 Gemini Circle, Suite 215, Homewood, AL 35209.

## **II. OVERVIEW OF THE ALABAMA COAL MINING INDUSTRY**

The majority of Alabama's coal is ranked high-volatile A bituminous. Moderate amounts of low and medium-volatile A bituminous coal also exist. The coal is generally of good quality, and most beds have low percentages of sulfur and ash.

Alabama has four coalfields that are part of the great Appalachian coal basin - the Plateau field, the Warrior field, the Cahaba field, and the Coosa field. Alabama's total coal reserves have been estimated at 4.8 billion tons. A total of 3.1 billion tons is estimated as recoverable reserves (0.73 billion tons is recoverable by underground mining, i.e., overburden of greater than 120 feet; and 2.4 billion tons are recoverable by present strip mining techniques, i.e., overburden less than 120 feet). A total of 9,700 square miles of the State is underlain by coal. Coal is the most abundant and important mineral resource in the Warrior, Cahaba, and Coosa fields. The great majority of coal mined today is in the Warrior field. The Plateau field, with a greater area than all the other coalfields combined, has attracted little commercial mining. The coal mined in Alabama is used principally for electric power generation. Other uses include methane gas recovery and coke production.

Lignite also occurs in the Coastal Plain of Alabama in irregularly-shaped deposits that may be discontinuous and highly variable in thickness. Deposits of lignite have been identified from Sumter and Choctaw Counties in the west to Barbour and Henry Counties in the east. Lignite has potential use as an industrial fuel, fuel for steam electric generating facilities, and for gasification. There is no current lignite mining in the State.

Coal is recovered by both surface and underground mining techniques. Surface mining in Alabama includes auger, contour, and area methods. Room and pillar and longwall methods are used for underground mining. Prior to 1986, surface mining predominated; since that time, underground mines have accounted for the majority of the coal recovered. For EY 2007, 54 percent of the coal mined was by underground mining (gross tonnage recovered by underground mining – 10,538,564; gross tonnage recovered by surface



mining – 8,670,747; see Table 1). 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 the 2007 evaluation year. In addition to coal production figures for the current year, Table 1 also contains the coal production figures from annual evaluation reports for the two 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 three 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.

The Alabama coal industry has seen an increase in demand for coal since mid-2002. New demands for coal are fueled by higher natural gas prices, making coal more attractive to producers of electricity, as well as general improvements in the United States economy. Exporting coal to foreign countries has also impacted coal demand. These demands have had a predictable effect on coal prices. Coal production has increased 15 percent over 2002 figures. On June 30, 2007, ASMC reported 55 active coal mining operations in the State. Thirty-eight surface mines, ten underground mines, four preparation and loading facilities, and three coal fines recovery operations were actively producing coal in Alabama. Production reports show that bituminous coal was produced in 11 Alabama counties: Bibb, Cullman, Fayette, Franklin, Jackson, Jefferson, Marion, Shelby, Tuscaloosa, Walker, and Winston. Approximately 74 percent of the mine sites are located in Jefferson, Tuscaloosa, and Walker Counties. Underground mining operations employed 2,151 people while surface mining operations employed 1,288 people as of March 31, 2007.

### **III. OVERVIEW OF PUBLIC PARTICIPATION OPPORTUNITIES IN THE OVERSIGHT PROCESS AND THE STATE PROGRAMS**

Opportunities for public participation occur at significant points in the Alabama regulatory program and involve the ability of the public:

- To request that areas be designated as unsuitable for mining;
- To have notification by advertisement of permit application receipt;
- To review permit and revision applications;
- To contest the decision of the Commission on permit applications and revisions;
- To request an inspection of a mine site;
- To object to proposed bond releases;
- To initiate civil suits; and
- To petition to initiate rulemaking.

Monthly meetings of the ASMC are open to the public.

Opportunities for public participation in the Alabama AML Program occur at the time of:

- Project selection;
- Grant application;
- Consultation under the National Environmental Policy Act (NEPA);
- Obtaining right of entry documents; and
- Securing amendments to the State Reclamation Plan.

On April 26, 2006, letters were sent to 16 Federal and State agencies and environmental organizations to alert the public of the opportunity for involvement in the BFO's oversight process. In the letter, recipients were asked to provide the BFO with any questions, issues, or concerns that could be addressed in oversight studies. No responses to these letters were received.

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

##### *Alabama Regulatory Program*

The ASMC continued to successfully administer its regulatory program during EY 2007 to achieve the goals identified in section 102 of SMCRA. The BFO conducted regulatory program studies and engaged in assistance activities to characterize the success of the State's program and to provide assistance in specific areas.

During the evaluation year, the ASMC issued eight new permits and seven permit renewals. Eighty-eight permit revisions were approved. Eight permit transfers were approved. The ASMC processed 39 notices of intent to explore. One application for the Small Operator Assistance Program was approved. A total of 2,612 inspections were conducted, including 2,276 complete inspections (195 inspections on exploration notices of intent to mine) and 336 partial inspections (six inspections on exploration notices of intent to mine). There were 216 inspectable units, including active, inactive, and abandoned permits, as of June 30, 2007.

The ASMC issued 162 Notices of Violation (NOV's), representing 207 violations, and 19 Failure-to-Abate Cessation Orders (FTACO's) with a total of 22 violations (not including vacated violations).

The ASMC continued to develop and make use of the computer system by creating a data base in which all coarse refuse disposal areas, excess spoil disposal areas, and slurry impoundments were documented with certification and quarterly recertification dates noted. This aids in keeping track of certification and recertification due dates.

The ASMC Technical Division and the ASMC Inspection and Enforcement Division are jointly working toward becoming trained in the latest Global Positioning System (GPS) technology. This will enable ASMC to closely monitor permit and increment boundaries and other aspects of permits.

The ASMC has continued to collect virtually all civil penalties in full incurred by active operators within 30 days of final assessment

The ASMC has been able to accomplish a significant reduction in the number of NOV's for which abatement dates extend beyond 90 days. This has been accomplished both through closer monitoring and/or abatement efforts by operators and by the employment of interim abatement measures.

The ASMC completed work on the largest bond forfeiture reclamation site undertaken by the Agency (Alabama Land and Mineral, North Johns Mine). The site consisted of 558 acres and was reclaimed at a cost in excess of \$3.9 million.

During EY 2007, three staff members retired and one resigned. One staff member was responsible for the bond forfeiture project section. These responsibilities have been assumed by one of the permit managers. The retirement of the staff geologist/hydrologist resulted in one of the field inspectors being transferred into the technical division to fill this position. The last retiree was a field inspector in Inspection and Enforcement. The ASMC also hired three additional field inspectors, but one of those individuals resigned before completing his probationary period.

The ASMC received assistance from OSM-MCR to aid in the training of the new geologist/hydrologist for permit review, PHC review, and CHIA development. A work plan was developed and onsite and remote training has taken place.

The ASMC purchased equipment to begin the process of scanning all permits, licenses and ASMC documents in digital format for storage. Software will be purchased in the subsequent evaluation year.

#### *Alabama Abandoned Mine Land Program*

The ADIR successfully administered the AML Program during EY 2007 as outlined in the AML Reclamation Plan and policies and procedures established in the annual AML grant. The AML Program completed 14 projects (including eight emergency projects) during the evaluation year. Pothole subsidence events were the predominant emergency project problem with seven of the eight projects involving subsidence. There was one emergency project that involved burning gob.

Reclamation achieved by non-emergency activities included eliminating 9,376 linear feet of dangerous highwall, 105.4 acres of spoil, one portal, one subsidence event, and two vertical openings. A total of 117.4 acres were affected by the reclamation. The data presented in Table A characterizes the status of AML reclamation in Alabama. The data is presented by problem type, showing reclaimed versus unreclaimed figures.

## **V. SUCCESS IN ACHIEVING THE PURPOSES OF SMCRA AS DETERMINED BY MEASURING AND REPORTING END RESULTS**

To further the concept of reporting end results, the findings from performance reviews and public participation evaluations are being collected for a national perspective. These findings include descriptions of the number and extent of observed off-site impacts, the number of acres that have been mined and reclaimed and 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 the BFO that provide additional details on how the following evaluations and measurements were conducted.

A. Off-site Impacts:

OSM annually evaluates and reports on the effectiveness of ASMC's regulatory program in protecting the environment and the public from off-site impacts resulting from surface coal mining and reclamation operations. Off-site impact data is gathered nationwide in order to portray the on-the-ground success of State programs in preventing or minimizing off-site impacts.

An off-site impact is defined as anything resulting from coal mining that negatively affects resources (people, land, water, structures). The impact must also be regulated or controlled by an applicable State program, must be coal mine related, and must occur outside the area authorized by the permit for conducting mining and reclamation activities. For EY 2007, off-site impact data was collected for the period of July 1, 2006, through June 30, 2007, during the BFO's field inspections and file reviews of State inspection reports, NOV actions, and bond releases.

The field and file reviews were conducted to determine if the State properly recorded off-site impacts for the inspectable units reviewed by the BFO. BFO inspections of these units occurred throughout the evaluation year, beginning in July 2006 and ending in June 2007. Of the seven increments inspected for the reclamation success study, no off-site impacts were identified. Three off-site impacts were identified during the BFO's complete inspections. All of the off-site impacts were classified as previously existing. The ASMC had previously taken enforcement action to address the observed concerns. Remediation and prevention were addressed for each off-site impact identified by the BFO. The examination of the State NOV database and associated hardcopy of the State NOV's identified an additional 39 off-site impacts not associated with the BFO studies. The BFO did not inspect bond forfeiture sites for off-site impacts.

A total of 42 off-site impacts, with 42 effects on resources involving people, land, and water, were identified on 27 of the 216 inspectable units. Effects on resources were determined to be major in seven cases, moderate in one case, and minor in 34 cases. The impacts were associated with failure to provide bond on all disturbed acreage (9), failure to construct or maintain diversions properly (6), conducting mining activities outside of permitted and bonded area (5), failure to control flyrock (5), failure to meet effluent limitations (4), uncontrolled runoff (4), failure to maintain sediment basin (3), failure to blast within limits of formula (2), failure to build basins (1), failure to control airblast (1),

failure to dispose of excess spoil in approved manner (1), and failure to maintain 100' setback (1).

Forty-seven off-site impacts occurred on 28 inspectable units in 2005, 40 off-site impacts occurred on 24 inspectable units in 2006, and 42 off-site impacts occurred on 27 inspectable units in 2007. Alabama's inspectable units as of June 30, 2007, totaled 216, which includes 176 active/inactive/abandoned permits and 40 permits which were bond forfeitures. Therefore, in EY 2007, there were 189 (87.5%) inspectable units free of off-site impacts.

The BFO reviewed hydrology related impacts and found that the majority of off-site impacts were due to the failure to meet effluent limitations, uncontrolled runoff, and the maintenance of diversions. The impacts appear to be isolated occurrences related to pH issues, weather, and/or construction and maintenance issues that are not programmatic in nature. The ASMC has required abatement which included, but was not limited to, water treatment, erosion control measures, and repair of diversions.

In 2006, there were nine encroachment off-site impacts. There was an increase to 15 impacts in 2007. The ASMC continues to stay in communication with the mining operators. The ASMC is requiring all permit revisions to include the location of the highwall and the current date. The map helps ASMC staff follow the progression of mining as each new revision is submitted. The permittee is also required to visibly flag the permit boundaries. The ASMC is being trained in Geographic Information System (GIS) technology. Geo-referenced permit maps and GPS coordinates will aid in the verification of permit boundary locations.

There has been an increase in the number of blasting off-site impacts from four in 2006 to eight this year. The ASMC is continuing to communicate with mining companies and the blasting contractors involved in blasting violations to discuss the nature of the violation and to determine what steps need to be taken to ensure the safety of the public. The ASMC continues to review each blasting plan and in some circumstances, have revoked the blasting license of the blaster in charge.

There has been a slight increase in off-site impacts as compared to impacts recorded in EY 2006. The ASMC inspection staff routinely discusses potential field problems with mine site personnel to prevent off-site impacts and violations from occurring. The BFO has concluded from this review that the State is discovering and citing violations involving off-site impacts as they occur. No instances were noted in which the State inspector failed to take proper enforcement actions.

#### B. Reclamation Success:

ASMC's effectiveness in ensuring successful reclamation through compliance with performance standards relative to bond release was evaluated. A sample of bond releases reviewed by the ASMC after July 1, 2006, was selected for this evaluation. A total of

seven increments were reviewed. Two increments were located on the same permit. This sample included Phase I, II, and III bond releases. The field reviews occurred throughout the evaluation year. All of the sites were reviewed prior to the ASMC's approval/denial of the bond release requests.

The following parameters as outlined in OSM Directive REG-8 were evaluated through field observations and/or review of the State bond release files:

- Phase I - Approximate Original Contour (AOC) achievement
- Phase II - Replacement of soil resources, vegetation stability
- Phase III - Postmining land uses, successful revegetation, surface water quality and quantity, restoration of ground water recharge capacity, comparison of premining to postmining surface water quality and quantity restoration

### Phase I

The BFO inspected and conducted a permit file review on one increment requested for Phase I bond release, totaling 151 acres. This increment was field inspected for AOC achievement, toxic material coverage (where indicated), and the removal of temporary structures and equipment. When indicated, water discharge was tested, toxic material coverage was measured, and topsoil variance compliance was analyzed. A permit file review was conducted to compare the premining/postmining surface and ground water data and compliance with National Pollutant and Discharge Elimination System (NPDES) requirements.

This increment was determined to have met the requirements for Phase I bond release. This increment had achieved AOC and toxic material had been covered when applicable. The permit file reflected a comparison of premining/postmining surface/ground water quality, compliance records of NPDES monitoring points were on file, and documentation reflected that temporary structures and equipment had been removed. OSM agreed with ASMC's approval of this Phase I bond release request.

### Phase II

The BFO inspected and conducted a permit file review on two Phase II increments representing 33 acres. These two increments were located on the same permit. An onsite inspection was conducted to determine the presence of topsoil or suitable soil replacement, to verify the establishment and presence of approved vegetation, to determine that vegetative success standards were met (80% cover), and to assure that the site was stabilized. A determination was also made that lands were not contributing suspended solids off the permit and that removal of temporary ponds and diversions was completed. The permit file was reviewed to determine acres of basins approved as permanent water impoundments, the applicability of prime farmland productivity, and the presence of topsoil waivers.

Although these increments had been vegetated for five years and the vegetation (grasses)

was well established, the postmining land use was designated as forestland. The permittee had not planted trees on either increment. The ASMC inspector had recommended approval for the Phase II bond release; however, upon notification by OSM staff of the postmining land use designation, the permittee withdrew the bond release request for the Phase II release of these two increments.

### Phase III

The BFO inspected and conducted permit file reviews on four increments, totaling 58 acres, for a Phase III bond release. Two of these increments were located on the same permit. The four sites were field inspected for the achievement of postmining land use and successful vegetative cover. The permit files were reviewed to determine the approved postmining land use, the monitoring of the quality of surface and ground water, and compliance with surface water discharge effluent limits. The permit files were also reviewed to determine that the appropriate liability periods had been met, and that productivity data was adequate.

Two increments were determined to have met the requirements for a Phase III bond release. These increments had achieved postmining land use, vegetative success, and met water quality standards. Permit files reflected that water leaving the minesite was comparable to or better than pre-mining conditions (where applicable) and that compliance with surface water discharge effluent limits had been verified. In all cases, the liability periods had been met.

The two increments located on the same permit are also the same two increments which were reviewed for a Phase II bond release. As discussed under the Phase II section above, these increments had been vegetated for five years and the vegetation (grasses) was well established. However, the postmining land use was designated as forestland. The permittee had not planted trees on either increment. The ASMC inspector had recommended approval for the Phase III bond release; however, upon notification by OSM staff of the postmining land use designation, the permittee withdrew the bond release request for the Phase III release of these two increments. OSM agreed with ASMC's final determination of approval/disapproval of the Phase III bond release requests.

The BFO determinations were consistent with ASMC's final actions on Phase I, II, and III bond releases on sites inspected in this sample. All approved bond release acreage in this sample met the approved reclamation plan, postmining land use, and required release standards. Based upon this review, the BFO has determined that ASMC's final decisions on approving bond release requests met the requirements of the approved Alabama surface mining program. The bond release and forfeiture figures for 2007 are shown in Table 5. The following data is not available from the ASMC database: disturbed acreage, remaining acreage, acres bonded between Phase I bond release and Phase II bond release, and acres bonded between Phase II bond release and Phase III bond release. The table

below shows figures for acres bonded, released, and forfeited from 1983 – 2006 and for 2007.

| <b>Evaluation Year</b> | <b>Acres Bonded</b> | <b>Phase I Release Acres</b> | <b>Phase II Release Acres</b> | <b>Phase III Release Acres</b> | <b>Bond Forfeiture Acres</b> |
|------------------------|---------------------|------------------------------|-------------------------------|--------------------------------|------------------------------|
| 1983 – 2006            | 122,418             | 83,145                       | 54,965                        | 61,079                         | 14,134                       |
| 2007                   | 3,886               | 2,240                        | 356                           | 1,021                          | 174                          |
| <b>TOTAL</b>           | <b>126,304</b>      | <b>85,385</b>                | <b>55,321</b>                 | <b>62,100</b>                  | <b>14,308</b>                |

C. Customer Service:

The ASMC’s procedures and permitting actions relative to public participation in the permit renewal process was selected for review. The Rules establish standards to ensure that the public has been afforded an opportunity to be involved in the permit renewal process. These Rules further outline requirements of both the ASMC and the permit renewal applicant in providing this opportunity to the public.

Eight permit renewal applications were received by the ASMC during the timeframe of July 1, 2005, through June 30, 2006. These permit renewal applications comprised the sample for this evaluation. The permit renewal application files were reviewed, and the data collected were compared to procedures required in the Rules. The majority of the eight permit renewal applications in this review contained all of the required documentation for the actions as outlined above. All but one renewal had been advertised for the required period and location. The one renewal which did not meet the advertisement requirement was advertised for only one day rather than the required one day for four consecutive weeks. The ASMC indicated that this was an oversight.

Documentation was available that verified all pertinent local, state, and federal agencies had been notified; and the permit renewal applications were made available for review and copying at a local library or other approved location. One discrepancy was noted, however, between a stated location in the permit renewal application and the location identified in the newspaper advertisement.

All permit renewals were issued at least 30 days after the comment period.

In accordance with Rule 880-X-8K-.05, written comments and/or objections received by the ASMC were transmitted to the applicant, and all comments and/or objections were addressed by the ASMC. Comments and/or objections were filed in the permit file and are available for public review.



A large number of citizens submitted comments expressing general concerns about one permit renewal and mining in a particular area. An informal conference was held. This informal conference was advertised in the local newspaper at least two weeks before the scheduled conference as required by the Rule. Examples of resolution of comments/objections included reviews regarding access to a cemetery, perceived delay by property owners in completing mining and reclamation, and a desire by landowners to build homes on the land.

This permit was renewed with two conditions relative to the concerns expressed by the citizens. The conditions of the permit renewal are: (1) the permit was renewed for only a three-year period and (2) access to the cemetery was to be provided to any interested person and information regarding cemetery access was posted near the mine entry gate.

Copies of ASMC's notice of decision to each person who filed comments regarding this renewal or a notice of decision to the party requesting the informal conference were unavailable. ASMC staff indicated that the actual permit renewal document serves as the notice of decision with the annotation of notified parties in the cc: section of the permit renewal document. Although this particular permit renewal document did not reflect citizens' notification, the ASMC stated that they were certain that the renewal document had been sent to the interested parties because there were letters from the concerned citizens regarding the approval of the permit renewal.

The ASMC addresses comments and/or objections regarding permit renewal applications and resolves any issues before a permit renewal is issued. All comments/objections are forwarded to the permit renewal applicant. All comments/objections are available for public review in the permit file. Informal hearings are held when requested in an effort to resolve issues before a permit renewal is issued.

During this review, the ASMC took measures to discuss issues with the staff and reinforce the importance of the annotation of citizen names on the permit renewal documents when appropriate, the importance of insuring that permit renewals are advertised for the required length of time, and that the location of permit renewal applications are correctly identified in the permit renewal package and the newspaper advertisement. In addition, written guidelines were issued clarifying who should receive copies of permit renewal decisions. These actions taken by the ASMC will insure that citizens are provided an opportunity to participate in the permit renewal process.

Based on this review, the BFO has determined that the ASMC is meeting the requirement of insuring that permit renewal applications are made available to the public for review and comment.

## **VI. OSM ASSISTANCE**

OSM's oversight role has shifted to focus more on on-the-ground reclamation success and end results than on processes. OSM's changing role now emphasizes assisting the State in improving its regulatory and abandoned mine land programs by identifying program needs and offering financial, technical, and programmatic assistance as necessary to strengthen the State programs. The BFO routinely provides information to the ADIR and the ASMC regarding new policy guidelines and procedures as well as changes in existing guidelines and procedures.

### ***Camp Cherry Austin Abandoned Mine Land Clean Streams Project***

The MCR is providing ongoing technical assistance to the ADIR in the design of a passive treatment system for the Camp Cherry Austin AML Project. The MCR staff along with ADIR personnel investigated Acid Mine Drainage (AMD) discharges at the Camp Cherry Austin Project site on November 29, 2006. The water quality data collected from the field visit was furnished to the ADIR. Currently, topographic data is being collected.

### ***Alabama Technology Development Transfer Workshop***

On March 27 through March 29, 2007, the MCR conducted two one-day workshops for the ASMC and the ADIR in Jasper and Birmingham, respectively. Each workshop provided 14 presentations by MCR staff on multiple aspects of technology development and transfer, technical assistance, and training that are available from OSM. The interactive program resulted in improved communication between MCR and the Alabama technical staff, including discussions of the possibilities for introduction of mobile computing and geospatial technologies to support both AML and Regulatory processes. During the workshop, interest was expressed in various software/hardware and training programs available through OSM's Technical Innovation and Professional Services (TIPS), OSM's National Technical Training Program (NTTP), and through the MCR. Twelve State and two BFO employees attended the Jasper workshop, and 10 State and two BFO employees attended the Birmingham workshop.

### ***Alabama PHC/CHIA Workplan***

In EY 2006, the BFO with assistance from the MCR, Program Support Division (PSD), conducted a review of the adequacy and appropriateness of ASMC's documentation supporting PHC determinations and ensuing CHIA's for permit issuance. In response to this review, the ASMC endorsed the need to improve and strengthen the adequacy and appropriateness of documentation supporting PHC determinations and the subsequent CHIA's. The ASMC initiated the development of a workplan and has been proactively involved in working with OSM to implement actions to address the recommendations of the EY 2006 study.

The PHC/CHIA Workplan was finalized in November 2006. Goals and tasks of the Workplan completed in EY 2007 include the following:

- Identification of current methods utilized by ASMC to determine the adequacy of geologic and hydrogeologic information submitted in permit applications.
- Collection of published materials specific to Alabama concerning geology and water quality/quantity information.
- Identification of methods used by other States to determine a sufficient number of overburden holes for geologic and acid-base accounting (ABA) information.
- Collection of applicable guidance documents from other States.
- Training of ASMC personnel in the review and expectations of adequate PHCs and problems and/or issues regarding geology, hydrogeology, permitting, bond releases, and water well complaints.

### ***Simultaneous Permit Reviews***

Due to the number of permit applications in review as of October 31, 2006, and the recent change in technical personnel within the ASMC, OSM began providing immediate technical assistance in the form of simultaneous permit reviews with ASMC personnel. The cooperative reviews focus on the geology and hydrology portions of permit applications and serve to not only assist the ASMC in processing permit applications but also as a training tool for ASMC personnel. Training of ASMC staff on adequate geologic reviews of permit applications (including acid-base accounting) is complete; however, OSM continues to provide whatever assistance the ASMC may need in this area.

### ***Water Well Investigation***

In June 2007, OSM provided technical assistance to the ASMC on a domestic well investigation. OSM personnel documented the existing conditions of the water well using the MCR borehole camera system. In addition to the well survey, OSM staff is currently working with ASMC staff to determine the reason for the diminution in supply to the domestic well.

## **VII. GENERAL OVERSIGHT TOPIC REVIEWS**

### **I. Program Evaluations of the State Regulatory Program**

#### ***Road Closure Study***

The BFO reviewed various regulations pertaining to road closure, relocation and set-back waivers to gain an understanding of ASMC procedures in protecting the public. ASMC regulation, 880-X-8F-.15, requires that each permit application describe, with appropriate maps and cross-sections, the measures that will be used to protect the interests of the

public if the applicant seeks to conduct surface mining activities within 100 feet of the right-of-way line of any public road or if the applicant proposes relocating a public road. The BFO also reviewed Rule 880-X-7B-.09 that pertains to the procedures for set-back waivers, relocation, or closing of a public road. The above regulations were utilized as a basis to review ASMC's procedures for approving road closure, relocation, and/or set-back waivers to public roads.

After the review of ASMC regulations, a sample was generated using permits issued from EY 2004 through 2006. The BFO interviewed the permit manager as well as State inspectors to obtain a target sample of road closures and set-back waivers. There were no road relocations in the sample for this review. There were 11 permits with public road closures or waivers reviewed for this study. Of the 11 permits, one permit was excluded due to the fact that the road in the permit was an existing road constructed by a gas well company and was not a public road.

During interviews with ASMC staff, the BFO found that the ASMC defers public road relocations, closures, and set-back waivers to the public road authority in the particular county where mining is to take place. The public road authority, as cited in 880-X-7B-.09(c), approves all permittee requests to impact any public road. The ASMC receives all documentation from the permittee and all approvals from the public road authority before the State approves road relocation, closure, or set-back waivers.

In some circumstances, the public road authority required landowner letters consenting to the road closure or set-back waiver before granting approval to the permittee. The public road authority required landowner consent on two permits. The permittee did obtain landowner letters, and the documentation was located in each permit file.

The BFO found that eight of the 11 permits received approval from the public road authority prior to closing a road or mining within the 100' set-back. There was documentation in eight permit files reviewed in this study showing permittee requests and the approval documents from the public road authority. Two permits did not have approvals due to the fact that one permit did not involve public roads and the other permit had not been mined on the increment where the public road was located.

Based on this review, OSM determined that the ASMC awaits approval from the public road authority before granting approval to the permittee to impact a public road. By deferring approvals to the public road authority, the ASMC is complying with regulations

regarding road relocation, closures, and set-back waivers when the permittee proposes to mine within 100 feet of the right-of-way line of the public road.

### ***Extensions and Vacations of Enforcement Actions Follow-up***

During EY 2005, the BFO conducted a study on ASMC's effectiveness in ensuring successful reclamation by enforcement of SMCRA through Cessation Orders (CO's),

NOV's and the extensions, terminations, and vacations of these enforcement actions.

The review revealed that interim measures to minimize harm that could occur to the public or environment during the extended abatement time were not addressed in the documentation, and the NOV database indicated that violations were extended beyond 90 days approximately 20% of the time. Also, although the files contained written or annotated requests for extensions exceeding 90 days for abatement, the documented requests did not always appear to consistently contain clear and convincing proof of entitlement to an extension as outlined in the Rule. However, during the review, ASMC implemented procedures to more thoroughly document the 90-day extension process to strengthen the program.

This follow-up study was conducted to review the implementation of BFO recommendations made as a result of the EY 2005 review. These recommendations included: (1) the implementation of ASMC procedures to insure operators provide clear and convincing proof of entitlement to an extension exceeding 90 days as outlined in the Rule; (2) documentation of interim measures for extended abatement dates, when applicable; and (3) documentation that good cause exists for vacation of enforcement actions.

The ASMC issued 149 NOV's comprised of 187 violations during July 1, 2005 – August 31, 2006. Nineteen of the 149 NOV's abatement dates were modified to exceed 90 days. These 19 NOV's comprised the NOV's reviewed during this study.

All of the NOV files in this review, with the exception of one, contained written or annotated requests for extensions which provided proof of entitlement to an extension as outlined in Rule 880-X-11C-.03(6). In some cases, additional actions by the permittee were necessary to abate the violation or resolve the enforcement action. The majority of these requests for abatement extensions were based on adverse weather conditions, and a few were requested for the processing of revisions. Interim measures, where applicable, were addressed. Overall, the ASMC NOV database indicates that violations extended beyond 90 days for this timeframe occurred approximately 13% of the time. This is an improvement from the EY 2005 review.

Nine violations in this study were vacated. Reasons, rationale, and good cause for the vacations of these NOV's were documented in the files.

Thirteen CO's were written during the timeframe July 1, 2005 – August 31, 2006. Eleven of the CO's were Failure-to-Abate CO's. One FTACO was written for failure to abate another CO. Two of the CO's were issued for mining without a permit.

Rationale and decisions regarding extensions and vacations appeared to be consistently implemented and documented. Based on this review, the ASMC is implementing the recommendations of the EY 2005 review.

### ***Sediment Pond Removal Follow-up***

During EY 2004, the BFO completed a study on the removal and reclamation of sediment ponds. In response to the study, the ASMC committed to ensuring ponds are removed in accordance with the approved plans. Agreement was also reached on improving the seeding and mulching practices on all disturbed and reclaimed pond areas, noting that site specific conditions may influence these activities. The follow-up review found all recently removed and reclaimed ponds were in accordance with the plans and commitments of the ASMC.

### ***Significant Revision Findings Follow-up***

The Rule 880-X-8M.06 provides that the State establish parameters to determine which permit changes constitute significant departure from the original permit application. Any application for a permit revision which proposes significant alteration in the permit operations are subject to the requirements of 880-X-8K-.10. This Rule states that the Regulatory Authority provide written findings, which are documented in the approval, on the basis of information in the permit or revision application or from information otherwise available as outlined in this regulation.

During an EY 2005 review, the BFO found that of the significant revisions reviewed, only 40% of the approved significant revisions in the study addressed findings. The remaining significant revisions did not address findings in writing, and the significant revision documents did not indicate that additional findings were made during the review of the revision. To satisfy the requirements of 880-X-8K-.10, the BFO recommended the preparation of either a separate findings document or a written statement to be added to the significant revisions document to indicate that ASMC reviewed the revision and found that there were no changes to the previously made findings contained in the original permit document. This follow-up study was conducted to review the implementation of this BFO recommendation.

For the timeframe July 1, 2005 – December 31, 2006, the ASMC approved 36 significant revisions. All 36 significant revisions were reviewed to determine if findings had been addressed. All of the significant revisions in this review contained a written statement addressing findings. The statement, “All other terms and conditions remain in effect as well as all Findings in the original permit and any Findings appropriate for this revision,” was reflected on all 36 significant revisions in this follow-up study. Nine of the 36 significant revisions contained two additional specific findings regarding (1) historical properties and (2) endangered/threatened species. Two of the 36 significant revisions contained three additional findings along with the general findings statement. These additional specific findings addressed (1) historical properties, (2) endangered/threatened species, and (3) the finding that the proposed permit area was not within an area under study or administrative proceedings under a petition filed to have an area designated as unsuitable for coal mining operations.

Based on this follow-up review, the BFO determined that the ASMC fully implemented the recommendations regarding findings on significant revisions as outlined in the EY 2005 review.

## II. Program Evaluations of the State Abandoned Mine Land Program

### *Abandoned Mine Land Inventory System*

The OSM, along with the States, developed an inventory of AML-impacted lands and waters for inclusion in the AMLIS. The SMCRA requires maintaining and updating AMLIS to track project accomplishments. Updating AMLIS is essential to insure that program decisions are made using current and accurate information. Maintaining and updating AMLIS includes making changes to reflect newly discovered problem areas, indicating changes in priority status, and capturing program accomplishments in terms of reclamation cost and problems reclaimed. Feature and cost information contained in AMLIS are utilized by OSM to quantify the number of reclaimed AML sites in the coalfields versus the number of unreclaimed sites. This calculation is one of the measurements OSM uses under the Government Performance and Results Act (GPRA) to characterize how well the AML Program is working.

In order to address the findings of an audit of the AMLIS conducted by the U.S. Department of the Interior Office of Inspector General, OSM recommended that each Field Office assure that each State had in place a system to ensure data entered into the AMLIS is accurate and that each State have a signed certificate on file stating that such a system exists and a description of that system. Also, OSM recommended that each Field Office annually review a random sample of the information entered in AMLIS during the year to verify that it matches the information maintained in hardcopy.

The ADIR has developed procedures to ensure the accuracy of data entered into AMLIS. Also, the ADIR has furnished OSM a signed certificate dated June 2, 2004, certifying that a system is in place to ensure the accuracy of data in AMLIS and describes the system. These procedures meet the recommendations made by the Department's Inspector General to establish a quality control system to ensure that States review and certify the accuracy of data entered into AMLIS. The BFO noted that all Abandoned Mine Land Problem Area Descriptions (PADs) were signed by the Field Supervisor certifying the accuracy of the data entry. The OSM-76, PAD, is the form utilized nationwide to collect feature and cost data on AML problem sites.

In order to verify that the information entered in AMLIS during the year matched the information maintained in hardcopy, the BFO reviewed all PADs (six PADs) entered into AMLIS as part of the grant closeout of the 2004 AML Grant non-emergency portion. Also reviewed were all PADs (seven PADs) entered into AMLIS as part of the closeout of the emergency portion of the 2005 AML grant. A total of 13 PADs were reviewed. The review emphasized accuracy of features, costs, and latitude and longitude entries. In

addition, AMLIS was checked to verify that completion dates and GPRA data had been updated.

The costs, features, and latitude and longitude entries in AMLIS agreed with the corresponding data on the hardcopy PADs for the 13 problem areas. In addition, all completion dates and GPRA data for the 13 PADs had been updated in AMLIS.

### ***Emergency Program***

Emergency projects are those involving AML problems that present an immediate danger to the public health and safety. Emergencies include landslides, subsidence openings, mine and coal waste fires, and open shafts and portals. Because public health and safety can be seriously threatened by AML emergencies, rapid response is critical. Reported emergencies are usually investigated within 24 hours and abated in less than a month.

On August 30, 1990, OSM authorized the State of Alabama to administer a State-managed emergency reclamation program. The first emergency program grants were awarded on January 23, 1991, providing funds for both the administration and construction activities of the emergency program. At that time, the ADIR assumed responsibility for the initial emergency investigations, with the BFO assuming the emergency declaration responsibility. Since that time, 155 emergencies have been reclaimed in Alabama. On September 2, 1997, the BFO approved an alternate system for approving emergency projects involving pothole subsidence problems. Pothole subsidence emergencies involve the sudden occurrence of the creation of vertical openings that reach to the mine works. The alternative system provides for the reclamation of pothole subsidence emergencies without the State having to individually request an emergency declaration for each project.

A review of the ADIR's administration of its AML emergency reclamation program was performed during the evaluation year. The areas evaluated were responses to citizen emergency notifications, other requirements for the emergency program listed below, and the success of emergency reclamation.

A random sample was chosen of seven emergency projects completed during EY's 2006 and 2007. Field visits were conducted on the seven emergency projects. The following measurements were selected for review: (1) the timely investigation of the emergency (ADIR personnel are dispatched to the problem site within 24 hours of notification); (2) coverage by the Blanket Agreement (pothole subsidence); (3) successful reclamation of the problem; (4) long-term stability of the reclamation; (5) notification of the emergency to the BFO and re-notification if the cost would exceed \$10,000; and (6) required documentation.

Emergencies are normally reported directly by telephone calls to the ADIR, and indirectly by persons contacting the ADIR who have been advised of the problem. Emergency notifications are typically responded to within 24 hours of receipt (six of



seven). The study demonstrated that the ADIR is very responsive to emergency reports and does everything possible to perform a site visit within 24 hours. One of the seven was not investigated on site within the 24 hour period, but ADIR staff did speak with the landowner who stated he was monitoring access to the site and had placed a barrier over the pothole subsidence. The BFO was notified of all emergencies declared by the State under the Blanket Agreement in a timely manner; all seven projects were covered under this Agreement.

In every instance, the reclamation conducted on the seven emergency projects successfully abated the emergency condition. The maximum time to reclaim an emergency problem was 17 days from notification.

The review of the State's emergency files showed that all documentation requirements were satisfied. Only one of the seven projects exceeded costs of \$10,000. Once it was determined that the costs would exceed \$10,000, ADIR staff contacted the BFO immediately and received approval to proceed with the project.

Field visits determined all projects were successfully reclaimed and eliminated the emergency situation. All disturbed areas were revegetated as appropriate and no erosion or off site sedimentation was noted. Long-term reclamation success and stability were achieved on each project. The ADIR is administering the emergency reclamation program in an exemplary manner.

### ***Best Management Practices***

AML reclamation projects are constructed in accordance with contract specifications and/or the cooperative agreement between the ADIR and the Walker County Soil and Water Conservation District Board (the Board). BMPs are selected for each project based on: the stormwater drainage permit required for the project; consultation with other State or Federal agencies; and, the professional judgment of the ADIR staff. BMPs are typically physical or revegetation techniques that reduce, minimize, or eliminate erosion or sedimentation problems; or are designed to prevent environmental damage from toxins, such as oil, gasoline or other organic compounds. The BFO evaluated whether BMPs used by the ADIR on abandoned mine lands projects were successfully preventing environmental damage from erosion/sedimentation, organic compounds commonly used during reclamation, and/or from acid mine drainage. The BMPs used included but are not limited to the following: hay bale and riprap check dams, sediment fencing, mulch, berms, riprap lined ditches, stabilization liners, erosion control blankets, vegetation and vegetation buffer zones, stream setbacks, grading methods, and terraces.

Under the provisions of the NPDES, administered by the Environmental Protection Agency, AML construction projects affecting one acre or more must obtain a Stormwater Discharge Permit. In Alabama, these permits are issued by the Alabama Department of Environmental Management (ADEM). The permits require that best management practices be employed to eliminate erosion, off-site sedimentation, and pollution.

Consultation activities under the NEPA often result in consulting agencies prescribing site-specific requirements for reducing or eliminating sedimentation from the project sites. Based on site conditions, permit and consultation requirements, and professional judgment, the ADIR selects BMPs for each site.

A sample of six non-emergency AML projects was chosen for the review from the population of eight projects under active construction from August 1, 2006, through April 15, 2007. In addition, a sample of ten non-emergency projects completed July 1, 2001, through June 30, 2006, was chosen. The purpose of the two study populations was to review the success of BMPs on projects under active construction as well as the long-term success of BMPs on completed projects.

The files of the six active projects were reviewed to determine:

- the timeliness of obtaining the Stormwater Discharge Permit for each project;
- the inclusion of BMPs in the contracts or other appropriate documents (including the Spill Prevention Control and Counter Measure Plan);
- the BMPs chosen for the project; and
- the placement of BMPs occurred prior to the start of project construction.

BMPs along with a Spill Prevention Control and Counter Measure Plan were incorporated into the contracts, plans, and other appropriate documents for all six projects. The ADIR requires that Stormwater Discharge Permits be obtained prior to construction. Stormwater Discharge Permits were obtained before construction began on all but one of the six projects. In the future, the ADIR will assure that the permits are obtained for all projects prior to the start of construction.

The approved/required BMPs to be employed during construction were used on all projects reviewed in the field. The required BMPs were in place prior to the start of project construction on all six projects. All BMPs were functioning properly, preventing erosion and off-site sedimentation. All projects with fuel stored at the site were following the Spill Prevention Control and Counter Measure Plan thereby preventing the release of toxins into the environment.

The review of the ten completed projects concluded that all permanent BMPs were functioning as planned on the projects visited. No active erosion or off-site sedimentation was noted on any of the ten sites evaluated for long-term success. Vegetative cover was good to excellent. No terraces or berms were breached. Riprap checkdams, ditches, and flumes were functioning properly. All sites were stable. The installed BMPs insured that each project met its reclamation goals. The BFO believes that ADIR's attention to BMPs assures long-term reclamation success. In addition, selected BMPs; i.e. covering gob with adequate soil material, leach beds, and limestone gabion check dams, used to address acid mine drainage had significantly reduced or eliminated the AMD on one of the projects.

Site review observations made on the 16 projects showed that BMP selection and use was similar throughout the projects. The ADIR uses a wide array of BMPs to reduce or eliminate erosion and off-site sedimentation. The topography of several sites reduced or eliminated the need for BMPs because runoff was contained within project boundaries. On all sites with onsite fuel tanks, the tanks were correctly placed inside a bermed area to contain spills if one should occur. The ADIR requires that appropriate BMPs are employed prior to the start of construction, during construction, and also provides that permanent BMPs remain in place after construction. ADIR's post-construction maintenance program provides early identification of erosion and assures that selected BMPs are appropriately maintained after the active phase of the project to assist in long-term project success and environmental protection.

The ADIR operates an abandoned mine lands program which specializes in not only correcting health and safety problems, but in stabilizing the affected project areas during and after construction. They accomplish this by employing BMPs to reduce erosion, minimize sedimentation, and prevent contamination by organic compounds and acid forming materials. ADIR's BMPs assure long-term reclamation success.

C. Program Evaluations Carried Over into EY 2008 – State Regulatory Program

***Incidental Boundary Revisions***

BFO oversight studies have concentrated in recent years on ASMC's definition of significant versus insignificant revisions, processing of revisions, and public participation involving permit revisions. In EY 2007, the BFO elected to review ASMC's compliance with 880-X-8M-.06 concerning the permitting of acreage by revision and its policy guidance concerning revisions.

As the study developed, the BFO determined that more data was required to gain a better understanding of the ASMC's policy concerning the addition of acreage through permit revisions. This study will be extended into EY 2008 to further develop and extend the scope of the review to include the addition of new acreage and incidental acreage in revisions. A workplan and schedule will be submitted to the ASMC for EY 2008.

***Topsoil Substitution Follow-up***

In EY 2006, the BFO completed a study concerning particle size in topsoil substitution. As a result of this study, the ASMC agreed to develop and submit a new guidance document concerning topsoil substitution. The ASMC submitted a draft policy in EY 2007 to the BFO and MCR for review. The draft document became ASMC's final topsoil substitution policy. The BFO, in conjunction with the MCR and ASMC, is in the process of developing a joint workgroup to review the methods used to determine suitable topsoil substitution and supplemental materials.

### ***Subsidence Control Plan Follow-up***

In EY 2006, the BFO conducted a follow-up study to document ASMC's responses to recommendations made during an EY 2001 study on subsidence control. The BFO determined that the subsidence control plan of one of the companies in the study was not in line with current subsidence regulations. The ASMC sent a letter to this company requiring them to update their subsidence control plan to meet subsidence control regulations. The company responded in a timely manner and submitted a new plan for all of their underground longwall mines. The ASMC is currently reviewing the subsidence control plan. After the ASMC's review, the BFO will review the plan and complete the follow-up study in EY 2008.



## **APPENDIX A**

### **TABULAR SUMMARY OF CORE DATA TO CHARACTERIZE THE PROGRAMS**

*The following tables present data pertinent to mining operations and State and Federal regulatory and abandoned mine lands activities within Alabama. They also summarize funding provided by OSM and Alabama staffing. Unless otherwise specified, the reporting period for the data contained in all tables is the same as the evaluation year. Additional data used by OSM in its evaluation of Alabama's performance is available for review in the evaluation files maintained by the Birmingham Field Office.*



## **APPENDIX B**

### **STATE COMMENTS ON THE REPORT**