

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Summary Report

for the

Regulatory and Abandoned Mine Lands Reclamation Programs

Administered by the State

of

ALABAMA

for

Evaluation Year 2001

October 1, 2000 to September 30, 2001

October 2001

EXECUTIVE SUMMARY

During the 2001 Evaluation Year (EY), the Office of Surface Mining (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 lands 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 land 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. The purpose for the oversight activities was to identify the need for and then provide financial, technical, and other program assistance to the State to strengthen its programs.

In support of OSM's national initiatives, studies were conducted in the areas of offsite impacts, reclamation success, and customer service.

- The offsite impacts study indicated that 89 percent of Alabama's inspectable units were free from offsite impacts. The number of offsite impacts has continued to decline with 59 offsite impacts identified during Evaluation Year 1999, 51 in 2000, and 39 in 2001. Data on offsite impacts were collected during BFO inspections and from State inspection reports and Notices of Violation.
- The BFO's review of 22 bond release actions demonstrated that ASMC continues to follow all program requirements for releasing bonds.
- The BFO's customer service review, which concentrated on the citizen complaint process, analyzed 20 complaints processed by the State during the evaluation year. The BFO review indicated that the ASMC was responsive to citizen complaints, addressed the concerns voiced by citizens, and consistently conducted onsite investigations of these complaints. The BFO recommended that continued emphasis be placed on the timely notification of complainants.

General oversight topic reviews were conducted for both the State regulatory and abandoned mine lands programs.

- A joint study was conducted with ASMC to review adherence to subsidence control regulations by underground mining companies, utilizing the longwall mining method. The study concluded that the mining companies complied with the majority of subsidence control regulations; however, some areas of the subsidence control plans and notifications to landowners needed to be addressed by the mining companies and ASMC to better adhere to all requirements.
- A study was conducted to evaluate ASMC's consultation under the National Historic Preservation Act (NHPA) and the development of findings and permit conditions demonstrating compliance of permits with the NHPA. The BFO concluded that ASMC coordinates with the Alabama Historical Commission in fulfillment of its requirement to

provide for the coordination of review and issuance of permits with applicable requirements of the NHPA.

- The BFO conducted a study to evaluate ASMC's performance concerning the approval of design, construction, and engineering certifications for haul roads. Fifteen of the seventeen completed haul roads had been constructed according to State-approved engineering designs and complied with State regulations regarding primary roads. Drainage control problems on two roads were addressed by ASMC during the study.
- Twenty-one revisions were reviewed to evaluate ASMC's performance relative to the regulations governing postmining land use revisions. Based on this review, ASMC provides opportunity for public participation in the postmining land use revision process. ASMC also conducts a thorough review of requests for postmining land use change. In 18 of the 21 postmining land use revision files reviewed, ASMC consulted with all affected landowners. The BFO advised ASMC that their policy should be changed to require that all affected landowners be consulted regarding postmining land use revisions.
- In support of the national initiative to identify coal refuse impoundments with breakthrough potential, the BFO, working with the Mine Safety and Health Administration – District 11 (MSHA) and the ASMC, conducted a review of water and slurry impoundments located in Alabama. MSHA identified 45 impoundments in Alabama and conducted a review of each site. Two (2) of the impoundments were identified as having a high potential for breakthrough of water/slurry into underground mine works. Both of these sites were in the process of being reclaimed. Any breakthrough would flood, but be safely retained within abandoned mine works.
- The BFO conducted a study to verify that ASMC was properly classifying coal mining permits on the Inspectable Units List. The study determined that the State was inspecting permits at the correct frequency. Permits were being removed from the Inspectable Units List at the proper time, based on bond release or forfeiture status.
- At the request of the U.S. Fish and Wildlife Service (USFWS), the BFO agreed to evaluate ASMC's compliance with regulations requiring coordination with the USFWS and compliance with the Endangered Species Act (ESA). Nine permits approved by ASMC in EY 2000 were evaluated. Following review of the permits, it was determined that the information exchange between the USFWS and ASMC could be enhanced to facilitate the Service's assessment of potential mining impacts. The parties agreed to explore the development of procedures that would improve information exchange and coordination during the permitting process.
- One of OSM's program priorities for EY 2001 was to review State programs for outstanding State program amendments. A review of Alabama's program determined that Alabama has taken prompt action to address required program amendments and 30 CFR Part 732 notices provided by OSM. No outstanding program amendments were identified.
- A field and file review of 19 abandoned mine land (AML) projects was conducted to determine ADIR's overall success in administering the Alabama AML Program. The evaluation of these projects showed that ADIR has an efficient and effective program. The projects were all completed in a timely manner, successfully reclaimed the AML features, achieved the goals and objectives of the projects, exhibited long-term reclamation stability/success, and had construction costs within or less than the initial estimates or bids.

- Nineteen emergency projects and seven potential emergency complaints were chosen to evaluate ADIR's management of the AML Emergency Response Program. The study determined that: citizen complaints were investigated promptly, usually within 24 hours of receipt; all complaints in need of emergency reclamation were addressed in an expeditious manner; reclamation was completed within one month of the complaint for 16 of the 19 emergency projects, and within six months for all projects; construction performed on all projects successfully reclaimed the problem; and long-term stability was achieved on 18 of 19 projects with one project needing maintenance to correct a slump in the backfill material.
- The MCRCC performed an analysis of ASMC's drawdowns and disbursement of Federal grant funds for the period of January 1, 2000, through March 30, 2001. The analysis determined that ASMC met the requirement that Federal funds be disbursed as soon as administratively possible.
- The MCRCC also performed a review of ADIR's property/equipment management records, including transactions from January 1, 2000, through March 30, 2001. The review determined that ADIR's management of property/equipment was in accordance with Alabama State laws and the Federal Assistance Manual.

In addition to national initiative reviews and topical studies, the BFO engaged in a number of assistance activities during the review period. Each assistance activity was identified during joint State/BFO meetings and was performed in full cooperation with the associated State agency.

- Efforts to identify and quantify AML acid mine drainage (AMD) sites continued during the review year. The BFO's testing results indicated that, of the original 81 problem areas, 34 exhibited AMD. The 34 problem areas that exhibited AMD will receive in-depth field investigations to further quantify/qualify the sites, beginning in EY 2002.
- In consultation with the OSM archeologist and ADIR, the BFO drafted the "*Procedures for Complying with Sections 800.3 - 800.7 of the National Historic Preservation Act (NHPA)*". These procedures reflected the changes to NHPA regulations and incorporated the categorical exclusions developed by the State Historic Preservation Office. The revised procedures were approved by both the ADIR and the Alabama Historical Commission during the evaluation year.

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LIST OF ACRONYMS USED IN THE REPORT

ADEM - Alabama Department of Environmental Management
ADIR - Alabama Department of Industrial Relations
AHC - Alabama Historical Commission
AMD - Acid Mine Drainage
AML - Abandoned Mine Lands
AMLIS - Abandoned Mine Lands Inventory System
AOC - Approximate Original Contour
ASMC - Alabama Surface Mining Commission
BFO - Birmingham Field Office
Board - Walker County Soil and Water Conservation District Board
EPA - Environmental Protection Agency
EPAct - Energy Policy Act
EY - Evaluation Year
FY - Fiscal Year
GIS - Geographical Information System
MCRCC - Mid-Continent Regional Coordinating Center
MOA - Memorandum of Agreement
MSHA - Mine Safety and Health Administration
NEPA - National Environmental Protection Act
NHPA - National Historic Preservation Act
NOV - Notice of Violation
NPDES - National Pollutant Discharge Elimination System
OSM - Office of Surface Mining
PA - Problem Area
PAD - Problem Area Description
SEP - Supplemental Environmental Project
SHPO - State Historic Preservation Office
SMCRA - Surface Mining Control and Reclamation Act
State Plan - Abandoned Mine Land Reclamation Plan
TDN - Ten-Day Notice
TIPS - Technical Information Processing System

I. INTRODUCTION

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for State regulatory and abandoned mine lands 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 Abandoned Mine Lands (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 Alabama Surface Mining Commission (ASMC) and the Alabama Department of Industrial Relations (ADIR). This report covers the period of October 1, 2000, to September 30, 2001. 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 (BFO), 135 Gemini Circle, Suite 215, Homewood, AL 35209.

II. OVERVIEW OF THE ALABAMA COAL MINING INDUSTRY

Alabama ranks fifteenth in coal production among coal-producing States. 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 (.73 billion ton 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 calendar year 2000, approximately 80 percent of the coal mined was by underground mining (tonnage recovered by underground mining – 16,261,181; tonnage recovered by surface mining – 4,083,480). Underground mining operations employed 2491 people while surface mining operations employed 543 people as of September 30, 2001.

As of September 30, 2001, 28 permitted surface mines, eight permitted underground mines, and four preparation and loading facilities were actively producing coal in Alabama. Production reports show that bituminous coal was produced in nine Alabama counties: Bibb, Cullman, Jackson, Jefferson, Marion, Shelby, Tuscaloosa, Walker, and Winston. Approximately 80 percent of the mine sites are located in Jefferson, Tuscaloosa, and Walker Counties.

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 initiate rulemaking;
- To initiate civil suits;
- To request that areas be designated as unsuitable for mining;
- To review permit and revision applications;
- To object to proposed bond releases; and,
- To request an inspection of a mine site.

Monthly meetings of the Alabama Surface Mining Commission are open to the public.

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

- Project selection;
- Consultation under the National Environmental Policy Act (NEPA);
- Grant application review;
- Obtaining right of entry documents;
- Management and disposal of land acquired by the AML Program;
- Obtaining a stormwater drainage permit; and,
- Securing amendments to the State Reclamation Plan.

Both ASMC and ADIR continue to participate actively in the Hurricane Creek Stakeholders Forum, an organization with representatives from industry, academia, the environmental community, and Federal and State government agencies. This activity has provided the public with an opportunity to engage ASMC and ADIR in discussions and

problem solving associated with Hurricane Creek water quality issues. During EY 2001, the Alabama Rivers Alliance applied for and received a watershed cooperative agreement from OSM to implement an acid mine drainage remediation project in the upper reaches of Weldon Creek, a tributary of the North Fork of Hurricane Creek. This is the first reclamation project developed by the Hurricane Creek Stakeholders Forum and aims to address severe water quality problems, attributable to abandoned coal mines, in the watershed.

On July 17, 2001, letters were sent to 20 Federal and State agencies and environmental organizations to alert the public to 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. In addition, the BFO hosted a field trip for local and regional watershed groups on July 23, 2001, to the Hurricane Creek Acid Mine Drainage (AMD) Remediation Project site. Three watershed groups, the City of Tuscaloosa, the Alabama Governor's office, and the aggregate industry participated in the field trip.

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

Alabama Regulatory Program

ASMC continued to successfully administer its regulatory program during EY 2001 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, ASMC issued eight (8) new permits and 10 permit renewals. Seventy-seven permit revisions and two (2) incidental boundary revisions were approved. Four (4) permit transfers were submitted, and three (3) approved. ASMC approved 16 Notices of Intent to Explore. A total of 3123 inspections were conducted, including 2773 complete inspections and 350 partial inspections. Seventy-six Notices of Violation (NOV), representing 100 violations, and 26 Cessation Orders, with a total of 34 violations, were issued (not including vacated violations).

During EY 2001 both ASMC and the BFO continued efforts to identify and take enforcement and legal action to curtail illegal mining operations. Utilizing information gathered from overflights, an on-the-ground inspection program involving night and weekend site visits and information from coalfield citizens, ASMC identified and took enforcement action on four illegal mining operations. These actions have resulted in obtaining bond and reclamation at two of these sites. Legal proceedings are in process to obtain compliance at the other two sites. OSM continued efforts to obtain reclamation at three illegal mining sites operated by Mr. Johnny Cupps. Two of these sites were also

covered by enforcement actions taken by ASMC. On May 15, 2001, a Final Judgment was entered in the U.S. District Court for the Northern District of Alabama against Mr. Cupps, which required him to immediately start reclaiming his mining operations. In the judgment the performance bond was increased to \$500,000, and the United States was given a lien on any and all of his real or personal property, including equitable interests in property, wherever such property was located. Engineered reclamation plans were required for each site with reclamation work to be monitored by ASMC and OSM. Mr. Cupps has not complied with the Final Judgment. Additional actions to achieve compliance are being continued by OSM and ASMC.

During EY 2001, ASMC with the assistance of the Mid-Continent Regional Coordinating Center (MCRCC) completed the upgrade of its entire computer system, both hardware and software. The BFO and the MCRCC provided computers and other hardware components to the effort. The network upgrade assisted ASMC in fully integrating the Technical Information Processing System (TIPS), electronic permitting, and their Geographical Information System (GIS) with the agency's existing database system. During EY 2001, the agency built an extensive GIS database for the Alabama coal mining areas. Over 12 gigabytes of spatial data were acquired or created to support this effort including U.S. Geological Survey quadrangles, digital soil surveys, the Abandoned Mine Land Inventory System (AMLIS), coal, hydrologic, and geologic data. The digital map database for all permanent program permit boundaries was completed. Work was begun to integrate data from the lignite regions of Alabama into the GIS database.

The entire ASMC information database was converted from dBase to Microsoft Access, and the permit information components were integrated with the GIS system. A digital permit inspection report system was created by ASMC personnel, and hardcopy reports were discontinued. The entire information system was made available to the BFO via the Wide Area Network for download and use. Using Microsoft Access, some of the OSM annual report tables were automated for data extraction from the ASMC information database.

Alabama participated in a national survey concerning the temporary cessation process. A review of Alabama permits showed that 3.9% of the 1999 permitted acres were currently in temporary cessation. All acreage was on surface mines.

The BFO has continued to collect information on ASMC's bonding activities to provide an overall general picture of how successfully reclamation is staying current with mining in the State. Through EY 2001, 105,820 acres had been bonded in Alabama for the purpose of coal mining; 71,153 acres had received a Phase I bond release; 47,064 acres had received a Phase II bond release; 43,155 acres had received a Phase III bond release; and, bonds had been forfeited on 8,795 acres.

Alabama Abandoned Mine Lands Program

ADIR successfully administered the AML Program during EY 2001 as outlined in the AML Reclamation Plan and policies and procedures established in the annual AML grant. The AML Program completed 27 projects (including 19 emergency projects) during the evaluation year. Pothole subsidence events were the predominant emergency project problem. Four of the 19 emergency projects involved the sealing of extremely dangerous mine openings. Reclamation achieved by non-emergency activities included 11,430 linear feet of dangerous highwall, three (3) vertical openings, ten (10) portals, and 1.1 acres of industrial/residential waste. The data presented in Table 6 characterizes the status of AML reclamation in Alabama. The data is presented by problem type, showing reclaimed versus unreclaimed figures.

An executed cooperative agreement between ADIR and the USX Corporation, as landowner, provided \$250,000 in matching funds for the reclamation of a 56-acre AML site that contained 5500 feet of dangerous highwall and a 50-foot deep dangerous water impoundment.

ADIR received an extension until December 31, 2003, from the BFO of its “blanket approval” for pothole subsidence AML emergencies. This expedited approval process allows for rapid (in most cases, less than 48 hours) reclamation of dangerous voids caused by collapsing abandoned underground coal mines without the State having to wait for project-by-project authorization to proceed.

With the regulation of arsenic in American’s water supply as a topic of national debate during EY 2001, Alabama AML representatives assisted a team of U.S. Geological Survey scientists obtain samples from the Cane Creek subwatershed in Walker County, Alabama. The presence of arsenic in the streambed sediments, fish tissue, aquatic insects, and plants of Cane Creek prompted a 4-year study. Reports, maps and other data generated from the study will be shared with the Alabama AML Program.

In May 2001, ADIR agreed to begin electronically applying for and reporting AML grant funds obtained from OSM. The move toward E-grants was in response to legal and government-wide requirements, and the desire of the U.S. Department of the Interior and its grantees to make grants management more efficient.

ADIR’s Deputy State Programs Administrator was elected President of the National Association of Abandoned Mine Lands Programs during the 2001 Annual Conference in Athens, Ohio. The Association represents 27 states and three Indian tribes, which administer abandoned mine lands reclamation programs.

While searching for potential financial partners under the Appalachian Clean Streams Initiative, the BFO contacted the City of Tuscaloosa concerning their interest in providing funding for environmental restoration projects. The City Attorney was in the process of negotiating a settlement/consent decree with the Alabama Department of Environmental Management (ADEM), the State Environmental Protection Agency (EPA)

counterpart, over water violations that the City had incurred. The BFO explained the AML Program to the City and gave them an overview of reclamation needs in the watersheds surrounding the City. The City agreed to consider applying some of their fines toward abandoned mine lands reclamation under the Supplemental Environmental Project (SEP) Program, fostered by EPA - Region IV. ADEM had been encouraging the City to develop SEP's under the consent decree, but the City was struggling to come up with SEP projects that would meet ADEM's approval. The BFO, the City, ADEM, the State Attorney General's office, and ADIR developed a partnership to funnel \$209,000 in fines to two AML projects, the Hurricane Creek AMD Remediation and the Cypress Creek Projects. The Hurricane Creek Project was sponsored by the Alabama Rivers Alliance, a local watershed group. The \$68,000 provided to the Hurricane Creek Project supplied the non-Federal contribution necessary for the Alliance to apply to OSM for Watershed Cooperative Agreement funding. The remainder of the funding went to augment reclamation at the Cypress Creek Project, designed to reduce massive sedimentation from an abandoned surface mine which had caused recurrent flooding in Cypress Creek and impacted flow controls at Lake Harris, a water supply for the City of Tuscaloosa. Since this historic partnership was formed, the Alabama Attorney General's office has provided additional SEP funding to ADIR for the reclamation of two noncoal project sites. Additional partnerships on both coal and noncoal sites are expected in the future.

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 in terms of the number and extent of observed offsite 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 Birmingham Field Office that provide additional details on how the following evaluations and measurements were conducted.

A. Offsite Impacts:

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

An offsite impact is defined as anything resulting from coal mining that negatively affects resources (people, land, water, structures). Also, the impact must 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 2001, offsite impact data was collected for the period of October 1, 2000, through September 30, 2001, during the BFO's field inspections and file reviews of State inspection reports, NOV actions, bond releases, and a study of haul road design, construction, and certification. The field and file reviews were conducted to determine if the State properly recorded offsite impacts for the inspectable units reviewed by the BFO. BFO inspections of these units occurred throughout the evaluation year, beginning in October 2000, and ending in September 2001. Of the 22 inspections performed for the reclamation success study, no offsite impacts were identified. Two (2) offsite impacts were identified during the haul road study. Of the 71 complete inspections performed, 11 offsite impacts were identified. All of these offsite impacts had been identified and cited by the State. The examination of the State NOV database and associated hard-copy State NOV's identified an additional 26 offsite impacts not associated with the BFO studies.

A total of 39 offsite impacts, affecting people, land, and water resources, were identified on 26 of the 238 inspectable units. Effects on resources were determined to be major in four (4) cases, moderate in eight (8) instances, and minor in 27 cases. Information concerning offsite impacts and resource affects are presented in Table 4. The impacts were associated with failure to meet effluent limitations (12), uncontrolled run-off (9), failure to construct or maintain diversions properly (2), failure to build or maintain basins (3), encroachment (8), failure to control surface runoff from a haul road (2), failure to blast within limits or formula (2), and hydrology – other (1).

Offsite impacts associated with Alabama mine sites numbered 59 impacts in 1999, and 51 in EY 2000. For EY 2001, offsite impacts occurred on 26 inspectable units. Alabama's inspectable units as of September 30, 2001, totaled 238. Therefore, offsite impacts occurred on a small percentage (11%) of the inspectable units.

Remediation and prevention were addressed for each of the eleven offsite impacts identified during BFO inspections by determining what could have been done to prevent the impact and what was done on the ground to correct the problem. The following was noted:

- The offsite impacts involving the failure to meet effluent limitations were remediated by treating the water to raise the pH to meet effluent limits. Prevention of this category of offsite impacts could be accomplished by a monitoring and maintenance program designed to identify and treat low pH/high iron/high sediment water before it is released into the environment, the establishment of adequate vegetation, and maintenance of basins and diversions.
- The offsite impacts involving uncontrolled drainage were remediated by constructing sediment basins, redirecting runoff into sediment basins, and repairing and maintaining sediment basins and diversion ditches. Prevention of this category of

offsite impacts could be accomplished by observing permit requirements and performing monitoring and maintenance of sediment ponds and drainage structures.

- The offsite impacts involving failure to bond all disturbed acreage and failure to obtain a permit were remediated by bonding disturbed areas and by the permittee obtaining a permit. These violations appear to be due to negligence on the part of the operator. Prevention of these categories of offsite impacts could be accomplished by observing requirements that do not allow disturbing areas unless a bond and permit are obtained.

While the occurrence of offsite impacts is beyond the control of ASMC, the BFO has concluded from this review that the State is operating its inspection and enforcement program in a manner that discourages offsite impacts and is employing diligence in discovering and citing violations involving offsite impacts as they occur. No instances were noted in which the State inspector failed to take proper enforcement action.

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 ASMC after October 1, 2000, was selected for this evaluation. The bond releases reviewed encompassed 22 permitted sites. 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 ASMC's approval/denial of the bond release request.

The following parameters were evaluated through field observations and/or review of the State bond release files:

- , Phase I - Approximate Original Contour (AOC) achievement
 - Evaluation Method - Onsite inspection
- , Phase II - Replacement of soil resources, vegetation stability
 - Evaluation Method - Onsite inspection and permit file review
- , 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
 - Evaluation Method - Onsite inspection and permit file review

Phase I

The BFO inspected and conducted permit file reviews on 12 increments requested for Phase I bond release, totaling 293 acres. These increments were 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 determine the premining/postmining surface/ground water quality comparison and compliance of National Pollutant Discharge Elimination System (NPDES) monitoring points.

All 12 of these increments were determined to have met the requirements for Phase I bond release. These increments had achieved AOC, and toxic material had been covered when applicable. The permit files 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 in all cases with ASMC's approval of the Phase I bond release requests.

Phase II

The BFO inspected and conducted permit file reviews on twenty-four (24) Phase II increments representing 1,124 acres. Onsite inspections were 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 (80% cover) were met, and to ensure site stabilization. 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 files were reviewed to determine acres of basins approved as permanent water impoundments, the applicability of prime farmland productivity, and the presence of topsoil waivers.

Seventeen (17) increments met the requirements for a Phase II bond release. These increments reflected suitable soil replacement, adequate and approved species of vegetative cover, and site stabilization. All temporary ponds and diversions had been appropriately removed, remaining basins were approved as permanent water impoundments, and reclamation did not contribute to suspended solids off the permit.

Seven (7) bond release requests were denied a Phase II bond release by the ASMC. Six (6) of these denials were due to failure to certify basins as permanent water impoundments. One (1) denial was due to the lack of tree establishment on an increment with a postmining land use designation of forest.

OSM agreed in all cases with the ASMC's determination of approval or denial of these Phase II bond release requests.

Phase III

The BFO inspected and conducted permit file reviews on twenty-six (26) increments, totaling 1,058 acres, for a Phase III bond release. These 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 the water, groundwater recharge capabilities, and compliance with surface water discharge effluent limits. The permit files were also reviewed to determine that the appropriate liability periods had been met.

Twenty-two (22) 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 mine site was comparable to or better than pre-mining conditions (where applicable), that the ground water recharge capabilities had been tested, and that compliance with surface water discharge effluent limits had been verified. In all cases, the liability periods had been met.

Four (4) increments reviewed for a Phase III bond release were denied by the ASMC due to the lack of productivity studies for increments with postmining land use designation of grazing land. Other problems with these increments included a dislodged rock on a highwall and lack of vegetation on acreage recently involved in a fire.

OSM agreed in all cases with ASMC's determination of approval or denial of the Phase III bond release requests.

The BFO determinations were consistent with ASMC's actions on Phase I, II, and III bond releases on sites inspected in this sample. All increments except for the 11 increments that were denied bond release appeared to be on track for the stated postmining land use. Based upon this review, the BFO has determined that ASMC's decisions on approving bond release requests met the requirements of the approved Alabama surface mining program. The table below shows figures for acres bonded, released, and forfeited from 1983 – 2000 and for 2001. The bond release and forfeiture figures for 2001 are also shown in Table 5.

Fiscal Year	Acres Bonded	Phase I Release Acres	Phase II Release Acres	Phase III Release Acres	Bond Forfeiture Acres
1983 - 2000	103,304	68,374	44,216	39,046	7,231
2001	2,516	2,779	2,848	4,109	1,564
TOTAL	105,820	71,153	47,064	43,155	8,795

C. Customer Service:

For EY 2001 the processing of citizen complaints and the appropriateness of actions taken by ASMC in response to citizen complaints was selected for review.

The Rules at Subchapter 880-X-11B establish standards for the processing of citizen complaints and outline ASMC's procedures for receiving and acting on requests for inspection when there is reason to believe that certain violations, conditions or practices exist. These procedures address the citizen's rights and the determination(s) and response to be made by ASMC.

The population for the citizen complaints review was established to be those complaints received by ASMC during the period of October 1, 1998, through September 30, 2000. The review sample consisted of 20 complaints randomly selected from that population of 58 complaints. Of the 20 complaints selected for review, 18 were blasting complaints. This review also included complaints provided to ASMC by the BFO through the ten-day notice (TDN) process during the same period. The review sample consisted of six (6) TDN's randomly selected from a total population of 13 TDN's. The review was performed by the BFO and ASMC.

Complaints Related to Blasting -- Eighteen of the 20 complaints reviewed involved blasting. If blasting is involved, the Rules require that ASMC forward a copy of that complaint to the coal operator unless confidentiality has been requested. Then the operator shall attempt to resolve the problem and report the results of these efforts to ASMC in writing within 15 days. If the issue cannot be resolved, ASMC shall hold an informal conference with the operator and complainant.

Mine operators were notified of blasting complaints. Written complaints were forwarded to the operator for 14 of the blasting complaints. Written complaints from the four (4) complainants requesting confidentiality were not forwarded to the operator. In these cases, the mine operators were informed of the complaints at the time of the inspection. Of the 14 complaints forwarded to the operator, ten (10) of the operators responded within 15 days. Four of the operators responded within 16 to 34 days. The 34-day response time was due to the operator not being able to contact the complainant. ASMC contacts the operators to remind them to respond in a timely manner.

Each of the complaints resulted in a check of the operators' blasting records for the times reported by the complainants. ASMC set up seismographs at eight (8) of the 18 complainants' homes.

Other Complaints -- Two of the complaints were not related to blasting. One complaint was not related to any specific permit and was for informational purposes only. The other involved mine-related subsidence. The subsidence complaint was determined not to be coal mine related. The structure in question was located 3000 feet from a longwall mining operation that had been mined in 1996 and 1997.

Responses to Ten-Day Notices -- The six (6) TDN's examined were all addressed in a timely manner, and adequate responses were provided by ASMC. An inspection was made by ASMC on each of the permit areas reported by the citizens to OSM. One NOV was issued by ASMC as a result of their inspection. ASMC issued cessation orders for violations identified in two of the citizens' complaints prior to their receipt of the TDN.

Citizen Complaint Procedures -- The review of the 20 randomly selected complaints found that:

- All citizens were informed of their right to confidentiality. Confidentiality was maintained for all complainants that requested that their identity be kept confidential.
- All complainants were advised of their right to accompany the ASMC inspector.
- All citizen complaints resulted in an inspection being performed by ASMC.
- All complainants were notified of ASMC's findings and decisions concerning their complaint. Each letter provided to the complainant included a description of the inspector's findings and an explanation of why no enforcement action was taken, if applicable.
- All complainants were given the opportunity to request an informal hearing. Only one complainant requested a hearing. This hearing was not held because the complainant withdrew the request prior to the hearing.
- Notification of ASMC's determination was sent to the complainants within 10 days after the inspection in 12 of the 20 complaints. Notification was provided to the remaining complainants within 11 to 29 days. One of the complainants not notified within the 10-day period was requesting information only. Two of the notifications were delayed due to extenuating circumstances which included waiting for seismography and water analysis results.

The BFO believes that the timeliness of responses to citizen complaints can be improved and recommends that continued emphasis be placed on notification of complainants.

The BFO review indicated that ASMC is responsive to citizen complaints. ASMC addresses the concerns voiced by the citizens. In all complaints sampled, ASMC conducted onsite investigations of the complaints including setting up seismographs at the residence of several citizens with blasting complaints. ASMC is responsive to the citizens of the coalfields and is constantly striving to strengthen customer service.

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 lands 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 ADIR and ASMC regarding new policy guidelines and procedures as well as changes in existing guidelines and procedures.

Streamlining of the National Historic Preservation Act (NHPA) Process

During EY 2001, the BFO continued to assist ADIR in reformulating procedures to comply with changes in the National Historic Preservation Act. In consultation with the OSM archeologist and ADIR, the BFO drafted the "*Procedures for Complying with Sections 800.3 - 800.7 of the National Historic Preservation Act (NHPA)*". These procedures reflected changes to NHPA regulations and incorporated the categorical exclusion approved by the State Historic Preservation Office (SHPO). The new procedures incorporated NHPA assessment and reporting guidelines for ADIR, enumerated NHPA regulation changes concerning adverse effect, and emphasized the need for consultation with federally recognized Indian tribes, when appropriate. The procedures were ratified by both ADIR and the Alabama SHPO.

Alabama Acid Mine Drainage Inventory

The identification/quantification of AMD sites began in EY 1998. The BFO entered into an Appalachian Clean Streams Initiative agreement with ADIR to provide technical assistance toward developing an inventory of potential Clean Streams Initiative projects. The BFO used the listing of 81 AMD-impacted abandoned mine land sites, which was developed in July 1996, to provide the population for the field review. Water quality data was last collected on all but five of these problem areas (PA's) during the early 1980's. The BFO agreed to assist in quantifying current conditions at the 81 sites identified as being sources of AMD and provide updated information.

The first phase of the study was to screen each of the 81 sites by testing pH and total iron to determine if the definition of AMD (pH < 6 and/or total iron \geq 10 mg/L) was met. Field investigations would be performed during high and low flow conditions.

During EY 2001, 29 PA's were screened for AMD during both high and low flow conditions. Of the 29 sites screened, seven sites had AMD present. The pH of the sites that exhibited AMD ranged from 4.0 to 8.0 and iron ranged from less than 1.0 milligrams per liter to greater than 10 milligrams per liter.

AMD screening of the 81 sites was completed this EY. The BFO testing results indicated that of the original 81 PA's, 34 exhibited AMD. The 34 PA's that exhibited AMD will receive in-depth field investigations to further quantify/qualify the sites. The in-depth portion of the study will begin in EY 2002.

Other Assistance Activities

In October 2000, the BFO was contacted by ASMC to determine if OSM was aware of any funding sources to complete reclamation on four abandoned permits that had lost their bonding through insolvency of the bonding company. The BFO provided ASMC with a list of possible funding sources and contacts. By the end of the evaluation year, one site had been included in a request for Section 319 water quality funding from the Alabama Department of Environmental Management.

At ADIR's request, the BFO arranged for a realty specialist to assist ADIR in assembling probative file documentation and preparing a valuation-based lien setoff document for the Lawstontown II AML Project.

OSM provided ASMC with an instructor to help teach the Environmental Effects of Blasting, a module of the Annual Blaster Certification School, conducted by ASMC each year.

OSM assisted ASMC by providing periodic ownership and control investigations of selected companies mining in Alabama. In each instance, ASMC received a detailed investigation package, including coal sales data, contract information, and contacts with other agencies that supported ownership and control allegations. The OSM Applicant Violator System office assisted both ASMC and the BFO in support of their prosecutions of illegal mining operations in the State.

The MCRCC provided technical assistance to ASMC by reviewing a permit revision for the Drummond Company's Chetopa Mine. The revision proposed a reduction in cover material from four feet to six inches for the coarse coal refuse area and other tippable facilities. The MCRCC found that the site information gathered to date did not support the proposed request for reduced cover material. The report also recommended that the permittee establish positive drainage on the top of the coarse refuse pile to reduce infiltration into the pile and resultant acid mine drainage.

The BFO provided ASMC with guidance concerning the retention of coal mine waste impounding structures. The BFO response noted that OSM and ASMC regulations prohibit the permanent retention of such structures as part of the approved postmining land use, unless retention is approved under an experimental practice.

During EY 2001, both ASMC and ADIR received the latest releases of the Technical Information Processing System. As of May 2001, all or portions of the TIPS software

had been loaded on 11 computers with plans for installing it on 10 additional computers. The MCRCC and TIPS National Team funded and replaced ASMC's Local Area Network, which will allow the State staff to access and review electronic permitting and Geographic Information System data. ADIR has received a Dell NT Workstation and all the components for a Local Area Network. Both the Workstations and Local Area Network have been installed.

VII. GENERAL OVERSIGHT TOPIC REVIEWS

A. Program Evaluations of the State Regulatory Program

Subsidence Control

The BFO performed a joint study with ASMC to review underground mining companies utilizing the longwall mining method to verify that each company was following subsidence control regulations enforced by ASMC.

The BFO and ASMC gathered procedural information through interviews of company representatives and by reviewing each company's subsidence control plans. In addition, for each year of mining, from calendar year 1997 through 2001, a random sample of three (3) residences and a separate sample of three (3) water supplies were selected. After selecting the random samples, a study form, agreed upon by the BFO and ASMC, was completed. The BFO and ASMC jointly interviewed the representatives of each coal company before data collection. Additional information on company policy was gathered by reviewing company policy manuals when available. Four mining operations were reviewed for the study.

Subsidence control regulations are adhered to differently by the four companies with longwall operations in Alabama. The company procedures differ in content when addressing subsidence-related damages. The regulations found in Rules 880-X-8I-.10 and 880-X-10D-.58 require that certain information must be included in the company's subsidence control plan.

This study revealed that, in all cases, the subsidence control plan maps did not include the required water supply information. Each map identified structures and mining progression, but did not indicate where water resources were located. One company did not identify the type of structure on the map.

In the area of water replacement, each company's policy stated that they would provide a public water supply to homeowners that lose water in wells or springs as a result of undermining. The definition of water replacement is found in Rule 880-X-2B-.06 (142) and states that along with replacing lost water supplies with public water the company must provide "upon agreement [with] the water supply owner, the obligation to pay such

operation and maintenance costs [which] may be satisfied by a one-time payment in an amount which covers the present worth of the increased annual operation and maintenance costs for a period agreed to by the permittee and the water supply owner.” It is noted from this study that all four companies negotiate a monetary amount with the homeowner to compensate for an increase in the cost of utilizing public water. The figures used to compute “a reasonable amount for compensation” were not defined by the companies studied in this review.

The regulations pertaining to the notification letter of undermining found in Rule 880-X-10D-.59 was handled as required by three companies reviewed. One company did not include information where the homeowner could review the company’s subsidence control plan, and the company did not notify all residents that were to be undermined. Notification was not sent to individual residences. Regulations require that all owners and occupants of surface property must be notified of undermining.

The BFO noted that one company used various techniques to minimize damage to structures during planned subsidence events. ASMC regulations require that the permittee take necessary and prudent measures to minimize material damage to occupied dwellings and structures. The regulations allow the mining company to demonstrate that preventative measures are economically or technologically infeasible. Two companies that undermined structures did not take measures to minimize damage by planned subsidence or meet the exceptions set forth in Rule 880-X-8I-.10 (2)(g).

Rule 880-X-10D-.58 (3)(b) states that if the permittee chooses to compensate for a structure damaged by subsidence, “the permittee must compensate the owner of the damaged structure for the full amount of the decrease in value resulting from the subsidence-related damage.” One company reviewed has various agreements that the homeowner can select as compensation for future damages caused by a subsidence event after undermining. Two of the five agreements reviewed included monetary compensation in exchange for a waiver of claims concerning damages caused by subsidence. One of the two agreements mentioned states that the homeowner is expected to utilize the funds to fix any damage that may occur to the property in the future. The company will not repair any damage caused by subsidence if such damage occurred. Agreements made with homeowners before undermining have been determined to be acceptable if the landowner and company entered “into a post-Act fair contract based on anticipated damages that would extinguish the landowner’s claim if the damages turned out to be more than anticipated” (National Mining Association, Appellant v. Bruce Babbitt, Secretary, United States Department of Interior, et al., Appellees, No.98-5320). The BFO has recommended in the study report that ASMC verify that agreements in anticipation of mining are fair and meet the requirements of subsidence regulations and the abovementioned court order.

While conducting this study, the BFO reviewed various documents that provided information about the manner in which each company complied with subsidence

regulations. In some cases, the documentation, such as a letter of notification, pre-subsidence survey, or homeowner consent, was not present in one company's files. Documentation is necessary to determine if the company is acting in accordance with subsidence control regulations.

The subsidence control plans that each coal company submits must adhere to Rule 880-X-8I-.10. ASMC may choose to require additional information from each company on an as needed basis. Each subsidence control plan should be reviewed by ASMC to verify that each regulation is complied with. Based on the findings of this study, emphasis needs to be placed on the following areas:

- Review of the map in the subsidence control plan submitted by the coal company to verify that the location and type of non-commercial buildings and occupied dwellings are identified on the map. The location and type of drinking, domestic, and residential water supply that could be compromised by undermining should also be identified on the map.
- Review of water surveys in the pre-subsidence plan submitted in the subsidence control plan. The water surveys should include the quantity and quality of all drinking, domestic, and residential water supplies that could be contaminated, diminished, or interrupted by subsidence.
- Review of each company's policy on water replacement and compensation. The BFO recommends that each company utilize the example given in the preamble of the Energy Policy Act (EPAct) distributed on March 31, 1995, which promulgated the final regulations of the EPAct. The preamble suggested "20 years could be a reasonable amount of time to hold a permittee responsible for costs." Two of the four companies studied had a policy that utilizes the 20-year time period to calculate the amount of monetary compensation for the increase in water costs.
- Notification letters, agreements and waivers should be reviewed to ensure compliance with the requirements of subsidence regulations. Notification letters should contain all required information and should be delivered to landowners and residents of permitted and adjacent areas that will be undermined. A review of the agreements and waivers between residents and coal companies should be conducted to verify that they are fair and meet the requirements of ASMC regulations.
- Review of mitigation measures for areas where planned subsidence is projected to cause damage. If mitigation measures are not used to prevent damage to structures, the subsidence control plan should include: (a) a demonstration that the costs of minimizing damage exceeds the anticipated costs of repair, (b) documentation that minimization measures would constitute a threat to public health or safety, or (c) written consent from the landowner of the structure that mitigation measures not be taken.

- Complete inspections conducted on a quarterly basis, depending on the progress of mining, should include a review of new longwall mining activity and documentation concerning subsidence issues at the mine site. Newly undermined non-commercial structures and dwellings should be reviewed to ensure that the company is handling structure and water replacement/repair/compensation in a manner consistent with ASMC regulations. The timing of repairs should also be included in a complete inspection when applicable.

Each company had differing policies and procedures when handling subsidence control for planned subsidence events. Although there were differences in procedure, most companies gathered detailed subsidence control information required of them by ASMC. Subsidence control planning is imperative to protect the public and environment from the damage that could occur during and after a subsidence event. The BFO concluded that the mining companies, utilizing longwall mining techniques, comply with the majority of subsidence control regulations in Alabama; however, some areas need to be addressed by the mining companies and ASMC to better adhere to all requirements.

Compliance with NHPA

Rule 880-X-8A-.07 of ASMC's Rules lists the NHPA as one of the Federal Acts that permittees must comply with. Rule 880-X-8E-.05 describes the collection of cultural/historical information required for a permit application. Rule 880-X-8K-.10 (3)(k) lists and describes the written findings and permit documentation that ASMC must provide concerning the effects of the proposed permitting action on cultural, historical, and archeological resources.

Section 800 of 36 CFR, the "Protection of Historic Properties" regulations, were revised on December 12, 2000. These regulations allow an agency to proceed with an undertaking when no historic properties are present or affected after it has provided documentation to the SHPO. These rules place major emphasis on both consultation with Indian tribes and public participation in the NHPA process. The regulations provide that if a historic "property" *is affected*, consultation is to occur among the appropriate parties including the Federal agency. Consultation usually results in a Memorandum of Agreement (MOA) between the parties. The Federal agency is a party to all MOA's.

The review of ASMC's NHPA compliance included all permits issued between October 1, 1999, and September 30, 2000 - a total of nine. The documentation in each permit concerning cultural, historic, and archaeological resources and consultation with the Alabama Historical Commission (AHC) was reviewed. ASMC personnel were interviewed to determine State procedures for processing these documents. ASMC's responses to AHC's issues/concerns were evaluated, and a determination made that the file documentation supported the written permit findings.

A Phase I cultural resource survey performed by an archeologist in accordance with procedural standards established by the AHC was performed on each permit. The SHPO was provided information on the filing of a permit and the legal description of the proposed mining operation. Each permit file contained ASMC's conditions and findings document attached to the issued permit document. A condition that required the permittee to "contact the ASMC and consult with the Alabama Historic Preservation Officer if the permit is modified or if previously unknown archaeological or historic resources are discovered on the permit area" was contained in all but one permit. The letters from the AHC sent to ASMC requested that similar language be included in the permit documents. All but two of the nine permit files contained letters from the AHC to ASMC. Five of the nine permit files reviewed contained documentation of correspondence between the AHC and the consultant.

One permit application had both a Phase I Cultural Resource Survey and Phase II Cultural Resource Testing. This permit was conditioned to protect the possible resource, pending full mitigation to the satisfaction of the SHPO. ASMC entered into a signed MOA with the AHC and the mining company. OSM was not a signatory to the MOA. As of May 2001, the AHC had notified ASMC that the MOA had been satisfied. The conditions added to the permit to protect the archeological finds were removed and mining resumed in the area addressed by the MOA.

The BFO concluded that ASMC coordinates with the AHC to fulfill its requirement at Rule 880-X-8A.07 to provide for the coordination of review and issuance of permits with the applicable requirements of the NHPA. ASMC requires each applicant to coordinate with the AHC and to conduct a Phase I cultural resource survey of the area to be permitted. These surveys are conducted by a qualified archeologist, using procedures prescribed by the SHPO. The surveys are submitted during the application process. If they are not submitted, ASMC requests that they be performed.

ASMC follows the regulations set forth in Rule 880-X-8E-.05. All permits contained findings addressing the effects of the proposed permitting action on cultural, historical, and archeological resources. All but one of the permits was conditioned to protect any historic properties or archeological finds during mining.

Haul Roads

The purpose of the study was to evaluate ASMC's performance concerning the approval of design, construction, and engineering certifications for haul roads. A random sample of 18 permits was chosen from the population of 28 permits issued from January 1, 1998, to October 31, 2000. Each permit file was reviewed in order to document the following information:

- Primary road certification
- Safety factor value of road embankment

- Road location
- Drainage and erosion control
- Type of surfacing material used
- Road embankment slope
- Road width and pipe diameter as required by road design plan
- Approval of road construction by ASMC.

The Engineering Design Plan found in each permit file was evaluated to obtain construction information needed in conducting onsite reviews of each selected permit site. Haul roads were then evaluated onsite to verify that each haul road was constructed as planned and approved by ASMC. Fifteen of the 18 haul roads sampled were constructed according to the State approved engineering design and complied with the State regulations regarding primary roads. They were constructed and certified, drainage and silt control was present and functioning, and there was durable, non-toxic, and non-erodible material on the road surface. On one (1) of the 18 permits, the primary haul roads had not been constructed at the time of the study. During the haul road evaluation, concerns pertaining to drainage control at the remaining two (2) permit sites were presented to the State and permittee by the BFO. These conditions were immediately addressed and corrected by the permittee. The BFO concluded from the data collected that the ASMC is properly approving haul road design and following regulatory procedures to ensure that primary roads are complying with regulations.

Postmining Land Use Changes

This area was considered for review in order to evaluate ASMC's performance relative to postmining land use regulations. A detailed review was conducted on the 21 postmining land use revisions issued in 1999 and 2000. Data was collected for each postmining land use revision concerning the premining land use, the postmining land use at the time the permit was issued, and the last postmining land use revision. The file review also included the determination that landowners were consulted by the ASMC; that ASMC conducted a thorough review of the proposed postmining land use change; that public notice was provided through newspaper advertisement; that proposed revisions were available for public viewing; and, when appropriate, that other state and federal authorities were notified of the proposed postmining land use revision (significant revisions only).

ASMC has issued guidelines for determining if a revision is considered a significant or insignificant revision. Significant revisions require an additional notice to all federal or state governmental agencies which have authority to issue permits and licenses applicable to the proposed surface coal mining and reclamation operation and which are part of the permit coordinating process.

Only one postmining land use revision was determined by ASMC to be a significant revision. This revision involved the addition of a basin as a permanent water

impoundment (fish and wildlife habitat). ASMC had appropriately issued a notice of the filing of a revision application to other interested state, federal, and county agencies. The remaining 20 postmining land use revisions were considered to be insignificant revisions.

The file review revealed the following:

- All of the postmining land use revisions were advertised in the newspaper and available for public review.
- ASMC performed an evaluation of each proposed postmining land use revision as evidenced by a completeness checklist.
- The one significant postmining land use revision included a notice to the appropriate federal, state, and local agencies.
- Letters from each of the affected landowners were located for 18 of the postmining land use revisions. Where the landowners supplied information, the comments supported the proposed postmining land use change. Based on an interview with ASMC staff, if an affected landowner objects to the proposed postmining land use change, ASMC does not approve the revision.
- Three of the postmining land use revisions did not contain letters to all of the affected landowners. Based upon a discussion with ASMC staff regarding the lack of correspondence with all of the landowners, ASMC stated that the current practice is to only contact landowners that responded during the initial permit application. If a landowner did not respond to the initial contact, ASMC does not solicit comments from that landowner regarding later postmining land use revisions. A letter describing the practice of not obtaining consultation with all affected landowners was located in one of the postmining land use revision files.

Based on this review, the ASMC provides opportunity for public participation in the postmining land use revision process. ASMC also conducts a thorough review of requests for postmining land use change. In 18 of the 21 postmining land use revision files reviewed, ASMC consulted with all of the affected landowners. Comments from all of these landowners supported the postmining land use revision. The policy to not consult with all affected landowners when the landowner did not provide comments during the initial permit application process is not consistent with the regulations. ASMC was informed that this policy should be changed to require that all affected landowners be consulted regarding postmining land use revisions.

Slurry Impoundments

The BFO, working with the Mine Safety and Health Administration – District 11 (MSHA) and the ASMC, conducted a review of water and slurry impoundments located in Alabama for breakthrough potential. MSHA identified 45 impoundments in Alabama and conducted a review of each site.

Five (5) of the impoundments are located where there is no underground mining activity within the area. These impoundments were determined to have no potential for

breakthrough of water/slurry into underground mine works.

Thirty-seven (37) of the impoundments were identified as having low potential for breakthrough of water/slurry into underground mine works. These low potential sites have vertical distances between the mines and the impoundments that exceed the distances outlined in the Bureau of Mines Information Circular 8741. Innerburden depths range from 200 feet to 2,000 feet, with the majority of innerburden depths greater than 1,300 feet. If breakthrough did occur, the safety of miners could be impacted on mine property for 23 of the impoundments, but the breakthrough would be retained in the mine works. For 14 of the impoundments, the breakthrough would flood the mine but be safely retained within the abandoned mine.

One of the ponds has a moderate potential for breakthrough of water/slurry into underground mine works. This impoundment involved deep mining where the coal seam intersects the surface at the impoundment. This mine has been inactive for over 15 years. Any breakthrough would flood, but would be safely retained within the abandoned mine.

Two (2) of the impoundments were identified as high potential for breakthrough of water/slurry into the underground mine works. These involve deep mining where the coal seam does not intersect the surface at the impoundment. The old mine works are located vertically within 100 feet beneath some portion of the impoundments. Both of these sites are in the process of being reclaimed. Any breakthrough would flood both of the mines but would be safely retained within the abandoned mines.

Abandoned Sites / Inspectable Units

Each year, in the preparation of the annual evaluation report, the BFO with the assistance of ASMC catalogs all State inspectable units as to their status of active, inactive or abandoned. The State maintains, in addition to the list of inspectable units, a list of interim and permanent program permits which are inspected on an “as needed” basis. The purpose of this study was to verify that ASMC is properly classifying coal mining permits on the Inspectable Units List. Data was gathered from ASMC’s inspection and enforcement computerized data system, telephone interviews were conducted, and a meeting between the BFO and ASMC was held.

Subchapter 880-X-11B of the Rules requires that each permanent program permit receive an average of at least one partial inspection per month and one complete inspection each calendar quarter for active operations. Inspection frequencies can be reduced to one complete inspection each calendar quarter when the site is determined to be inactive. Coal mining operations that meet the definition of an abandoned site can receive inspections at the rate of no less than one complete inspection per calendar year, if the State has conducted all reviews and made all notices required in the regulations.

The State indicated during the study that they had not implemented the procedures that allow the State to reduce the inspection frequency to no less than one complete inspection per calendar year on abandoned sites. They continue to inspect all sites on either a monthly or quarterly basis and to maintain them on the Inspectable Units List. The study determined that the State was inspecting permits at the correct frequency. Permits were being removed from the Inspectable Units List at the proper time, based on bond release or forfeiture status.

U.S. Fish and Wildlife Coordination

In response to the BFO EY 2000 inquiry, the U.S. Fish and Wildlife Service (USFWS) submitted a letter to the BFO expressing concerns that relate to the Endangered Species Act and the coordination effort between the USFWS and ASMC when issuing surface coal mining permits. In response to the letter, the BFO agreed to evaluate ASMC's compliance with regulations requiring coordination with the USFWS and compliance with the Endangered Species Act.

As a first step in the review, nine permits approved by ASMC in EY 2000 were evaluated to determine compliance with State regulations requiring coordination with the USFWS. The file review revealed the process/procedures followed by the ASMC for coordination with Fish and Wildlife agencies.

After completing the above review, a meeting was held that involved representatives from ASMC, the BFO, and the USFWS to address the issues raised by the USFWS regarding the surface mine permit process in Alabama. After discussing the points raised in the USFWS letter, it was apparent that the information exchange between agencies could be enhanced to facilitate the Service's assessment of potential mining impacts.

The parties agreed to explore the development of procedures that would improve information exchange and coordination during the permitting process. The procedures will likely include many of the following elements:

- The development of a process that would allow an initial screening of each permit application to identify permits which are of potential concern to the USFWS.
- The identification of information that would help further the USFWS review of ASMC permit applications.
- The provision by the USFWS of site-specific information and recommendations when a surface coal mining operation may affect a listed species.
- The identification by the USFWS of areas where no listed species would be likely to occur and the identification of specific conditions that would address cumulative impacts in certain areas.
- The performance of joint ASMC and USFWS field visits of active mine sites to assess the effectiveness of sediment/erosion control.

- The provision of feedback by ASMC relative to concerns that are raised during the permit review process before permit decisions are made.
- The consultation of ASMC with the USFWS regarding remedial actions on offsite impacts that may affect a listed species.

The agreements between the USFWS, ASMC and the BFO, on procedures as generally outlined, will move all agencies toward meeting the Terms and Conditions of “Guidance for Implementing Office of Surface Mining Programmatic Section 7 Consultation”, dated September 24, 1996. Work will continue during EY 2002 to develop enhanced coordination procedures.

Program Maintenance

One of OSM’s program priorities for EY 2001 was to review State programs for outstanding State program amendments. In response to that initiative, the BFO reviewed the status of State responses to address required program amendments and responses to 30 CFR Part 732 notices.

A 30 CFR Part 732 notification concerning changes to valid existing rights regulations was sent to Alabama on August 23, 2000. Alabama responded with an informal amendment proposal covering these areas on February 28, 2001. Following comments from OSM, Alabama provided a formal amendment on August 29, 2001.

Alabama has taken prompt action to address required program amendments and 30 CFR Part 732 notices provided by OSM. There are no outstanding program amendments at this time.

Grant Review

The MCRCC performed an analysis of ASMC’s drawdowns and disbursements of Federal grant funds. The review included dates of drawdowns and dates of expenses incurred for the period of January 1, 2000, through March 30, 2001. Thirty drawdowns occurred during this period; a sample of 10 drawdowns was reviewed. The purpose of the review was to determine if the drawdowns of Federal funds made by ASMC were in accordance with the actual immediate cash requirements, and to determine if funds were immediately disbursed.

In Alabama the State Treasurer disburses State funds to ASMC for expenses. Therefore, ASMC’s drawdowns of Federal grant funds in the amount of 51 percent of the administrative and enforcement costs of the approved program are reimbursement funds to the Alabama Treasury. To ensure compliance with OSM’s grant procedures and disbursement requirements, ASMC’s drawdown of Federal funds is made 30 days after the State Treasurer has disbursed State funds for expenses.

ASMC's cash advances were limited to the amounts needed to carry out the purposes of the approved program, and drawdowns were properly accounted for. The dates of the drawdowns were timed to ASMC's immediate needs and were disbursed as soon as administratively feasible. ASMC does not maintain any excess cash advances. Therefore, ASMC meets the requirement that Federal funds be disbursed as soon as administratively possible.

B. Program Evaluations of the State Abandoned Mine Lands Program

Overall Program Success

ADIR operates its approved AML Program through policies and procedures established in Alabama's Abandoned Mine Land Reclamation Plan (State Plan). ADIR also uses procedures included in their annual grant agreement, entitled Procedures for Monitoring Abandoned Mine Land Reclamation Projects. This document describes ADIR's project monitoring responsibility during project construction to ensure that contract specifications are carried out by the contractor or the Walker County Soil and Water Conservation District Board (the Board) and addresses post-reclamation monitoring and maintenance of projects by ADIR. Site-specific materials and methods used in project construction are delineated in the reclamation contract developed for a project or in the approved project plan prepared by the Board. The Board conducts maintenance of sites (i.e. overseeding) and all tree planting on AML sites. As part of ADIR's project planning, ADIR keeps an inventory of AML features and costs and enters that information into the Abandoned Mine Lands Inventory System.

For the overall construction program success study, a random sample of 19 non-emergency projects completed from October 1, 1997, through September 30, 2000, was chosen. Of the 19 projects chosen, eight were reclaimed by lowest-bid contractors, and 11 were reclaimed by the Board. The study examined the construction program including project planning, construction, and maintenance.

A review of ADIR project files was conducted on each of the 19 projects. The AMLIS was checked to determine if the Problem Area Descriptions (PADS) had been updated for the projects sampled. After the file reviews were completed, joint field inspections with BFO and ADIR staff were performed on each of the 19 projects. The following findings were made from the review:

Project Planning: Eligibility was established for all of the projects reviewed. Seventeen of the projects' PAD's were updated in AMLIS, i.e., the costs and features reclaimed were either under the funding category or under the completed category. Two of the projects' PAD's were not updated but, upon discovery of the discrepancy, the updated information was included in AMLIS.

Project Construction: The goals and objectives of the projects were clearly stated. All required permits were obtained - stormwater drainage permits (when the project equaled or exceeded 5 acres) and burn permits when it was necessary to burn debris onsite. Soil and water samples were taken when appropriate. NEPA and NHPA conditions and mitigation measures were included in the contracts or in the letters to the Board when appropriate. All NEPA and NHPA conditions and mitigation measures were complied with. ADIR's inspection frequency and quality of project monitoring was adequate. All eight of the contractor projects were completed within the number of allowable workdays. All 19 projects were completed within the allowable grant period. None of the projects had significant cost overruns per the bid price or estimated costs furnished by the Board.

Project Maintenance: ADIR followed their post-construction inspection schedule and performed both preventive maintenance and maintenance needed for a specific project problem, as appropriate.

On-the-Ground Results: All projects were reclaimed according to plan. Successful reclamation was accomplished on all projects reviewed. No erosion was noted on any of the projects, and all projects exhibited vegetation success. The projects examined exhibited long-term reclamation success.

Projects with Innovative Reclamation Techniques: ADIR used innovative reclamation techniques that included passive AMD treatment systems and specialized sediment and flow detention ponds. These techniques have allowed ADIR to meet the goals and objectives of projects with special needs, to decrease or totally eliminate offsite impacts, and to ensure long-term reclamation success. The use of these techniques has also reduced maintenance of the sites.

The State is following its State Plan and official policies and procedures in performing the project planning, project construction, and project maintenance portions of its program. As part of project planning, the procedures of determining eligibility and documentation of AML problems in the AMLIS system ensures that ADIR follows their State Plan when choosing AML project sites. Project construction is carried out in a manner that ensures that the goals and objectives of their projects are met. By acquiring all permits, testing soil and water parameters, and adhering to NEPA and NHPA conditions and mitigation measures as part of the construction process, ADIR ensures that the environment is protected. The State's construction monitoring procedures have ensured that projects are constructed according to plan, that projects are completed within a reasonable time frame, and that costs overruns are avoided. Innovative reclamation techniques are used to ensure reclamation success and to decrease maintenance requirements. The project maintenance portion of the program provides for both preventive and specific project maintenance needs. A combination of both excellent project construction and maintenance has resulted in long-term reclamation success for

projects completed under the program. The State's program shows overall program success. ADIR achieves the goals and objectives of their projects and achieves long-term reclamation success by eliminating public health and safety problems while protecting the environment.

The BFO identified five parameters for evaluating efficiency and effectiveness of the construction program: (1) timely completion of reclamation construction, (2) successful reclamation of AML features, (3) achievement of the goals and objectives of projects, (4) long-term reclamation stability/success, and (5) final construction costs within or less than initial estimates or bids. Evaluation of these parameters indicated that ADIR has an efficient and effective program. The projects were all completed in a timely manner, successfully reclaimed the AML features, achieved the goals and objectives of the projects, exhibited long-term reclamation stability/success, and had construction costs within or less than initial estimates or bids. Visits to the 19 sites to determine on-the-ground results further verified that ADIR has an efficient and effective program.

AML Emergency Program

A random sample of 19 emergency projects and seven potential emergency complaints was chosen from a population of all projects reclaimed and complaints received for the period of October 1, 1999, through March 31, 2001.

The BFO identified five major parameters for the emergency program: (1) timely investigation of the complaint; (2) completing reclamation within six months of the complaint; (3) successful reclamation of the problem; (4) long-term stability of reclamation; and, (5) final cost within the initial cost estimate. Citizen complaints were investigated promptly and in a highly professional manner, usually within 24 hours of complaint receipt. All complaints in need of emergency reclamation were addressed in an expeditious manner. Reclamation was completed within one month of the complaint for 16 of the 19 emergency projects, and within six months for all projects. Construction performed on all projects successfully reclaimed the problem. Long-term stability was achieved on 18 of 19 projects with one project needing maintenance to correct a slump in the backfill material. The work was accomplished the day following the BFO site visit. All project costs fell within the original estimated cost.

Both citizen complaint and emergency project files were well-documented. All required information was provided through emergency investigation reports, project packages provided to the BFO, or in final grant narrative reports.

Grant Review

The MCRCC performed a review of ADIR's property/equipment management records, including transactions from January 1, 2000, through March 30, 2001. Of the transactions that occurred during this period, a sample of 75 transactions was reviewed. ADIR receives Federal grant funds in the amount of 100 percent of the AML program.

The objectives of the review were to ensure that ADIR has an operating property and equipment management system and is managing the property and equipment according to the Federal Assistance Manual and the State of Alabama laws and policies. The review also examined ADIR records to determine if their accounts reconciled all property and equipment purchased with Federal grant funds. ADIR's Federal grant property/equipment was visually verified by random sample and ADIR's property manager's report of June 1998 was reviewed.

The review revealed that ADIR has a computer database program in place to manage property/equipment purchased with State and Federal funds. ADIR accounts for and reconciles all purchased property/equipment and twice a year performs inventory reviews of all property/equipment. ADIR has a designated Property Manager as defined by State law on property management. No discrepancies were noted by the visual verification. ADIR's management of property/equipment is in accordance with Alabama State laws and the Federal Assistance Manual.

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