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 2000

October 1, 1999 to September 30, 2000

November 2000

EXECUTIVE SUMMARY

During the 2000 Evaluation Year, the Office of Surface Mining, Birmingham Field Office, conducted oversight evaluations of the Alabama Surface Mining Commission and the Alabama Department of Industrial Relations, 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 88 percent of Alabama s inspectable units were free from offsite impacts. The number of offsite impacts has continued to decline with 64 offsite impacts identified during Evaluation Year 1998, 59 in 1999, and 51 in 2000. Data on offsite impacts were collected during BFO inspections and from State inspection reports, and Notices of Violation.
- The BFO s review of 23 bond release actions demonstrated that ASMC continues to follow all program requirements for releasing bonds. The BFO concurred with the ASMC action on each bond release.
- The BFO s customer service review concentrated on the National Pollutant Discharge Elimination System permitting process. The purpose of the review was to determine if areas of improved coordination and interaction could be identified. What the review showed was that processing times for these permits could be greatly improved if applications were submitted in a timely manner to the processing agency and if applications contained complete and accurate information and were accompanied by the correct fee. These actions would also facilitate the public notice process, which cannot be initiated until an application is complete and accurate.

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

- A review was conducted as part of the national initiative to determine the existence and/or adequacy of regulatory authority findings on permit actions. The study showed that the State makes permit findings as required in their regulations. Adequate documentation was present in the permit files to support the required permit findings.
- A study was conducted to evaluate the timeliness and effectiveness of reclamation on permits on which a show cause order was issued and either the operator or the surety agreed to complete the site reclamation. Several recommendations came from the study. One was to require that sureties or operators closely adhere to the reclamation agreements to minimize delays in the collection of forfeited bonds and obtaining reclamation of the site. The BFO

recommended that consent agreements be entered into only with sureties that have demonstrated the ability to complete the reclamation plan and which do not have a history of noncompliance. The study also recommended that ASMC maintain written documentation in each case file outlining extensions and delays in the reclamation process.

" Phase I of a study on the State s success in revegetation and tree planting on AML sites was completed during the 1999 review year with Phase II conducted during 2000. The study indicated that ADIR s revegetation and tree planting programs are highly successful and assure long-term reclamation success.

In addition to national initiative reviews and topical studies, the BFO engaged in a number of assistance activities, emphasizing improving the regulatory and AML programs, 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.

" The assistance activity conducted by the BFO to identify and quantify Abandoned Mine Lands acid mine drainage sites continued during the review year. Fifty-two Problem Areas were screened for AMD during both high and low flow conditions. Of these, 13 sites were impacted by AMD.

" During the 1999 Evaluation Period, the BFO assisted both ASMC and ADIR in developing regulations that would allow for the incidental removal of coal on AML projects with government financing of less than 50%. A proposed State program amendment covering an exemption from the Act for coal extraction incidental to government-financed construction was submitted to OSM on April 11, 2000, and approved on June 22, 2000. In EY 2000, ADIR submitted its first project under the new State rules, the Gorgas Mine Refuse Impoundment project. The BFO s review of the project proposal determined that all requirements necessary for the approval of the project under the revised regulations had been met. This project should result in the elimination of 45 acres of coal mine refuse and 30 acres of slurry and the placement of a guardrail between a county road and a hazardous water body.

" 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 the changes to NHPA regulations and incorporated the categorical exclusions developed by the State Historic Preservation Office. Upon approval by the SHPO, the procedures will be finalized.

" Under the National Hydrologic/Acid Mine Drainage Initiatives, the BFO developed, in cooperation with ASMC, a plan to inventory inspectable units which are long-term, pollutional dischargers. File and field analyses of 21 sites determined that 18 could potentially discharge acid mine drainage long term. All but four of the sites identified were bond forfeiture sites. The BFO will continue to sample sites with potential long-term pollutional discharges to determine if additional sites should be added to the inventory.

TABLE OF CONTENTS

LIST OF ACRONYMS USED IN THE REPORT

ACSI - Appalachian Clean Streams Initiative
ADEM - Alabama Department of Environmental Management
ADIR - Alabama Department of Industrial Relations
AMD - Acid Mine Drainage
AML - Abandoned Mine Lands
AOC - Approximate Original Contour
ASMC - Alabama Surface Mining Commission
BFO - Birmingham Field Office
Council - Advisory Council on Historic Preservation
DHA - Department of Hearings and Appeals
EY - Evaluation Year
FY - Fiscal Year
GIS - Geographical Information System
GPS - Geographic Positioning System
MCRCC - Mid-Continent Regional Coordinating Center
NEPA - National Environmental Protection Act
NHPA - National Historic Preservation Act
NOV - Notice of Violation
NPDES - National Pollutant Discharge Elimination System
NRCS - Natural Resources Conservation Service
OSM - Office of Surface Mining
PA - Problem Area
PSD - Program Support Division
SHPO - State Historic Preservation Office
SMCRA - Surface Mining Control and Reclamation Act
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 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, 1999, to September 30, 2000. 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.

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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 1999, approximately 75 percent of the coal mined was by underground mining (tonnage recovered by underground mining - 15,093,940; tonnage recovered by

surface mining - 5,029,444). Underground mining operations employed 2,558 people while surface mining operations employed 455 people as of September 30, 2000.

As of September 30, 2000, 27 permitted surface mines, 10 permitted underground mines, and three 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 85 percent of that production came from 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 minesite.

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

Opportunities for public participation in the Alabama Abandoned Mine Lands (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 were participants 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.

To alert the public to the opportunity for involvement in the BFO s oversight process, letters were sent to 20 Federal and State agencies and environmental organizations in August, 2000. In the letter, recipients were asked to provide the BFO with any questions,

issues or concerns that could be addressed in oversight studies. As a result of this effort, a written response was received from the U.S. Fish and Wildlife Service in Daphne, Alabama, expressing concerns about the Alabama coal mine regulatory and abandoned mine lands programs. These concerns will be addressed in an oversight study during the 2001 Evaluation Year (EY). BFO representatives attended meetings of the Clean Water Action Plan, Volunteers in Service to America, and the Southeast Watershed Forum.

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

Alabama Regulatory Program

ASMC continued to successfully administer its regulatory program during EY 2000 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 nine (9) new permits and eight (8) permit renewals. Sixty-one permit revisions and two (2) incidental boundary revisions were approved. Two (2) permit transfers were submitted and approved. ASMC approved 16 Notices of Intent to Explore. A total of 3526 inspections were conducted, including 3174 complete inspections and 352 partial inspections. One-hundred twenty-three Notices of Violation, representing 159 violations, and 62 Cessation Orders, with a total of 62 violations, were issued (not including vacated violations).

During EY 2000, ASMC with the assistance of the Mid-Continent Regional Coordinating Center (MCRCC) upgraded 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. ASMC began processing electronic permits during this evaluation year. They had received four electronic permit applications and one electronic permit revision application by September 30, 2000. During EY 2000, the agency established an extensive GIS for the Alabama coal mining areas. To support this effort, an extensive digital map base of U.S. Geological Survey quadrangles was acquired. ASMC also acquired the latest digital soil surveys for three coal counties. Work has begun on a digital map database for permit boundaries. Over 140 permits have been digitized to date.

The Small Operator Assistance Program was re-established in Alabama during EY 2000. Funding was secured from OSM, and assistance has been provided by ASMC on several new permits. In addition, ASMC was successful in securing significant additional funding from the State Legislature for Fiscal Year (FY) 2001 operations.

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 2000, 103,304 acres had been bonded in Alabama for the purpose of coal mining; 68,374 acres had received a Phase I bond release; 44, 216 acres had received a Phase II bond release; 39,046 acres had received a Phase III bond release; and, bonds had been forfeited on 7,231 acres.

On October 10, 2000, during the annual meeting of the National Mining Association, OSM presented the Excellence in Surface Coal Mining Reclamation Award to the Drummond Coal Company, Arkadelphia mine.

Alabama Abandoned Mine Lands Program

ADIR successfully administered the AML Program during EY 2000 as outlined in the AML Reclamation Plan and policies and procedures established in the annual AML grant. The AML Program completed 29 projects (including 18 emergency projects) during the evaluation year. Pothole subsidence events were the predominant emergency project problem. Reclamation achieved by non-emergency activities included 11,250 linear feet of dangerous highwall, four (4) dangerous impoundments, 25 acres of spoil, one (1) acre of dangerous piles and embankments, two (2) vertical openings, seven (7) portals, 13 acres of gob, one (1) abandoned structure, 0.2 acres of industrial/residential waste, and three (3) acres of slurry. 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.

A record number of AML emergency projects (18) was completed in EY 2000. More emergency projects (9) were completed in August 2000 than in any other month in the 21-year history of Alabama s AML Program. Other notable accomplishments included the start-up of a large coal mine refuse removal project, being reclaimed under the AML Enhancement Rule that involves no-cost material removal by the contractor; the completion of Alabama s second Appalachian Clean Streams Initiative (ACSI) project; and, the development of a cooperative agreement between ADIR and the Alabama Department of Environmental Management (ADEM) to provide $60,000 in Section 319 funding for Alabama s third ACSI project (estimated cost - $319,000). An executed cooperative agreement between ADIR and the USX Corporation, as landowner, will provide up to $250,000.00 in matching funds from USX to ADIR for reclamation of a 56-acre AML site that contains 5500 feet of dangerous highwall and a dangerous water impoundment.

ADIR in partnership with the Walker County Soil and Water Conservation District and the Natural Resources Conservation Service (NRCS) equipped and maintained a mobile environmental laboratory housed at a Walker County high school. Designed to improve

public awareness of water quality issues, funding for the ECOBUS was provided by the NRCS.

ADIR assisted Auburn University in developing a Rapid BioAssessment Technique for evaluating acid mine drainage impacts at abandoned coal-mined sites. In partnership with OSM and Clarke Atlanta University, ADIR assisted Clarke Atlanta University with an experimental bacteriological bioremediation system installed on the Cane Creek ACSI project. Cane Creek was Alabama s first ACSI project.

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 pubic 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 which 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 which causes a negative effect on resources (people, land, water, structures). Also, the impact would be regulated or controlled by the applicable State program. The impact must be coal mine related and must occur outside the area authorized by the permit for conducting mining and reclamation activities.

For EY 2000, offsite impact data was collected for the period of October 1, 1999, through September 30, 2000, during the BFO s field inspections and file reviews of State inspection reports, Notice of Violation (NOV) actions, and bond releases. 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 s inspections of these units occurred throughout the evaluation year, beginning in October 1999, and ending in August 2000. Of the 23 inspections performed for the Reclamation Success study, no offsite impacts were identified. Of the 53 complete inspections performed, nine (9) 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 42 offsite impacts not associated with the BFO studies.

Therefore, a total of 51 offsite impacts, affecting people, land, water and structural resources, were identified on 30 of the 258 inspectable units. Affects on resources were determined to be major in 10 cases, moderate in eight (8) instances, and minor in 40 cases. Information concerning offsite impacts and resource affects are presented in Table 4. The impacts were associated with failure to meet effluent limitations (24), uncontrolled run-off (2), failure to construct or maintain diversions properly (7), failure to build or maintain basins (12), encroachment (4), and failure to follow the operation plan (2).

Offsite impacts associated with Alabama minesites numbered 64 impacts in EY 1998, 59 impacts in 1999, and 51in EY 2000. For EY 2000, offsite impacts occurred on 30 inspectable units. Alabama s inspectable units as of September 30, 2000, totaled 258. Therefore, offsite impacts occurred on a small percentage (12%) of the inspectable units.

Remediation and prevention was addressed for each of the nine (9) 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 the 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, establish adequate vegetation, and maintain basins and diversions.

" The offsite impacts involving uncontrolled drainage (failure to build basins/failure to maintain sediment basins/failure to maintain diversions properly) were remediated by constructing sediment basins, redirecting runoff into sediment basins, 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 impact involving failure to provide bond on all disturbed acreage was remediated by bonding the disturbed area. This violation appears to be due to negligence on the part of the operator. Prevention of this category of offsite impact could be accomplished by observing permit requirements which do not allow disturbing areas unless a bond is obtained.

Offsite impacts were also evaluated for sites that had been bond forfeited by ASMC through the BFO s study, entitled Reclamation Activities Conducted by Permittees or Sureties in Lieu of Forfeiture . Nine (9) of the 16 permits inspected were identified as having offsite impacts, involving 18 different offsite impacts. All of these sites were in different stages of bond forfeiture. Affects on resources were determined to be major in one (1) case, moderate in 15 instances, and minor in 9 cases. The impacts were associated with failure to comply with the reclamation plan (1), failure to maintain diversions properly (4), failure to meet effluent limitations (1), failure to provide bond on all disturbed areas (1), failure to maintain roads (1), failure to control surface drainage (2), failure to reclaim contemporaneously (2), and failure to maintain sediment basins (4).

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 the occurrence of 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 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 release actions reviewed by ASMC after October 1, 1999, was selected for the evaluation. The total number of bond releases reviewed was 23 sites. This sample included Phase I, II, and III bond releases. Each site was evaluated to determine if the site supported the proposed postmining land use. Revegetation was also a special emphasis of this review. The field reviews occurred throughout the evaluation year. Most 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 565 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 of NPDES monitoring points were on file, and documentation reflected that temporary structures and equipment had been removed.

Phase II

Twelve (12) Phase II increments representing 420 acres were inspected. 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 were met, 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 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.

Eleven (11) inspected 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 (no rills or gullies). All temporary ponds and diversions had been appropriately removed, acres of basins were approved as permanent water impoundments, and reclamation did not contribute to suspended solids off the permit.

One (1) bond release request was denied a Phase II bond release by ASMC due to the development of a large gully leading into a temporary basin. This basin also needed to be removed and the area stabilized prior to a Phase II bond release.

Phase III

Nineteen (19) increments, totaling 824 acres, were reviewed 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.

Fourteen (14) of these 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), that the groundwater 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.

Five (5) increments reviewed for a Phase III bond release were denied by ASMC due to failure to obtain approval for a permanent water impoundment or for failure to submit a size particle analysis on substitute topsoil material.

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 six increments which 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 - 1999 and for 2000. The bond release and forfeiture figures for 2000 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 - 1999	101,938	66,433	41,496	35,826	7,031
2000	1,366	1,941	2,720	3,220	200
TOTAL	103,304	68,374	44,216	39,046	7,231

C. Customer Service:

Directive REG-8 requires an annual review of the effectiveness of customer service provided by the State. For EY 1999, the amount of time required to obtain other permits needed for the approval of a permit application was reviewed. The intent of the review

was to determine the problems in obtaining these other permits and how this was affecting the timeliness of the ASMC permit review process. In addition, the BFO hoped to facilitate discussions with the Federal and State agencies involved in providing these other permits to determine if areas of improved coordination and interaction could be identified. The population for both the Phase I and II studies was the coal mine permits issued by ASMC between October 1, 1998, and May 30, 1999.

During EY 2000, the BFO conducted Phase II of the study, which concentrated on the National Pollutant Discharge Elimination System permits. The NPDES permitting process was chosen for the analysis because it had the longest elapsed processing time (155 days average) for other permits required for a surface coal mine permit. Interviews with the ADEM staff disclosed that applicants for NPDES permits are encouraged to submit their applications a minimum of 180 days before the date on which the discharge is to commence. ADEM representatives indicated that the vast majority of applications are not received in a timely manner. In addition, over 95% of permits received (according to ADEM interviews) are either incomplete or contain incorrect information. ADEM estimated that 70- 80% of their review time was spent trying to get correct or missing information. ADEM does not begin calculating the processing time until the application is complete and correct at which time the draft permit is issued and the public review process initiated. Using this approach, the processing times for the six permits analyzed in this study ranged from 43 to 108 days. Another factor which affects the processing time was receipt of the required fee. ADEM representatives stated that they did not begin processing the application until the correct fee was received.

The study determined that processing times for NPDES permits could be greatly improved if applications were submitted at least 180 days prior to the need for the permit and if applications contained complete and accurate information and were accompanied by the correct fee. The public notice process, which cannot be initiated until an application is complete and accurate, would also be facilitated.

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.

Identification/Quantification of Acid Mine Drainage (AMD) Sites

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 list of AMD-impacted abandoned mine lands sites, which was developed in July 1996, to provide the population for field review. Eighty-one sites had previously been identified. 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 acid mine drainage and provide updated information.

It was determined that the study would be conducted in two phases. 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 =/> 10 mg/L) was met for that site. Field investigations would be performed during high and low flow conditions.

During EY 2000, 52 PA s were screened for AMD during both high and low flow conditions. Of the 52 sites screened, 13 sites had AMD present. The pH of the sites that exhibited AMD ranged from 3.0 to 7.3 and iron ranged from 0 milligrams per liter to greater than 10 milligrams per liter.

AMD remains a problem on several of the sites identified in the early 1980's. Sites exhibiting AMD will receive in-depth field investigations to further quantify/qualify the sites. The screening portion of the study will continue in EY 2001.

AML Enhancement Rule

In order for AML projects to be pursued under the AML Enhancement Rule, ASMC had to amend their regulations regarding government-financed projects. On April 11, 2000, ASMC submitted to the BFO a proposed State program amendment covering the exemption from the Act for coal extraction incidental to government-financed construction. The amendment was approved by OSM on June 22, 2000. The amendment incorporated changes to the definition of government-financed construction, as stated in 30 CFR Part 707, that allows for less than 50 percent funding when the construction is an approved AML project under SMCRA. In addition, Alabama s State program amendment added the following additional requirements:

- The AML contractor or subcontractor must have a valid coal mining license.
- The AML contractor shall identify the prospective purchasers or end users of all coal to be extracted under the project prior to concurrence granted by ASMC.
- The AML contractor shall maintain records of the exact tonnage of coal removed.
- No coal shall be removed outside the boundaries of the AML project.
- No coal shall be removed unless the project has been approved by both ADIR and ASMC.

" All coal removal shall be under the direct supervision of the AML contractor who shall be liable for any violations of these regulations.

In EY 2000, ADIR submitted its first project under the new State rules, the Gorgas Mine Refuse Impoundment project. BFO s review of the project proposal determined that all requirements necessary for the approval of the project under the revised regulations had been met. The project was approved by the BFO on June 22, 2000. This project should result in the elimination of 45 acres of gob and 30 acres of slurry and the placement of a guardrail between a county road and a hazardous water body. In the future, other resource recovery projects are anticipated.

Streamlining of the National Historic Preservation Act (NHPA) Process

In February 1996, the ADIR and the BFO developed a process for adhering to NHPA. The process was determined to be laborious and involved major time delays during the processing of AML projects involving NHPA issues. In 1997, ADIR had secured a Categorical Exclusion Determination by the Alabama State Historic Preservation Office for the Reclamation of Abandoned Mine Lands , effective August 11, 1997. This document states that emergency response to public safety hazards and routine AML reclamation activities on previously disturbed mined lands may take place without further Alabama State Historic Preservation Office (SHPO) consultation, provided ADIR continues to consult with the SHPO when abandoned mine lands reclamation could affect structures over 50 years old located on or adjacent to the project or historically significant portals and associated mining structures. In addition, revised NHPA regulations under the Advisory Council on Historic Preservation (Council) became effective on June 17, 1999.

In consultation with the OSM archeologist in Denver and ADIR involvement, 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 SHPO.

The NHPA assistance activity will be extended into the 2001 review period in order to allow SHPO to comment on the procedures. After meeting with SHPO, the NHPA procedures will be finalized.

Alabama Acid Mine Drainage Inventory

The purpose of the study was to develop a computerized inventory of permits with long-term pollutional mine discharges (commonly referred to as AMD). A pollutional discharge is defined as a discharge resulting or originating from a surface coal mining operation that is not in compliance with NPDES limits. The purpose of the inventory was:

" To identify permits with long-term pollutional discharges;

" To define the scope and impact of water quality problems at bond forfeiture and other active mine sites;

" To ensure consistent water quality data collection on bond forfeiture and other active mining sites within all States; and

" To serve as the basis for estimating general costs for long-term treatment.

The BFO began the study by reviewing all information in the permit files of each potential permanent program AMD site identified by ASMC and other sites that had known water quality problems. The water quality data in the permit file was used to locate and determine the extent of water quality problems for each permit. The information gathered from the permit file review consisted of the permit number, permit type, permit status, permitted and bonded acreage, bonding status, coal seams mined, and water quality data. After gathering pertinent information from the permit files, the BFO conducted field work to obtain water quality data from each site. The geographic location of each sample site was gathered by using a portable Geographic Positioning System (GPS) unit. Water samples were taken from the site of potential AMD as well as upstream and downstream of the discharge point.

Eighteen mine sites were identified with long-term acid mine drainage problems. All but four of the sites identified were bond forfeiture sites. Due to the exceptional drought conditions in Alabama, only nine of the twenty-six ponds sampled were discharging at the time of field data collection. The BFO will continue to sample sites with potential long-term pollutional discharges to determine if additional sites should be added to the inventory.

Other Assistance Activities

At the request of the BFO, the Program Support Division (PSD) staff at the MCRCC developed a customized training workshop on mine subsidence for the ASMC and BFO staffs. The workshop outline is under review by the State.

The MCRCC provided technical assistance to ASMC by reviewing a permit revision for the Gorgas #7 mine and preparation plant. The revision proposed a reduction of cover material from two feet to six inches for permanent reclamation of a coal refuse pile. The PSD and ASMC are awaiting the response from the permittee on the review findings.

In support of a Federal court action against an Alabama wildcat miner, the MCRCC staff completed a GPS boundary survey of the unpermitted minesite. Using the information

acquired during the survey and aerial photos of the minesite, MCRCC estimated the amounts of coal and clay that were removed from the site.

MCRCC assisted Drummond Coal, Inc., ASMC, and the BFO by performing an onsite review of Drummond Coal s Chetopa mine and proposing a plan for remediating the acidic drainage produced by the site. During the same visit, MCRCC visited the Cane Creek AMD Remediation project , the first Clean Streams Initiative project constructed in Alabama, and provided comments to the BFO on additional treatment options.

In response to recommendations from the TIPS Steering Committee, the Alabama AML program was re-incorporated into TIPS. Hardware and software was installed at the State offices to reinitiate the TIPS connection and to operate a local area network. Additional TIPS software will be installed during FY 2001.

The BFO arranged for a nationally renowned AMD expert, Paul Ziemkiewicz, from the National Mine Land Reclamation Center at West Virginia University, to tour AMD sites in the headwaters of Weldon Creek and provide a technical proposal for the remediation of the acidic conditions. This request was made at the behest of the Hurricane Creek Watershed Forum.

VII. GENERAL OVERSIGHT TOPIC REVIEWS

A. Program Evaluations of the State Regulatory Program:

Permit Findings

This area was considered for review as part of the national initiative to determine the existence and/or adequacy of regulatory authority findings on permit actions.

All permits issued between October 1, 1998, and December 31, 1999 - a total of 13 - were reviewed. Each permit was examined for the presence of written findings as required by the Rules of the Alabama Surface Mining Commission (the Rules).

Each finding was analyzed for the following:

- the presence of documentation in the permit file to support the decision made in the finding;
- signature and/or dates on the documentation;
- if applicable, the presence of deficiency letters associated with any area that requires a written finding as file documentation;
- if applicable, comments raised during the public comment period or presented at public hearings concerning an area that requires a written finding; and

" the presence of permit specific information, signatures, dates, and/or permit numbers on the standard Findings Document, attached to the permit.

Each permit examined contained a Findings Document. A finding was written for each item required under ASMC s regulations. Each Findings Document contained the permit number, a signature, and a date. Except for the permit specific findings concerning endangered or threatened species under the Endangered Species Act and the specific finding concerning the National Register of Historic Places, all other findings in the document were standard in nature.

Documentation was present in all of the files to support the Findings Document. The documentation consisted of land use checklists; completeness checklists; pre-issuance conference reports; deficiency letters; assessments of the probable cumulative hydrologic impacts; specific separate findings documents for auger mining, prime farmland, endangered/threatened species, and historic places; and required application documents from the coal companies including the additional information/clarification requested by ASMC. The majority of the checklists and separate findings documents were either initialed or signed and were dated. All identified the specific permit.

Only one of the permits examined received comments from the public. The concerns were about a cemetery that was within the permit area. A discussion of the comments was present in the Findings Document.

Based upon our review of the permit files, we believe that the ASMC is diligent and thorough in their review of the permit allowing them to make the required findings. Numerous documents support each permit finding; i.e., deficiency letters to the company, requests to the operator for additional information and/or clarification, pre-issuance conference notes indicating discussions regarding findings, and checklists.

During the review, ASMC showed a willingness to improve the permit findings documentation. Even as the BFO permit findings study progressed, the ASMC enhanced the documentation of permit findings by providing a separate review document for each finding. These individual findings sheets are now being filed in the permit section pertinent to the finding. Although some of these findings are still standard in nature, this has enhanced ASMC s documentation for permit findings.

Although the ASMC has strengthened its permit findings documentation, the BFO recommended additional enhancements to the separate permit findings documents and the all-inclusive Findings Document, which lists all of the permit findings. The recommended additional documentation would include whether the finding was applicable to the specific permit and information specific to that permit finding.

The study has shown that ASMC makes permit findings as required in their regulations. Adequate documentation is present in the permit files to support the required permit findings.

Reclamation Activities Conducted by Permittees or Sureties in Lieu of Forfeiture

The purpose of this study was to evaluate the timeliness and effectiveness of reclamation on permits on which a show cause order was issued and either the operator or the surety agreed to complete the site reclamation. To conduct this evaluation, the BFO selected permits which had been placed in show cause/bond forfeiture status. This sample consisted of 15 permits.

This review was conducted in three parts; interviews with ASMC staff, field/site reviews, and file reviews. To begin the study, an interview was conducted to determine the procedures that ASMC follows when a show cause order has been issued. Legal files, ASMC inspection reports, and bond release files were also reviewed. Each permit site was visited by an OSM inspector.

The following outlines ASMC s process:

- ASMC issues the Show Cause Order to operator and surety.

- If no response is received and time for appeal of the Show Cause Order has expired, an Application for Default is filed with the Department of Hearings and Appeals (DHA).

- Upon receipt of a written Entry of Default from DHA, ASMC makes a written demand on the surety for immediate payment on the bond. This demand letter includes an offer to accept a time frame for reclamation in lieu of payment.

ASMC explained that historically this process has worked well. It often speeds up reclamation that otherwise would require placing bond proceeds in the Reclamation Fund, developing project specifications for the site, and then seeking competitive bids for work completion.

Twelve (12) of the 15 sampled permits in show cause had a signed consent agreement or an acceptable alternative document to reclaim the site. Three (3) of these consent agreements were letters from ASMC to financial institutions outlining the reclamation timetable, and two (2) were revisions to the permit. Only five (5) of these cases fully complied with the reclamation timetable or have received a Phase II or Phase III bond release. Reclamation work has occurred on several other sites reviewed, but it has not progressed to a stage which would allow Phase II bond release. Written justification for

delays or variances from terms contained in consent agreements were incomplete or could not be located in several files examined.

Interviews with the ASMC staff revealed that ASMC is somewhat limited in actions they can take to insure the timeliness of reclamation on show cause sites when these cases are appealed. Appeals for review by the DHA, the Full Commission, and on to circuit court can prohibit the reclamation of permitted sites for years. Appeals of bond forfeiture actions had been filed in circuit court for eight (8) of the permits reviewed. Four (4) of these cases filed in circuit court contained consent agreements with the operators. Although the operators had not complied with the reclamation timetable, Alabama statute allows the surety to exercise all rights to appeal the bond forfeiture actions. These eight (8) cases have been pending court action for an average of over three years each. ASMC can not take any action on these permits while they wait for the circuit court s decision.

In the permits reviewed, ASMC pursued actions with permittees and sureties to complete reclamation obligations prior to forfeiture and collection of bond, letters of credit, or certificates of deposit. Although ASMC may allow sureties to complete the reclamation plan, documentation on the surety s ability to complete the reclamation should be sought. In several instances, the negotiation of consent agreements extended over several months and was further complicated in that agreements could be reached at any stage of the appeal process. In cases where permittees and sureties had not proceeded in good faith, this strategy may have contributed to delays in the reclamation of these permitted sites.

Based on our review, we recommended that:

- Where ASMC has entered into reclamation agreements with operators or sureties, the requirements of these agreements need to be closely adhered to so as to minimize delay in the collection of forfeited bonds and obtaining reclamation of the site.

- Consent Agreements are only entered into with sureties that have demonstrated the ability to complete the reclamation plan and do not have a history of noncompliance. Companies with a history of noncompliance in meeting reclamation timetables should not be offered additional opportunities to enter into consent agreements.

- Written documentation outlining extensions and delays in the reclamation process agreed to by ASMC be maintained in each case file.

B. Program Evaluations of the Abandoned Mine Lands Program:

Success in Revegetation and Tree Planting (Phase II):

Phase I of the study was performed in EY 1999 and was included in the 1999 BFO Annual Report. This portion of the study was a review of ADIR s/the Walker County Soil and Water Conservation District Board s planting practices and a compilation of tree and wildlife shrub planting statistics. Planting practices include soil sampling, proper ground preparation and fertilization prior to planting, quality control during planting, and maintenance of sites after planting. The compilation of statistics showed that from 1987 to 1999, ADIR planted approximately 173 sites with trees and wildlife shrubs covering approximately 2,868 acres. During that time, the following species were planted: a) 1,760,290 pine seedlings; b) 102,410 sawtooth oaks; c) 87,790 autumn olives; and, d) 83,860 bicolor lespedeza.

This topic was considered for review in order to evaluate the Alabama AML Program s performance in reclaiming and revegetating AML sites in a manner that minimizes offsite erosion following reclamation and maximizes the survival of trees planted on the sites.

Phase II of the study began in January 2000 and concluded in March 2000. The study was performed as a cooperative team effort between OSM s Birmingham Field Office and ADIR s Birmingham Field Office. Team members from both offices participated fully in all aspects of the study. Field visits and statistical analyses were performed to assess revegetation success and the erosion control on completed AML sites.

The study involved a randomly selected sample of 20 sites completed prior to June 1997. Of the 20 sites, 17 were sampled for the number of trees and three (3) were sampled for grass/legumes percent coverage. Each of the sites was visited by ADIR/BFO team members to evaluate revegetation success.

The tree planting portion of the sampling was designed by ADIR. The field sampling of 17 projects involved counting the number of living trees (pines, hardwoods, and wildlife shrubs) within a plot (a plot represented 1/100th of an acre). The size of the project or number of planted acres determined how many circular plots would be sampled.

The three grass sites were sampled using the Application of the Point Frequency Method of Estimating Soil Vegetative Cover procedures employed by ASMC and designed by Dr. Samuel Lyle. This point-frequency method involves the selection of 100 random points to be located on a map. In the field, the pre-selected points are each examined for vegetation or the lack thereof and the results are recorded.

Each of the 20 project sites was visually examined for erosion.

The tree survival results were as follows:

" The species included pines, hardwoods, and wildlife shrubs. All species were planted on a 6 by 10 spacing or 726 plants per acre. Eighty-five percent of the vegetative

cover was loblolly pines and 15 percent hardwoods and wildlife shrubs. Natural revegetation added to the survival percentage on some sites.

" Seventy-eight percent of the originally planted acreage was stocked. Stocked refers to those originally planted acres that were not affected by development and unforeseen acts of nature such as fire. Twenty-two percent of the originally planted acreage were not stocked. The non-stocked acreage (22 percent) included: 16 percent developed (range, residential, commercial, etc.), five (5) percent destroyed by natural events (fire, kudzu, pH problems, etc.), and one (1) percent remined (coal and non-coal mining).

" Using weighted averages to determine survival on stocked acreage (187.3 acres), 591 plants of the 726 planted per acre had survived for a survival rate of 81 percent.

" Using weighted averages to determine survival on all acres originally planted (238.6 acres), 474 plants of the 726 planted per acre had survived for a survival rate of 65 percent.

" All stocked sites visited had healthy stands of trees and an excellent survival rate. Although the stands were very healthy at this time, it appeared that there was no landowner management of these sites.

The grass survival results showed a range of 95 to 99 percent vegetative cover on the sites sampled.

Of the 20 sites sampled, only one (1) showed any erosion. This project exhibited erosion on approximately 1/4 acre of poorly vegetated gob material. The presence of erosion on the site may be attributed to heavy visitation by residents of the adjacent community.

The study indicated that ADIR s revegetation and tree planting programs are highly successful and assure long-term reclamation success. Tree survival rates and grass coverage rates were high, and no significant erosion was observed on the sites studied.

APPENDIX A

TABULAR SUMMARY OF CORE DATA TO CHARACTERIZE THE PROGRAM

The following tables present data pertinent to mining operations and State and Federal regulatory 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 OSM Office.

TABLE 1

COAL PRODUCTION (Millions of short tons)			
Period	**Surface mines**	**Underground mines**	**Total**
Coal production[A] for entire State:			
Annual Period			
1997	7	18	25
1998	6	16	22
1999	5	15	20
	18	49	67

[A] Coal production as reported in this table is the gross tonnage which includes coal that is sold, used or transferred as reported to OSM by each mining company on form OSM-1 line 8(a). Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by States or other sources due to varying methods of determining and reporting coal production.

TABLE 2

INSPECTABLE UNITS
As of September 30, 2000

Coal mines and related facilities	Number and status of permits								Insp. Unit[D]	Permitted acreage[A]		
	Active or temporarily inactive		Inactive Phase II bond release		Abandoned		Totals					
	IP	PP	IP	PP	IP	PP	IP	PP		IP	PP	Total
STATE and PRIVATE LANDS	**REGULATORY AUTHORITY: STATE**											
Surface mines	0	49	0	123	0	49	0	221	221	0	75306	75306
Underground mines	0	11	0	6	0	2	0	19	19	0	10129	10129
Other facilities	0	12	0	3	0	3	0	18	18	0	2977	2977
Subtotals	0	72	0	132	0	54	0	258	258	0	88412	88412
FEDERAL LANDS*	**REGULATORY AUTHORITY: STATE**											
Surface mines	0	0	0	1	0	0	0	1	1	0	6	6
Underground mines	0	3	0	0	0	0	0	3	3	0	1770	1,770
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0
Subtotals	0	3	0	1	0	0	0	4	4	0	1,776	1,776
ALL LANDS[B]												
Surface mines	0	49	0	123	0	49	0	221	221	0	75,306	75,306
Underground mines	0	11	0	6	0	2	0	19	19	0	10,129	10,129
Other facilities	0	12	0	3	0	3	0	18	18	0	2,977	2,977
Totals	**0**	**72**	**0**	**132**	**0**	**54**	**0**	**258**	**258**	**0**	**88,412**	**88,412**

Average number of permits per inspectable unit (excluding exploration sites) 1

Average number of acres per inspectable unit (excluding exploration sites) 342

Number of exploration permits on State and private lands: 0 On Federal lands[C]: 0

Number of exploration notices on State and private lands: . . 16 16 16 On Federal lands[C]: 0

IP: Initial regulatory program sites.
PP: Permanent regulatory program sites.

[A] When a unit is located on more than one type of land, includes only the acreage located on the indicated type of land.

[B] Numbers of units may not equal the sum of the three preceding categories because a single inspectable unit may include lands in more than one of the preceding categories.

[C] Includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to a Federal lands program. Excludes exploration regulated by the Bureau of Land Management.

[D] Inspectable Units includes multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.
Federal lands units are included in State and Private lands and are not separate permits.

TABLE 3

STATE PERMITTING ACTIVITY
As of September 30, 2000

Type of application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres[A]	App. Rec.	Issued	Acres[A]	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New permits	11*	9	2,716	0	0	0	0	0	0	11	9	2,716
Renewals	8	7	1,912	0	1	45	0	0	0	8	8	1,957
Transfers, sales and assignments of permit rights	0	0		2	2		0	0		2	2	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits	0	0		0	0		0	0		0	0	
Exploration notices[B]		16			0			0			16	
Revisions (exclusive of incidental boundary revisions		47			12			2			61	
Incidental boundary revisions		2	-167		0	0		0	0		2	-167
Totals	19	81	4,461	2	15	45	0	2	0	21	98	4,506

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions 41

[A] Includes only the number of acres of proposed surface disturbance.

[B] State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.

* SOAP assistance has been provided by ASMC for two (2) applications.

TABLE 4

OFF-SITE IMPACTS

DEGREE OF IMPACT			RESOURCES AFFECTED												Total
			People			Land			Water			Structures			
			minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major	
TYPE OF IMPACT	Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	Land Stability	3	0	0	0	3	0	0	0	0	0	0	0	0	**3**
	Hydrology	44	0	0	0	13	2	4	22	6	4	0	0	0	**51**
	Encroachment	4	0	0	0	2	0	2	0	0	0	0	0	0	**4**
	Other	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
	Total	51	0	0	0	18	2	6	22	6	4	0	0	0	**58**

Total number of inspectable units: 258
Inspectable units free of off-site impacts: 228

OFF-SITE IMPACTS ON BOND FORFEITURE SITES

DEGREE OF IMPACT			RESOURCES AFFECTED												Total
			People			Land			Water			Structures			
			minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major	
TYPE OF IMPACT	Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Land Stability	10	1	0	0	5	5	0	0	2	0	1	0	0	14
	Hydrology	5	0	0	0	0	3	0	0	4	0	0	1	0	8
	Encroachment	3	0	0	0	2	0	1	0	0	0	0	0	0	3
	Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	18	1	0	0	7	8	1	0	6	0	1	1	0	25

Total number of inspectable units: 0
Inspectable units free of off-site impacts: N/A

Refer to the report narrative for complete explanation and evaluation of the information provided by this table.

TABLE 5

ANNUAL STATE MINING AND RECLAMATION RESULTS		
Bond release phase	**Applicable performance standard**	**Acreage released during this evaluation period**
Phase I	* Approximate original contour restored * Topsoil or approved alternative replaced	1,941
Phase II	* Surface stability * Establishment of vegetation	2,720
Phase III	* Post-mining land use/productivity restored * Successful permanent vegetation * Groundwater recharge, quality and quantity restored * Surface water quality and quantity restored	3,220

	Bonded Acreage Status[A]	**Acres**
	Total number of bonded acres at end of last review period (September 30, 1999)[B]	58,022
	Total number of bonded acres during this evaluation year	1,366
	Number of acres bonded during this evaluation year that are considered remining, if available	Unavailable
	Number of acres where bond was forfeited during this evaluation year (also report this acreage on Table 7)*	200

[A] Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations.

[B] Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).

* Acreage may be different from that reported in Table 7 as forfeiture orders from courts may specify different acreage.

TABLE 6
Alabama Abandoned Mine Lands
Problem Type Unit & Cost Summary
September 30, 2000

		Unfunded		*Funded*		*Completed*		*Total*	
Problem Type	Meas.	Units	Costs	Units	Costs	Units	Costs	Units	Costs
Bench	(Acres)	0.0	0	0.0	0	22.5	4,009	22.5	4,009
Clogged Streams	(Miles)	0.6	504,000	0.0	0	6.6	615,932	7.2	1,119,932
Clogged Stream Lands	(Acres)	0.3	2,400	86.0	0	161.5	516,938	247.8	519,338
Dangerous Highwalls	(Feet)	316,305.0	34,539,611	62,280.0	6,774,249	291,996.0	19,604,354	670,581.0	60,918,214
Dangerous Impoundments	(Count)	0.0	0	0.0	0	6.0	52,149	6.0	52,149
Ind/Res Waste	(Acres)	71.5	50,595	1.0	2	19.4	11,884	91.9	62,481
Dangerous Piles & Embankm	(Acres)	1,993.4	2,388,543	28.0	69,200	2,208.7	2,642,298	4,230.1	5,100,041
Dangerous Slides	(Acres)	21.0	60,000	0.0	0	52.6	1,424,681	73.6	1,484,681
Equip/Facil.	(Count)	156.0	315,004	0.0	0	20.0	49,857	176.0	364,861
Gases: Hazardous/Explosive	(Count)	0.0	0	0.0	0	0.0	109,797	0.0	109,797
Gobs	(Acres)	413.9	2,360,750	45.0	318,500	411.1	622,114	870.0	3,301,364
Highwall	(Feet)	1,746,435.0	285,601,034	0.0	0	70,485.0	1,649,085	1,816,920.0	287,250,119
Hazardous Equipment & Faci	(Count)	414.0	398,000	25.0	140,000	472.0	209,446	911.0	747,446
HaulRoad	(Acres)	3.0	1	0.0	0	3.5	3	6.5	4
Hazardous Water Body	(Count)	69.0	824,352	10.0	301,000	87.0	523,283	166.0	1,648,635
Industrial/Residential Waste	(Acres)	51.4	204,685	1.2	1	31.5	46,185	84.1	250,871
Mine Opening	(Count)	203.0	661,100	0.0	0	80.0	38,790	283.0	699,890
Other	0 68.5	224,155	14.0	14,804	53.0	30,412	135.5	269,371	269,371
Portals	(Count)	202.0	527,600	11.0	46,000	1,068.0	1,651,291	1,281.0	2,224,891
Pits	(Acres)	22.0	21,002	4.5	24,000	1.1	960	27.6	45,962
Polluted Water: Agri. & Indus.	(Count)	1.0	1,680,000	1.0	27,000	2.0	732,161	4.0	2,439,161
Polluted Water: Human Cons	(Count)	1.0	5,000	2.0	60,000	15.0	765,724	18.0	830,724
Subsidence	(Acres)	3.2	17,575	0.0	0	23.9	8,488,725	27.1	8,506,300
Spoil Area	(Acres)	39,876.5	73,845,946	130.0	48,704	13,780.0	10,759,849	53,786.5	84,654,499
Surface Burning	(Acres)	62.5	445,125	2.0	40,000	72.2	1,781,089	1363	2,266,214
Slurry	(Acres)	8.3	61,048	37.0	785,000	361	227,642	81.4	1,073,690
Slump	(Acres)	5.3	16,001	0.0	0	12.5	64,621	17.8	80,622
Vertical Opening	(Count)	27.0	141,176	6.0	27,000	1,373.1	717,216	1,406.1	885,392
TOTAL			**405,333,503**		**8,675,460**		**53,374,595**		**467,383,558**

TABLE 7

ALABAMA BOND FORFEITURE ACTIVITY
(Permanent Program Permits)

Bond Forfeiture Reclamation Activity by SRA	Number of sites	Acres
Sites with bonds forfeited and collected that were unreclaimed as of September 30, 1999 (end of previous evaluation year) [A]	10	246.5
Sites with bonds forfeited and collected during Evaluation Year 2000 (current year)		5 200
Sites with bonds forfeited and collected that were re-permitted during Evaluation Year 2000 (current year)	0	0
Sites with bonds forfeited and collected that were reclaimed during Evaluation Year 2000 (current year)	6	91.5
Sites with bonds forfeited and collected that were unreclaimed as of September 30, 2000 (end of current year)[A]	9	452
Sites with bonds forfeited but uncollected as of September 30, 2000 (end of current year)	0	0
Surety/Other Reclamation (In Lieu of Forfeiture)		
Sites being reclaimed by surety/other party as of September 30, 1999 (end of previous evaluation year) [B]	16	2250
Sites where surety/other party agreed to do reclamation during Evaluation Year 2000 (current year)	2	268
Sites being reclaimed by surety/other party that were re-permitted during Evaluation Year 2000 (current year)	0	0
Sites with reclamation completed by surety/other party during Evaluation Year 2000 (current year) [C]	4	1239
Sites being reclaimed by surety/other party as of September 30, 2000 (current evaluation year) [B]	14	1379

[A] Includes data only for those forfeiture sites not fully reclaimed as of this date
[B] Includes all sites where surety or other party has agreed to complete reclamation and site is not fully reclaimed as of this date
[C] This number also is reported in Table 5 as Phase III bond release has been granted on these sites

TABLE 8

ALABAMA STAFFING
(Full-time equivalents at end of evaluation year)

Function	EY 2000
Regulatory Program	
Permit review	**9.25**
Inspection	**12.75**
Other (administrative, fiscal, personnel, etc.)	**4.00**
SUB-TOTAL	**26.00**
AML Program	**17.75**
TOTAL	**43.75**

TABLE 9

FUNDS GRANTED TO ALABAMA BY OSM

(Millions of dollars)

EY 2000

Type of Grant	Federal Funds Awarded	Federal Funding as a Percentage of Total Program Costs
Administration and enforcement	**.92**	**51**
Small operator assistance	**.07**	**100**
Totals	**.99**	

APPENDIX B

STATE COMMENTS ON THE REPORT