## OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

**Annual Evaluation Summary Report** 

for the

**Regulatory Program** 

Administered by the State

of

# MISSISSIPPI

for

**Evaluation Year 2001** 

October 1, 2000 to September 30, 2001

October 2001

#### **EXECUTIVE SUMMARY**

During the 2001 Evaluation Year, the Office of Surface Mining, Birmingham Field Office (BFO), conducted oversight evaluations of the Mississippi Office of Geology (MOG), the State coal mine regulatory authority. The oversight studies focused on the success of Mississippi in meeting the Surface Mining Control and Reclamation Act's goals for environmental protection of land mined for coal. An evaluation (performance) plan was cooperatively developed by the BFO and the State to tailor the oversight activities to the unique conditions of the 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 program.

The BFO provided assistance to Mississippi in the areas of developing revegetation guidelines, revising and consulting on National Historic Preservation Act documents, and developing an Abandoned Mine Lands Program.

In support of OSM's national initiatives, the BFO conducted studies in the areas of offsite impacts and customer service. The offsite impacts study demonstrated that no offsite impacts had occurred on the coal mining permit during the review period. No offsite impacts have been identified on the Red Hills Lignite Mine since mining commenced in 1998. The BFO's customer service review concentrated on the processing of citizen complaints. Mississippi had received six complaints during the review year, but only one complaint, involving dust and diesel fumes, could be construed as being related to the mining operation. The BFO's review determined that Mississippi responded to the complaint and determined that the mining operation was not in violation of the surface mining regulations. The BFO did recommend that Mississippi respond to such complaints more quickly. Mississippi was also instructed to notify all parties involved within the time frames provided in their regulations and include in their letters to citizens appeal rights language.

A general oversight topic review was conducted to evaluate the development and issuance of certifications for such structures and features as sediment ponds/impoundments, excess spoil areas, diversions, and primary roads. The BFO's review indicated that the MOG has followed its procedures concerning certification as provided for in their regulations. The file and field reviews showed that all coal mining structures requiring certification were certified and that the mining company had provided all annual recertifications. A certified professional engineer had prepared all initial and annual certifications. All structures appeared to be constructed as designed and meet the requirements of the surface mining regulations. MOG has procedures in place to assure that these certifications are provided to them in a timely manner.

A review of required State program amendments and responses to 30 Part 732 notices determined that Mississippi has taken prompt action to address required amendments and 30 Part 732 notices. There are no outstanding program amendments at this time.

	Executive Summaryi
	Table of Contentsiii
	List of Acronyms Used in Report iv
I.	Introduction1
II.	Overview of Coal Mining Industry1
III.	Overview of Public Participation in the Program2
IV.	Major Accomplishments/Issues/Innovations
V.	Success in Achieving the Purposes of SMCRA4
	A. Offsite Impacts
	B. Bond Release
	C. Customer Service
VI.	OSM Assistance
VII.	General Oversight Topic Reviews

Appendix A: Tabular Summary of Core Data to Characterize the Program Appendix B: State Comments on the Report and Responses to Comments

#### LIST OF ACRONYMS USED IN THE REPORT

AML – Abandoned Mine Lands
BFO - Birmingham Field Office
EY - Evaluation Year
MCRCC - Mid-Continent Regional Coordinating Center
MOG - Mississippi Office of Geology
MSDEQ - Mississippi Department of Environmental Quality
MSHA - Mine Safety and Health Administration
MSHPO - Mississippi State Historic Preservation Officer
NHPA - National Historic Preservation Act
OSM - Office of Surface Mining
RHPP - Red Hills Power Project
SMCRA - Surface Mining Control and Reclamation Act
TIPS - Technical Information Processing System
TVA - Tennessee Valley Authority
VER - Valid Existing Rights

### I. <u>INTRODUCTION</u>

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for State regulatory programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Mississippi Regulatory Program and the effectiveness of the Mississippi Program in meeting the applicable purposes of SMCRA as specified in section 102. The Mississippi Department of Environmental Quality (MSDEQ), Mississippi Office of Geology (MOG), administers the program. 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 MISSISSIPPI COAL MINING INDUSTRY

The State of Mississippi was one of the first States to be awarded primacy to regulate coal mining within its borders after passage of SMCRA in August, 1977. For a number of years after primacy was awarded, no serious interest surfaced for mining the lignite deposits found in Mississippi. Exploratory drilling throughout the Mississippi lignite fields began in the mid-1970's and culminated in the issuance of a permit to mine lignite in Choctaw County in August, 1998.

Coal is present in Mississippi in the form of lignite, a brownish black coal that is intermediate between peat and bituminous coal. The lignite found in Mississippi is part of a band of lignite that extends from south Texas through Louisiana, Arkansas, Tennessee, Mississippi, and into central Alabama. Essentially all of the economically significant lignite in Mississippi are found in the Eocene Wilcox and Claiborne groups, which come into the state just east of Memphis, Tennessee and proceed through the state in a shallow eastern-progressing curve, exiting into Alabama approximately midway down the State. Typically, lignite beds or seams that can be mined for economic purposes range from 2 to 9 feet in thickness. 1978 estimates of the total lignite resources for the State in lignite beds 2 feet thick or greater and less than 200 feet in depth were 5 billion tons. Mississippi lignite resources equal about 13% of the total U.S. lignite resources of 40 billion tons. For the foreseeable future, lignite will primarily be used for the generation of electricity.

The Red Hills Power Project (RHPP) in Choctaw County, the site of the only permitted lignite mine in the State of Mississippi, developed as a result of an initiative by the Tennessee Valley Authority (TVA) to explore options for additional power generation. A load forecast, developed by TVA, projected a demand for electricity that would exceed

TVA's 1996 generating capacity by the year 2005. One option chosen by TVA to meet this demand was the purchase of power from independent power producers. An independent power producer, Tractebel Power, Inc., submitted a proposal to TVA for the sale of the total electric power output from the RHPP. The generation facility, with a net output of 440 MW of electricity, was estimated to consume about 3 million tons per year of lignite from the Red Hills Lignite Mine. The lignite mine is located between the generation facility and the Natchez Trace Parkway near the town of Ackerman, Mississippi. Over the 30-year life of the mine, about 4700 acres will be disturbed - 1400 acres by mine development activities and 3300 by lignite removal operations. Lignite will be mined from six (6) seams.

Mine development began in September, 1998, with construction of access roads, mine support facilities, a lignite handling facility, temporary stream diversions, a stormwater runoff control pond and sedimentation control ponds. Overburden removal began in 1999 with actual lignite mining beginning in 2000. The mine has over 1,000,000 tons of lignite stockpiled. The boxcut has been excavated down to the E seam over half way to its total depth of around 200 to 250 feet. Due to technical problems, the power plant was unable to open during Evaluation Year (EY) 2001. Therefore, only a small portion of the lignite mined, 10,832 tons, has been sold to the power producer. The power plant is projects to open in November, 2001.

MOG received its second permit application for the Red Hills Lignite Mine on September 21, 2001. The new application requests a permit for 3600 acres, including the original 1908 acres permitted under MS-001.

Mississippi has a small inventory of abandoned lignite mines. A total of nine sites have been identified in five counties. All of the sites for which acreage was available were listed as less than one acre in size. Three of the sites involved the underground mining of lignite. The lignite was typically used for blacksmithing and for home heating. An effort to identify other sites will be made as a part of the Mississippi abandoned mine lands program.

## III. <u>OVERVIEW OF THE PUBLIC PARTICIPATION OPPORTUNITIES IN THE</u> <u>OVERSIGHT PROCESS AND THE STATE PROGRAMS</u>

Opportunities for public participation occur at various points throughout the Mississippi regulatory program. They include the ability of the public:

- to initiate rulemaking;
- to initiate citizen suits;
- to request that areas be designated as unsuitable for mining;
- to review permit and modification applications;
- to receive newspaper notifications of permit applications;

- to request a formal hearing concerning actions of the Mississippi Environmental Quality Permit Board;
- to object to proposed bond releases; and,
- to request an inspection of a minesite.

Chapter 63 of the Mississippi Surface Coal Mining Regulations addresses the processing of citizens' complaints. This area was the subject of a general oversight review for EY 2001 and is discussed on page 4 of this report.

On July 13, 2001, the BFO sought public comment on OSM's oversight process and the State regulatory program from four organizations or agencies. These were the Mississippi Wildlife Federation, the Sierra Club, the National Park Service, and the U.S. Fish and Wildlife Service. By letter, the four entities were requested to contact the BFO if they had any questions, issues or concerns that the BFO's oversight studies could address. No responses were received.

## IV. <u>MAJOR ACCOMPLISHMENTS/ISSUES/INNOVATIONS IN THE MISSISSIPPI</u> <u>PROGRAM</u>

The State is implementing the coal mine regulatory program in an effective manner. Inspections are being conducted as required, and conditions on the minesite are thoroughly documented. No violations of the Mississippi surface mining law or regulations were noted during the year. MOG continues to process occasional revisions to the permit. One revision, Revision #10, involved extensive technical assistance from OSM and resulted in Mississippi requiring additional topsoil and subsoil substitution data in the new permit application. Revision #10 was subsequently withdrawn by the applicant. The new permit application, submitted on September 21, 2001, includes revised topsoil substitution plans. The BFO anticipates that MOG will continue to successfully manage its coal mine regulatory program and will continue to mature and grow as a result of oversight reviews and interactions with OSM and other coal mine regulatory programs.

On December 26, 2000, MOG presented OSM with an informal amendment, addressing the revegetation success guidelines as well as a required revision to § 6511(c) of the regulations and a response to a 30 CFR 732 letter, regarding changes to the Federal regulations for valid existing rights (VER). OSM reviewed the informal package and provided comments to the State on January 18, 2001. A formal amendment was submitted on October 4, 2001.

## V. <u>SUCCESS IN ACHIEVING THE PURPOSES OF SMCRA AS DETERMINED BY</u> <u>MEASURING AND REPORTING END RESULTS</u>

To further the concept of reporting end results, the findings from performance standard and public participation evaluations are collected for a national perspective. For the majority of primacy States, these findings include descriptions 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. Since lignite mining in Mississippi is barely three years old, only the evaluations of offsite impacts and customer service apply. Individual topic reports are available in the BFO, 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 State regulatory programs 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). The impact must also be regulated or controlled by the State regulatory program. The impact must be coal mine related and must occur outside the area authorized by the permit for conducting mining and reclamation activities.

The Offsite Impacts study was accomplished by collecting data during two complete joint inspections. Data was also collected from MOG inspection reports, and the files were checked for any enforcement actions issued by MOG. No enforcement actions were issued during this review year.

The BFO's joint inspections of the mine site were conducted in November, 2000, and May, 2001. No offsite impacts were identified during the joint inspections. No offsite impacts were noted on any of the inspection reports prepared by MOG. No State Notices of Violation containing offsite impacts were issued by MOG. Therefore, 100 percent of the inspectable units in Mississippi are free of offsite impacts.

## B. <u>Reclamation Success</u>:

The first coal mining permit ever issued in the State of Mississippi was issued on August 25, 1998. No bond release actions were processed during the review period.

## C. <u>Customer Service</u>:

OSM annually evaluates the effectiveness of customer service provided by the State. OSM selects one State activity, such as the handling of citizen complaints, permitting actions, or the processing of lands unsuitable petitions, to evaluate the timeliness, accuracy, completeness and appropriateness of the State action.

The processing of citizen complaints was considered for review as a sample of specific State activities related to customer service. The actions and steps taken during the processing of citizens complaints were compared to the guidelines developed and adopted to process citizen complaints. Citizen complaint processing activities were reviewed to determine timeliness, accuracy, completeness and appropriateness of MOG's actions. Mississippi's citizen complaint process in the areas of initial action and subsequent follow-up actions and notifications was examined.

Follow-up actions taken on citizen complaints received by OSM/BFO and forwarded to Mississippi through the ten-day notice process were also to be a focus of the review. The BFO did not refer any complaints for review to the MOG through the ten-day notice process.

A review was conducted of the appropriate procedural guidelines in the State of Mississippi Surface Coal Mining Regulations. The population for the citizen complaints review was established to be those complaints received during the period of October 1, 1999, through September 30, 2000. The review sample included 100 percent, a total of 6 complaints, of the citizen complaints received during that time. Interviews and discussions were conducted with appropriate MOG personnel to address MOG's procedures and practices in handling citizen complaints. Each complaint filed during the study period was reviewed for procedural process and appropriate action.

After conducting initial investigations, the MOG staff determined that five of the six complaints did not relate to the mine permit and were out of the jurisdiction of MOG's Title V responsibilities. One of the six complaints could have been coal mining related and was investigated per procedures in MOG's coal mine regulations.

Mississippi's coal mining regulations stipulate that a citizen may request an inspection by furnishing to an authorized representative a signed, written statement, or an oral report followed by a signed written statement, giving MOG reason to believe that a violation exists. The identity of a person supplying information to MOG concerning a possible violation will remain confidential, if requested by that person. If an inspection is to be conducted, the complainant is to be notified in advance of the date of the inspection and is allowed to accompany the MOG representative. Within 10 days of the inspection or, if no inspection is conducted, within 15 days of receipt of the citizen's written statement, MOG shall send the citizen: 1) if an inspection was made, a description of the enforcement action taken or an explanation of why no enforcement action was taken; 2) if no inspection was conducted, an explanation of the reason why; and, 3) an explanation of the citizen's right, if any, to review the action or inaction of MOG by informally or formally appealing the decision to the Mississippi Commission on Environmental Quality. The department shall give a copy of all materials relating to the inspection

(inspection reports, notices of violations, etc.) or an explanation of why no inspection was made to the citizen.

In the one complaint processed by the MOG staff, the complainant alleged health problems related to dust and diesel fumes from the mining operation. The allegation was investigated by MOG 23 days after the complaint was received. MOG's investigation found that the mining operation was not in violation of Mississippi's mining regulations. Both the complainant and the mining company were notified 21 days after the inspection was made of the results of MOG's investigation. Language describing the complainant's appeal rights of MOG's decision was not included in the follow-up letter to the complainant.

The study showed that MOG followed its procedures for handling citizens complaints but did not notify the complainant or the mining company of the results of their investigation within the time frames provided in the regulations. MOG did not investigation the air quality complaint until 23 days after receiving the complaint. As noted above, MOG is to notify the complainant and the company within 10 days of the inspection; they were notified within 21 days. The letter to the complainant did not include language describing the complainant's right to appeal MOG's decision as provided for in the surface mining regulations.

The BFO recommended that MOG conduct their citizen complaint investigations in a more expeditious manner. In addition, MOG was instructed to notify the parties involved within the time frames provided in their regulations. This is critical for complaints involving potential violations that are short in duration or temporary in nature such as many air or water quality violations. MOG should include appeal rights language in their letters to the citizens. MOG has agreed to follow the study's recommendations upon receipt of future citizen complaints.

## 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 program by identifying program needs and offering financial, technical, and programmatic assistance as necessary to strengthen the State program. In addition to engaging in the specific assistance activities discussed below, the BFO routinely provides information to MOG regarding new policy guidelines and procedures as well as changes in existing guidelines and procedures.

#### **Revising National Historic Preservation Act (NHPA) Documents**

During EY 2001 the BFO continued efforts to complete the revision of NHPA documents (programmatic agreement and memorandum of agreement for the Red Hills Lignite Mine) begun in 1998. The last action prior to EY 2001 associated with this effort

occurred on August 20, 2000, when the BFO provided the revised NHPA documents to both the Mississippi State Historic Preservation Officer (MSHPO) and MOG for comments. During EY 2001, the BFO initiated consultation on the two documents with the Mississippi Band of Choctaw Indians. Once comments are received from all interested parties, the documents will be finalized by the BFO, signatures will be obtained, and the completed documents provided to the ACHP.

#### **Other Assistance Activities**

The BFO assisted MOG by advising them of upcoming workshops, conferences, and training courses that would be of interest to Mississippi. At MOG's request, the BFO researched questions concerning the development of an abandoned mine lands (AML) program in Mississippi and provided the State with an AML Plan for Mississippi to review.

At MOG's request, the Mid-Continent Regional Coordinating Center (MCRCC) technical staff provided examples of revegetation success guidelines and met with the MOG staff on several occasions to provide assistance on MOG's draft guidelines.

In May 2000, MOG requested that OSM provide the State technical assistance in the review of Revision #10 to MS-001. The revision request involved changes in the approved topsoil substitution plan. MCRCC staff reviewed the approved permit information and performed soils analyses at the mine site. The resultant technical report provided the State with guidance on how to respond to the revision request and recommended that the upcoming permit application contain additional soils data to support a topsoil and subsoil substitution plan.

During EY 2001, Mississippi received the latest releases of the Technical Information Processing System (TIPS). As of May, 2001, all or portions of the TIPS software had been loaded on four computers with plans on installing it on three additional computers. On-site Earth Vision training was provided to the State.

#### VII. <u>GENERAL OVERSIGHT TOPIC REVIEWS</u>

#### **Certifications Process**

Engineering certifications are required on various aspects of the mining operations to verify that the structures or features, such as haul roads, sediment ponds, and excess spoil piles are constructed according to the approved design. Yearly certification by a

registered professional engineer is required on certain structures, such as sediment ponds, to assure that the structure has been maintained in accordance with the approved plan and MOG's coal mining regulations. The development and issuance of certifications has not previously been reviewed.

A review was conducted of the appropriate guidelines in the Mississippi surface mining regulations. Chapter 53 of the regulations requires that certifications be issued for different construction areas of the mine and supporting facilities. The population for the review was established to be all certifications issued or required on the one approved mining operation. This included both initial certifications and any annual certifications due at the time of the BFO inspection. Interviews and discussions were conducted with appropriate MOG personnel to address MOG's procedures and practices for certifications. Discussions were also conducted with the appropriate mining company engineers to address their procedures and practices for certifications. A review of the State's and mining company's files was conducted.

After reviewing both the State's and the mining company's certifications in the files, a complete joint field inspection (the BFO personnel accompanied the MOG personnel and the company's mining engineer) was conducted. All certified structures were evaluated in the field and all aspects of the mining operation noted to see if any other certifications should have been required.

Certifications are required for siltation structures/sediment basins, diversions, excess spoil structures, and primary roads, showing that their design is approved by a professional engineer. Annual recertifications are also required on sediment basins/impoundments, showing that they have been maintained as designed and according to the approved plan. Copies of the certifications and recertifications are kept at both MOG and the mine site.

MOG through their inspection process assures that certified structures are constructed as designed and that recertifications reflect the on-the-ground condition of sediment ponds.

The BFO review indicated that MOG has followed its procedures concerning certification as provided for in their regulations. The file and field reviews showed that all coal mining structures requiring certification were certified and that the mining company had provided all annual recertifications. A certified professional engineer had prepared all initial and annual certifications. All structures appeared to be constructed as designed and meet the requirements of the surface mining regulations. MOG has procedures in place to assure that these certifications are provided to them in a timely manner.

### **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.

On August 13, 1998, OSM approved amendments to the Mississippi coal mining regulations, including regulations at § 53103 relating to success of revegetation. Mississippi did not include in its revised program the standards for revegetation success and was required to amend its program to include revegetation guidelines and standards for success. In addition, a change in regulations at § 6511 (c) concerning temporary relief was also required. A 30 CFR Part 732 notification concerning changes to valid existing rights regulations was sent to Mississippi on August 23, 2000. An informal amendment covering these areas was presented to OSM on December 26, 2000. Following comments from OSM, Mississippi provided a formal amendment on October 4, 2001.

Mississippi 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.

## Slurry Impoundments

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

The three impoundments in Mississippi have no potential for breakthrough of water into underground mine works. There are no underground mines in Mississippi.

## **APPENDIX** A

## TABULAR SUMMARY OF CORE DATA TO CHARACTERIZE THE PROGRAM

The following tables present data pertinent to mining operations and State regulatory activities within Mississippi. They also summarize funding provided by OSM and Mississippi 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 Mississippi's performance is available for review in the evaluation files maintained by the Birmingham OSM Office.

## **APPENDIX B**

## STATE COMMENTS ON THE REPORT AND RESPONSES TO COMMENTS

## **Responses to Comments Submitted by the Mississippi Office of Geology on October 16, 2001**

## Comment:

Page 2, paragraph 4. I am not aware of any know lignite sites in Mississippi other than those nine identified. It is possible there may be others, but none have been identified at this time. An effort to identify other sites will be made as part of the AML program.

### Response:

The sentences indicating other sites are known to exist in Mississippi has been removed and replaced with a section indicating that an effort to identify other sites will be made a part of the Mississippi AML program.

#### Comment:

Page 3, paragraph 4. Revision #10 was withdrawn by the applicant, but is included in the permit application received September 21, 2001.

### Response:

Sentences indicating that Revision #10 was withdrawn by the applicant and that the new permit application, submitted on September 21, 2001, includes revised topsoil substitution plans have been added.