## OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

**Annual Evaluation Summary Report** 

for the

**Regulatory Program** 

Administered by the State

of

# MISSISSIPPI

for

**Evaluation Year 2002** 

October 1, 2001 to September 30, 2002

October 2002

#### **EXECUTIVE SUMMARY**

During the 2002 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 National Historic Preservation Act documents, permit review in technical areas, and on-site technical training.

In support of OSM's national initiatives, the BFO conducted studies in the areas of offsite impacts and customer service. OSM's national initiative on reclamation success was not reviewed because Mississippi has not processed any bond release actions since its sole mining permit was issued on August 25, 1998.

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 received no coal mining related complaints during the review year. The BFO's review determined that Mississippi has policies and procedures in place to respond to citizen complaints.

A general oversight topic review was conducted to evaluate Mississippi's compliance with five performance standards – surface and groundwater monitoring, stream buffer zone requirements, protection of fish and wildlife resources, roads, and setbacks. The file and field reviews indicated that the permittee had complied with the performance standards associated with the five areas of special emphasis selected for the review.

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.

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#### LIST OF ACRONYMS USED IN THE REPORT

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
NHPA - National Historic Preservation Act
NPDES - National Pollutant Discharge Elimination System
OSM - Office of Surface Mining
RHPP - Red Hills Power Project
SMCRA - Surface Mining Control and Reclamation Act
TVA - Tennessee Valley Authority
USFWS - United States Fish and Wildlife Service
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, 2001, to September 30, 2002. 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. The 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 boxcut has been excavated down approximately 200 feet to the C seam, which has been mined. The C seam is the deepest seam to be mined and in some places will be 250 feet deep. 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, was sold to the power producer in EY 2001. Prior to the start-up of the power plant there was an excess of 1,000,000 tons of lignite stockpiled. The power plant became fully operational on February 28, 2002. Since the start-up of the plant, the stockpile of lignite has been reduced to approximately 500,000 tons.

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. MOG projects that the new permit, MS-002, will be approved in January or February 2003. As of the end of August 2002, 985 acres of the Red Hills Lignite Mine had been disturbed. The disturbance includes the completely reclaimed excess spoil piles.

Mississippi has a small inventory of abandoned lignite mines. Nine (9) 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 citizen complaints.

On July 16, 2002, 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. The new permit application, submitted on September 21, 2001, was reviewed during this evaluation period. 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.

## 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 four 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 on December 5, 2001, and August 14, 2002. 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. Customer Service:

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 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, 2000, through August 12, 2002. The review sample was to include 100 percent 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. MOG's citizen complaint files were reviewed on August 13, 2002.

The MOG received no coal mining related citizen complaints during the October 1, 2000, through August 12, 2002, time period. Two non-coal complaints were received during the period – one involved possible air pollution by the adjacent power plant, and the other involved mold in a residence located three miles from the mine.

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 violation, etc.) or an explanation of why no inspection was made to the citizen.

The study showed that MOG has procedures in place for handling citizen complaints but did not receive any coal mining related complaints during the review period.

## 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 provided information to MOG regarding new policy guidelines and procedures as well as changes in existing guidelines and procedures.

## **Revising National Historic Preservation Act Documents**

During EY 2002 the BFO continued efforts to complete the revisions of the programmatic agreement and memorandum of agreement for the Red Hills Lignite Mine. These efforts were undertaken to bring the documents into accordance with changes in the National Historic Preservation Act (NHPA). In EY 2002, an additional opportunity for consultation on the documents was provided to the Mississippi Department of Archives and History and the Mississippi Band of Choctaw Indians. On June 10, 2002, a package containing the NHPA documents was presented to the Advisory Council on Historic Preservation, inviting their participation in the development of the documents. No response from the Advisory Council was received. The BFO will continue efforts to finalize the documents in EY 2003.

## **Other Assistance Activities**

MOG is processing a new permit for the Red Hills Lignite Mine, received by the agency on September 21, 2001, and has requested assistance for this effort. The Mid-Continent Regional Coordinating Center (MCRCC) has provided technical assistance in the areas of soils, geochemistry, and surface hydrology. MCRCC provided comments to MOG on prime farmland and soil substitution issues during the permit completeness review. MCRCC staff members met with Mississippi and mining company personnel in August 2002 to discuss details of prime farmland acreage and soil substitution. The BFO also secured answers to questions from MOG pertaining to the size of the permit, whether renewal/modification of the current permit would be preferable to issuing a new permit, cultural/historic surveys and NHPA consultations.

OSM conducted two on-site computer technical training courses. State and Mississippi Lignite Mining Company employees attended the courses.

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

## Special Emphasis Studies

In addition to areas inspected routinely by the BFO and MOG inspectors during joint inspections, an emphasis was placed on five standards, and a detailed review was conducted on these standards. The performance standards that were emphasized are: 1) Surface and groundwater monitoring as required by section 5333; 2) Stream buffer zone requirements of section 5343; 3) Protection of fish and wildlife resources as described in section 5383; 4) Roads as required in section 53111; and 5) Setbacks as prescribed in section 1105.

The BFO conducted joint inspections with MOG on December 5, 2001, and August 14, 2002. In each inspection, specific data for the five study topics, listed above, were collected.

## 1) Surface and groundwater monitoring, Section 5333

Surface and ground water monitoring data was on file at the MOG office in Jackson, Mississippi. All National Pollutant Discharge Elimination System (NPDES) required surface and ground water monitoring reports were submitted by the permittee every quarter. Surface water monitoring data was gathered by reviewing all MOG inspection reports written during the study period. The inspection reports demonstrated that water discharges from all ponds were tested and were in compliance with MOG water standards. The surface water monitoring results demonstrated that the water discharge was in compliance with water standards set in the NPDES permit/MOG performance standards.

Groundwater wells used for monitoring were observed during the BFO inspections. The State reviews the groundwater data for trends and changes in the chemistry of the water. The review of the groundwater data showed that the chemical values of the parameters tested remained relatively constant.

### 2) Stream buffer zone requirements, Section 5343

Areas designated as stream buffer zones are being complied with by the permittee. The distance required is 100 feet. Perimeter markers are set 100 feet back from the stream.

### 3) Protection of fish and wildlife resources, Section 5383

All consultation and communication with the U.S. Fish and Wildlife Service (USFWS) was well documented in the permit file. Six species of concern that may be found in the permit area were listed by the USFWS, which are the American alligator, arctic peregrine falcon, bald eagle, interior least tern, piping plover and the red-cockaded woodpecker. No state or federally listed fish species were found in the permit area. The permit document addresses these six species and indicates that the likelihood of finding these species in the permit area is "limited" or "transitory in nature" due to lack of accommodating habitat. No observation of the species mentioned by the USFWS

occurred during the two oversight inspections or the MOG permit inspections.

4) Roads, Section 53111

The mine access road or main service road has been certified by a qualified, registered professional engineer. The BFO inspection report, December 5, 2001, indicated that all coal produced was being shipped via belt line to the power plant. All primary and ancillary roads are in good condition and in compliance with regulations set forth in Section 53111.

## 5) Setbacks, Section 1105

The permit is located near the boundaries of the National Park Service. The permittee has taken various precautions to remain unseen from the Natchez Trace Parkway (part of the National Park System). The permittee has designated a 300-foot setback from the parkway and has not mined in the area located near the northern end of the permit where the Natchez Trace lookout point is located. The National Park Service has asked the permittee to refrain from disturbing any areas that can be seen from the designated lookout point in the Park. The permittee has complied with the National Park Service request.

The permittee was in compliance with the 300-foot setback from occupied dwellings, 100-foot setback from roads and the 100-foot setback from cemeteries. The permittee has relocated a cemetery found on the permit area, and the removal was conducted observing State law requirements.

The results from this review indicate that the permittee has complied with the performance standards associated with the five areas of special emphasis selected for this review. The well-written and complete MOG inspection reports assisted the BFO in gathering the information needed for the study.

## **Program Maintenance**

## Valid Existing Rights (VER) Rule – Mississippi:

Due to the changes in the Federal VER rule, under 30 CFR 732.17(d) MOG was notified that they must amend their program to be no less effective than the changes to the Federal regulations. An informal amendment was submitted to the BFO on December 22, 2000, covering required modifications to section 6511, revisions to the definition and application of valid existing rights, and adoption of revegetation success standards.

On February 2, 2001, a formal amendment was submitted to OSM covering the same areas. At OSM's encouragement, the processing of the amendment was delayed until MOG could assimilate OSM's February 9, 2001, concern letter. MOG revised its amendment to respond to these concerns, and changes were submitted to OSM on July

22, 2002. The "reopened" public comment period closed on September 23, 2002. The final rule will be published at a future date.

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.

## **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 17, 2002

## Comment:

Section II, Overview of the Mississippi Coal Mining Industry. In the fourth paragraph, the boxcut has been excavated approximately 200 feet to the C seam, which has been mined. The C seam is the deepest seam to be mined and in some places will be 250 feet deep. Prior to the start-up of the power plant on February 28, 2002, there was in excess of 1,000,000 tons of lignite stockpiled. Since the plant start-up, this inventory has been somewhat diminished and now is approximately 500,000 tons. Finally, in paragraph five, the Red Hills Mine doesn't have rock dumps in the generally used, hard-rock sense. The dumps consist entirely of unconsolidated material, and are referred to by the mining company as excess spoil piles.

## Response:

The information received in the comments has been incorporated into paragraphs four and five of the report.