

STATE OF MISSISSIPPI SOLID WASTE MANAGEMENT PERMIT

TO OPERATE A SOLID WASTE MANAGEMENT FACILITY IN
ACCORDANCE WITH THE REGULATIONS GOVERNING
SOLID WASTE MANAGEMENT

THIS CERTIFIES THAT

Mississippi Power Company

has been granted permission to operate a solid waste management facility

located at

*Interstate 10 and Lorraine Road
Gulfport, Mississippi*

under the name of

Plant Jack Watson Ash Management Unit

This permit is issued in accordance with the provisions of the Mississippi Code Annotated, and the regulations and guidelines adopted and promulgated thereunder

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: AUG 14 2013
Expires: JUL 31 2023

Permit No. SW0240040507

CONDITIONS

A. EFFECT OF PERMIT

The permittee shall operate the solid waste management facility in accordance with the Mississippi Nonhazardous Waste Management Regulations (state regulations), applicable federal regulations, the approved application and plan of operation and the conditions of this permit.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for noncompliance with the terms and conditions of the permit. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of the permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

D. DUTIES AND REQUIREMENTS

1. Duty to Comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the solid waste law and regulations promulgated thereunder and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application.
2. Duty to Reapply. If the permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the permittee must submit a complete application for a new permit at least 180 days before this permit expires.
3. Duty to Mitigate. The permittee shall take all reasonable steps to minimize, prevent or correct any adverse impact on human health or the environment resulting from noncompliance with this permit.

4. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all equipment and systems which are installed or used by the permittee to achieve compliance with the conditions of this permit and the application as submitted and approved by the Department of Environmental Quality (Department).

5. Duty to Provide Information. The permittee shall furnish to the Department, within a reasonable time, any relevant information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

6. Inspection and Entry. The permittee shall allow an authorized representative of the Department upon the presentation of credentials and other documents as may be required by law to:
 - a. Enter on the permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under this permit;
 - d. Sample or monitor at reasonable times for the purposes of assuring permit compliance.

7. Transfer of Permit. This permit is not transferable to any person except after notice to and approval of the Mississippi Environmental Quality Permit Board. The Permit Board may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.

E. SITE SPECIFIC CONDITIONS

1. Operating Conditions
 - a. The permittee is authorized to place coal combustion product generated at Mississippi Power's Plant Watson in Harrison County, Mississippi, as described in the plan of operation into the coal combustion product (ash) management unit. No other facility solid wastes, including construction or demolition debris, other process wastes, or any other wastes may be deposited in the ash management unit, unless approved by the Department with the exception of bottom ash from Plant Daniels in Jackson County, Mississippi to be specifically used as leachate blanket material.

- b. The permittee shall prepare and submit quality assurance/quality control documents of the as-built system in accordance with the specifications submitted in support of the approved application to the Department for approval at a minimum of two weeks prior to the disposal of ash into the disposal cell.
- c. The placement of coal combustion product shall be restricted to the approved permitted area of Cell 1 which is approximately 20 acres. The applicant shall adhere to the design specifications as proposed in submittals. Maximum elevation for Cell 1 is seventy-three (73) feet mean sea level (msl) including the final cover system. Final cell 1 sideslopes shall not be constructed at less than a 3 foot horizontal to 1 foot vertical (3:1) ratio.
- d. Disposal area boundaries shall be clearly marked. At a minimum, the corners of the disposal area shall be marked by minimum 3-foot high posts as measured from ground surface, unless otherwise approved or directed by the Department. The markers may be concrete posts, metal pipes, weather treated wood posts, metal fence posts, or other markers as approved by the Department. Posts shall be at a minimum 2 inches in diameter (excluding metal fence posts) and shall be placed in the ground to a sufficient depth to facilitate permanence.
- e. Security must be maintained at the facility site to prohibit unauthorized access and disposal. Access to the site shall be secured or locked when the site is closed and when no attendant is on-site.
- f. All-weather access and transport roads shall be constructed and maintained at the site to maintain operations during inclement weather conditions.
- g. Appropriate actions shall be taken to inhibit coal combustion product particles from becoming windblown off the site. In addition, appropriate dust control measures shall be conducted as necessary to contain and/or suppress fugitive dust emissions from the unit; from the access and transport roads at the unit and from other facility components.
- h. Excavation and recovery of coal combustion products from the ash management unit shall be conducted in such a manner that the underlying clay liner and leachate collection system shall not be disturbed or damaged and in such a manner that runoff or washout of ash will be prevented and windblown ash will be minimized. The permittee shall limit excavations adjacent to the leachate collection system to a distance no less than 5 feet.
- i. The Department may require changes in the operating conditions of the ash management unit, including requiring an intermediate cover, modifying leachate management conditions and implementing other control measures as necessary to prevent or correct conditions at the facility which cause, contribute to or allow

environmental, public health or public nuisance problems.

- j. The leachate collection systems shall be cleaned, maintained, and pumped as necessary to properly manage leachate collection.
- k. Surface water which has contacted the ash, surface leachate flowing from filled areas of the ash management unit, and sub-surface leachate shall be collected and managed as leachate. Surface leachate and contaminated surface water and/or groundwater shall not be allowed to flow off-site of the ash management unit, but shall either be recirculated for use in the ash storage unit, routed for use in plant activities for ash hydration or shall be treated and discharged as per the applicable National Pollutant Discharge Elimination System (NPDES) permit requirements.
- l. The facility shall be constructed, operated, and monitored in such a manner as to ensure Mississippi Groundwater Quality Standards are not exceeded by any activity of this facility.
- m. The facility shall be constructed, operated, and monitored in such manner so as to prevent a discharge of pollutants into waters of the State, including wetlands, that violates any requirements of the Clean Water Act or the Mississippi Air and Water Pollution Control Act, including, but not limited to, the NPDES requirements.
- n. The leachate collection system shall be monitored by a flow meter and by visual inspection on a monthly basis for approximate leachate volumes and significant changes in quantities. Observations shall be recorded and kept on file for review by the Department.
- o. Operation of the ash management unit shall be conducted in accordance with any applicable requirements of the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service.
- p. An annual report shall be submitted to the Department each year no later than February 28 to include data regarding the preceding calendar year. The report shall include the items listed below:
 - 1. The amount of coal combustion product deposited in the ash management unit during the calendar year;
 - 2. The amount of coal combustion product excavated from the ash management unit for beneficial use purposes during the calendar year;
 - 3. An estimated remaining capacity, in terms of volume or tons of coal combustion product.

2. Monitoring Requirements

- a. Groundwater monitoring shall be conducted at the ash management unit in accordance with the approved groundwater monitoring plan for the following parameters:

Total Arsenic
Total Cadmium
Total Selenium
sulfate
chloride
sodium
pH
specific conductance
temperature
turbidity
oxidation-reduction potential

- b. Groundwater monitoring shall be conducted semi-annually, unless otherwise approved or directed by the Department, according to the following schedule:

<u>Monitoring Period</u>	<u>Report Due</u>
January - June	August 31
July - December	March 1 (of the following year)

Samples may be taken at any time during the monitoring period; however, all sampling events shall be at least four months apart.

- c. All groundwater samples shall be taken by qualified personnel as per U.S. EPA-approved sampling procedures and chain of custody requirements.
- d. The following reports and records shall be retained in the operating record, and a copy shall be submitted to the Department according to the schedule above:
1. The dates, exact location, and time of sampling;
 2. The individual who performed the sampling;
 3. Results of groundwater level measurements and a map indicating direction of flow;
 4. The date(s) laboratory analyses were performed;

5. The individual(s) who performed the analyses;
 6. The analytical techniques or methods used;
 7. The results of such analyses, provided by the laboratory;
 8. A graphic representation of groundwater monitoring data for analyzing trends in water quality for pH, Chloride, Sulfate, Arsenic, Cadmium, and Selenium.
 9. A statistical comparison of analyses;
 10. A determination of statistically significant increase; and
 11. Chain of custody forms.
- e. The permittee shall not remove, abandon or relocate any monitoring well prior to obtaining approval from the Department. If any monitoring well becomes damaged and/or inoperable, the permittee shall notify the Department as soon as practical upon becoming aware of such conditions and shall provide a written report within seven (7) days of the notice. The written report shall detail what problem has occurred and the measures taken to correct and prevent the recurrence. All replacement or corrective monitoring well location and design shall be approved by the Department prior to installation.
- f. Groundwater assessment monitoring and corrective action, if necessary, shall be conducted at the facility, in accordance with state regulations and the plans approved by the Department.
- g. Upon the establishment of sufficient historical data or other suitable demonstration, the Department may consider a request for a variance to the monitoring points, monitoring occurrences, or monitoring parameters.
- h. At a minimum, one groundwater sampling and analysis event shall be conducted of the approved groundwater monitoring network for submittal to the Department prior to the disposal of ash into the disposal unit.

3. Closure/Post Closure Requirements

- a. A closure/post-closure plan for the ash management unit shall be submitted to the Department for approval at least 120 days prior to initiation of final closure of the ash management unit. Due to the potential for recovery of material from the ash management unit after each unit has reached capacity, alternate final closure

conditions may be approved by the Department to allow for ash mining and recovery operations.

- b. The closure/post closure plan shall include, at a minimum:
 - i. a description of and the construction details of the final cover system and surface water control structures;
 - ii. a construction quality assurance (CQA) plan for the final cover system components, drainage system features and any other appropriate closure components;
 - iii. a plan for interior, exterior and subsurface drainage and dewatering of the unit as appropriate;
 - iv. a proposed schedule of closure activities; and
 - v. a description of the post-closure monitoring plans and a proposed schedule of monitoring for the approved post-closure monitoring period which will be conducted for 10 years except as provided under Section IV.E.3.b. of the State of Mississippi Nonhazardous Solid Waste Management Regulations.
- c. An approved final cover system shall be placed on completed areas of the ash management unit in accordance with state regulations and the approved plans.
- d. Upon completion of final closure of the site, a surveyed drawing of the ash management unit shall be submitted to the Department depicting final contours and the boundaries of the ash management unit.
- e. The condition of the final cover system shall be inspected at least monthly by company personnel during the post-closure monitoring period of the facility. Erosion, cracks, ponding, leachate outbreaks and similar problems shall be promptly repaired.
- f. Any reduction in frequency or number of monitoring events, monitoring parameters, site inspections or other components of the approved closure or post-closure plan must be submitted to the Department for approval before being implemented.

4. Other Permit Conditions

- a. The permittee shall plug and abandon all soil borings, groundwater monitoring wells, and/or piezometers utilized in the course of the hydrogeologic investigation or other investigations

within the confines of the actual disposal area prior to cell construction and disposal in compliance with the specifications of the rules and regulations of the Mississippi Office of Land and Water Resources.