

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
13201 Highway 63 North
Escatawpa, Mississippi
in Section 37, Township 6 South, Range 6 West
Jackson County

under the name of

Daniel Electric Generating Plant North 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: [Permit Issuance Date]
Expires: [Permit Expiration Date]

Permit No. SW0300040527

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), the approved application and the conditions of this permit. Furthermore, it shall be the responsibility of the permittee to ensure that the facility is operated in accordance with the Federal “Disposal of Coal Combustion Residuals from Electric Utilities” final rule (CCR Rule) published by the Environmental Protection Agency on April 17, 2015.

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 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 Permits. This permit is not transferable to any person except after notice to and approval of the Mississippi Environmental Quality Permit Board or the Board's Designee. 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.
8. Signature Requirements. An application for the re-issuance, modification or transfer of this permit and all reports required by this permit or by state regulations shall be signed in accordance with Rule 1.2.G of the Mississippi Nonhazardous Solid Waste Management Regulations.

E. SITE SPECIFIC CONDITIONS

1. Authorized Wastes
 - a. The permittee is authorized to place coal combustion ash including fly ash and bottom ash generated at Mississippi Power's

Plant Daniel in Jackson County, Mississippi, as described in the plan of operation into the ash management unit.

- b. The permittee shall not deposit other Company solid wastes, including construction or demolition debris, other process wastes, or any other wastes may in the ash management unit, unless approved by the Department.

2. Construction Requirements

- a. The permittee shall ensure at least two weeks prior to the placement of solid waste in a newly constructed cell within the permitted area, a construction quality assurance report shall be submitted to the Department which contains a certification from an independent professional engineer, registered with the State of Mississippi, indicating that the area has been constructed according to the approved design plans and state regulations. The report shall also include field logs, results of testing, subgrade survey, top of liner survey, and construction testing methods.
- b. The permittee shall limit ash disposal to the footprint and elevation as described in the approved application. The ash disposal area shall be limited to the area defined in the application consisting of 29.73 acres. The maximum elevation of the disposal cell shall not exceed seventy-five (75) feet above MSL. This maximum height shall include the final cover system constructed with a 3:1 side slope.
- c. The permittee shall ensure that disposal area boundaries are 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. Such markers shall be maintained throughout the active life of the disposal facility.
- d. The permittee shall construct and maintain all-weather access and transport roads at the site to maintain operations during inclement weather conditions.
- e. The permittee shall insure that construction of the ash management unit is conducted in accordance with any applicable requirements

of the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service.

3. Operating Requirements

- a. The permittee shall implement and maintain adequate security measures at the facility to prohibit unauthorized access and disposal at the ash management unit.
- b. The permittee shall take appropriate actions to inhibit ash 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.
- c. The permittee shall insure that excavation and recovery of ash from the ash management unit is conducted in such a manner that the underlying clay liner, geocomposite liner, and/or leachate collection system shall not be disturbed or damaged; that runoff or washout of ash will be prevented; and that windblown ash will be minimized. The permittee shall maintain a buffer of at least 5 feet of ash between the bottom of the recovery unit excavation and the leachate collection system.
- d. The permittee may implement appropriate corrective action or changes to the operating conditions of the ash management unit, where determined necessary by the Department, including but not limited to, placing an intermediate cover, modifying leachate management conditions and implementing other control measures to prevent or correct conditions at the facility which cause, contribute to or allow environmental, public health or public nuisance problems.
- e. The permittee shall insure that surface water which has contacted the ash, surface leachate flowing from filled areas of the ash management unit, and sub-surface leachate is 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.

- f. The permittee shall construct, operate, and monitor the facility 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 storm water permit requirements.
- g. The permittee shall properly clean, maintain, and operate the leachate collection system as necessary to adequately collect and manage leachate. The depth of leachate over the liner shall not exceed 30 cm. Measurements of leachate head shall be made daily. Records shall be kept of daily measurements, quantities pumped, cleaning, maintenance, any analysis and method of disposal.

4. Monitoring and Reporting Requirements

- a. The permittee shall submit an annual report to the Department each year no later than February 28 to include data and information regarding the preceding calendar year. The report shall include the items listed below:
 - 1. aggregate information on the types, amounts (in tons), and sources of waste received during the calendar year;
 - 2. the amount of waste in tons excavated from the ash management unit for beneficial use purposes during the calendar year, if applicable;
 - 3. a contour drawing of the landfill showing areas filled during the report year and total volume filled;
 - 4. estimated remaining capacity, in terms of volume and years of remaining life;
- b.. The permittee shall insure that groundwater monitoring is conducted at the ash management unit in accordance with the approved groundwater monitoring plan for the following laboratory analytical parameters using EPA approved groundwater monitoring methods:

Arsenic	Fluoride
Boron	Selenium
Chloride	Sulfate
Cadmium	Total Dissolved Solids (TDS)
Calcium	

Field parameters of groundwater to be tested during monitoring and reported with laboratory analytical results using EPA approved groundwater monitoring methods include:

Temperature
Oxidation-Reduction Potential (ORP)
Specific Conductance
Turbidity
pH

- c. The permittee shall conduct groundwater monitoring 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	February 28 (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.

- d. The permittee shall insure that all groundwater samples are taken by qualified personnel as per U.S. EPA-approved sampling procedures and chain of custody requirements.
- e. The permittee shall retain the following reports and records 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, Arsenic, Boron, Cadmium, Calcium, Chloride, Fluoride, Selenium and Sulfate.
 9. A statistical comparison of analyses;
 10. A determination of statistically significant increase; and
 11. Chain of custody forms.
- f. 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.

- g. The permittee shall conduct groundwater assessment monitoring and corrective action, if necessary, at the facility, in accordance with state regulations and corrective action plans approved by the Department.
- h. The permittee may request the Department consider a variance to the monitoring points, monitoring occurrences, or monitoring parameters, which is supported by sufficient historical data and other suitable demonstration.

5. Closure/Post Closure Requirements

- a. The permittee shall submit a closure/post-closure plan for the ash management unit 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 alternate final closure conditions may be approved by the Department to allow for post-closure ash mining and recovery operations.
- b. The closure/post closure plan shall include, at a minimum:
 - 1. a description of and the construction details of the final cover system and surface water control structures;
 - 2. a construction quality assurance (CQA) plan for the final cover system components and any other appropriate closure components;
 - 3. a proposed schedule of closure activities; and
 - 4. a description of the post-closure monitoring plans and a proposed schedule of monitoring and inspections of the final cover system for the approved post-closure monitoring period having a minimum duration of 30 years.

- c. The permittee shall complete final closure activities within 180 days following the beginning of closure as specified in Rule 1.4.E.2.j of the state solid waste regulations.
- d. The permittee shall submit a surveyed drawing of the ash management unit to the Department depicting final contours and the boundaries of the ash management unit within 60 days of the final closure of the site.
- e. The permittee shall not reduce the frequency or number of monitoring events, monitoring parameters, site inspections or other components of the approved closure or post-closure plan unless a plan for such reduction is submitted to the Department for approval prior to being implemented.