

STATE OF MISSISSIPPI SOLID WASTE MANAGEMENT PERMIT

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

THIS CERTIFIES THAT
Waste Management of Mississippi, Inc.

has been granted permission to operate a solid waste management facility

located at
1649 Highway 15 North
Houston, Mississippi 38851
235.69 acres in E/2 of Section 8, Township 13 South, Range 3 East
Chickasaw County

under the name of

Prairie Bluff Sanitary Landfill and Recycling Center

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: SEP 08 2015
Expires: AUG 31 2025

Permit No. SW00901B0302

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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, and 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 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. 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 OPERATING CONDITIONS

1. Construction of landfill components shall be conducted by qualified and experienced personnel. The Department shall be notified of an approximate construction schedule at least one week prior to liner and final cover construction activities.
2. Construction of any landfill cells shall be in accordance with the following, unless an alternate method is approved by the Department:
 - a. The insitu subbase shall be inspected for cracks, large stones, other protrusions, and for soil material which would not be suitable buffer material. Unsuitable materials shall be removed and replaced with buffer material having permeability equal to or less than 1×10^{-6}

cm/sec. The surface shall be compact, smooth, uniform, and free of desiccation cracks.

- b. Prior to placement of the soil liner, the surface of the prepared subbase shall be scarified for proper bonding with the liner. The liner shall be placed in 6-inch nominal lifts. Each lift shall be evenly compacted to the density and moisture content required. Placement of the liner on the side slopes shall be in lifts along the slope, not in horizontal lifts. Between lifts, the surface shall be scarified for proper bonding.
 - c. In construction/preparation of the buffer subbase and the soil liner, the surface shall not be allowed to dry out and crack before placement of the next layer. If desiccation cracks do form, the surface shall be rewetted, rehomogenized, and recompact to the depth of the cracks before placement of the succeeding layer.
 - d. Field density, moisture content, and permeability tests shall be conducted in accordance with the approved plan. Test holes in the soil liner shall be sealed with bentonite or another method approved by the Department.
 - e. Prior to placement of the geomembrane, the soil liner shall be smooth, uniform, and free from protrusions or cracks. During and after installation, the geomembrane shall be protected from damage (e.g., heavy equipment, tearing, puncturing, exposure to the sun, etc.). Field seams shall be oriented vertically along the side slopes (i.e., top to bottom of side slope). No later than six months after liner installation, the protective layer shall be placed over the geomembrane, and properly maintained until waste is placed over the area.
3. Prior to the disposal of any solid waste within the expansion area (Cells 5-16):
- All borings drilled on the site in preparation of the permit application, which will not be converted to monitoring or supply wells, shall be properly sealed.
4. At least two weeks prior to the placement of solid waste in a newly constructed cell or subcell, construction quality assurance shall be submitted to the Department which demonstrates compliance with all applicable sections of the state regulations. The report shall contain a certification from an independent registered professional engineer that the area has been constructed according to the approved design plans and all applicable sections of the state regulations of testing, subgrade survey, top of liner survey, and construction testing methods.

5. The disposal of solid waste shall be restricted to the approved permitted area, consisting of approximately 236 acres and shall be within approved elevations. A minimum 250-foot buffer zone shall be maintained between the expansion disposal area (Cells 5-16) and the property line while a 100-foot buffer zone is to be maintained on the east side of the original 37.5-acre disposal area.
6. Construction, operation, closure, and post-closure activities of the facility shall be conducted in accordance with state regulations and the approved plans, as submitted to the Department.
7. The permittee shall properly plug and abandon the two on-site water wells prior to construction of the affected cells in accordance with the requirements of the Office of Land and Water.
8. Modification of this permit shall be required prior to a vertical or horizontal expansion of the facility or a significant change in the method of waste management.
9. Financial assurance, as required by state law and regulations, shall be established and maintained for closure and post-closure costs.
10. 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.
11. The service area of the facility shall be consistent with the service area listed in the approved Chickasaw County Solid Waste Management Plan. Solid waste generated by areas not within the approved service area shall be prohibited from disposal, unless specifically approved by the Commission.
12. Asbestos containing material shall not be accepted for disposal, unless an operating plan and demonstration of compliance with EPA NESHSP regulations 40 CFR Part 61.153 and 61.154 (reporting and standard for active waste disposal sites) is submitted to the Department. Furthermore, excavation of waste for the disposal of asbestos shall occur only in the areas where the waste has been in place for less than 72 hours.
13. Infectious medical wastes, as defined by the Mississippi Department of Health, generated by established medical facilities, shall be prohibited from disposal unless such wastes have been satisfactorily rendered non-infectious and placed in special bags or other appropriate packages.
14. Vehicles entering the facility shall be operated and maintained to prevent loss of liquids or solid waste material. Vehicles failing to meet this requirement,

after one warning to the owner or driver, shall be refused acceptance at the site until the situation is remedied.

15. All solid waste shall be covered each day before the close of operations, or more frequently, if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging. Cover shall consist of at least six inches of earthen material or an alternate approved method of cover. An alternate method of cover may be used if a specific description and plan of operation is submitted to the Department, and written approval is obtained.
16. Litter and scattered debris on the landfill area and along the property access roads shall be collected every operating day and returned to the active disposal area.
17. Small portions of earthen cover shall be removed from low areas of each lift in order to facilitate downward movement of leachate to the collection system. The amount of soil removed shall be minimized as much as possible.
18. Filled areas of the landfill, which have remaining capacity and which will not receive waste within 30 days, shall receive an intermediate cover of twelve inches of earthen cover. An alternate cover system may be approved by the Department.
19. Filled areas of the landfill, which will not receive additional waste or final cover within one year, shall receive an intermediate cover of twenty-four inches of earthen cover. Following placement, a minimum of eighteen inches of the cover shall be maintained until additional waste is placed on the area or until final cover is applied. An alternate cover system may be approved by the Department.
20. Final cover shall be placed on completed areas of the landfill in accordance with state regulations and the approved plans.
21. The conditions of daily, intermediate, and final earthen cover shall be routinely inspected by landfill personnel during the operation of the facility. Erosion, cracks, ponding, leachate outbreaks, and similar problems shall be promptly repaired.
22. Burning or smoldering wastes accepted at the site shall be extinguished in an area separate from the active disposal area and shall not be unloaded into the working face until all smoldering debris has been adequately extinguished. Such wastes, however, shall not be left uncovered at the close of operations for that day.
23. Should an accidental fire occur, the operator shall immediately take action to extinguish the fire and shall notify the Department as soon as possible.

24. The landfill shall be constructed, operated, and maintained with berms, ditches, or other means such that uncontaminated surface water is directed around and away from the developed landfill area. Likewise, each cell shall be constructed and maintained to direct uncontaminated surface water around and away from the active disposal area. Uncontaminated surface water runoff from construction activities, from areas with daily or intermediate cover, or from areas with final diverted to an onsite sedimentation pond.
25. The sedimentation pond shall be constructed and maintained to collect and control at least the water volume resulting from a 24 hour, 25-year event storm. Periodic dredging shall be conducted to maintain proper elevations.
26. Surface water contaminated by contact with solid waste and surface leachate flowing from filled areas of the landfill shall be collected and disposed as leachate. Surface leachate and contaminated surface water shall not be allowed to flow offsite of the landfill property.
27. Leachate collection systems shall be cleaned, maintained, and pumped as necessary to properly manage leachate collection. The depth of leachate over the liner, excluding the sumps and trenches, 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.
28. Leachate and gas condensate shall not be recirculated back into the landfill, unless an operational plan including detailed drawings is submitted to and approved by the Department.
29. Groundwater monitoring wells shall be installed according to the following schedule, unless otherwise specifically approved by the Department: (Example: MW-01 to be installed prior to disposal in Cell 7.)

<u>Install Well Number:</u>	<u>Prior to disposal in Cell:</u>
MW-05	14
MW-06	14
MW-11	10
MW-12	11
MW-13	12

Each well shall be sampled within six (6) months after the date of installation. Installation reports containing methodology, construction logs, well specifications, depths, and surveyed locations shall be submitted to the Department no later than sixty (60) days after installation of the wells.

30. Groundwater monitoring shall be conducted at the facility in accordance with state and federal regulations. Monitoring shall be conducted semiannually, unless otherwise 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 any time during the monitoring period; however, all required sampling events (except background) shall be at least four months apart. 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:

- a. The dates, exact location, and time of sampling;
- b. The individual who performed the sampling;
- c. Results of groundwater level measurements and a map indicating direction of flow;
- d. The date(s) laboratory analyses were performed;
- e. The individual(s) who performed the analyses;
- f. The analytical techniques or methods used;
- g. The results of such analyses, provided by the laboratory;
- h. The results of such analyses, prepared on a form provided or approved by the Department;
- i. The statistical comparison of analyses;
- j. A determination of statistically significant increase ; and
- k. Chain of custody forms

31. Groundwater assessment monitoring and corrective action, if necessary, shall be conducted at the facility, in accordance with state and federal regulations.

32. Additional methane monitoring wells shall be installed according to the following schedule, unless otherwise specifically approved by the Department: (Example: GP-1 to be installed prior to disposal in Cell 6.)

<u>Install Well Number:</u>	<u>Prior to disposal in Cell:</u>
GP-5	16
GP-6	15
GP-7	15
GP-12	11
GP-13	12
GP-14	12
GP-15	12
GP-16	11
GP-17	16

Each well shall be sampled no later than three (3) months after the date of installation.

33. Methane monitoring, and corrective action, if necessary, shall be conducted at the facility in accordance with state regulations and the approved operating plan. Monitoring shall be conducted quarterly, unless otherwise directed by the Department, according to the following schedule:

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

Measurements may be taken at any time during the monitoring period; however all required monitoring events shall be at least 45 days (1 ½ months) apart. The following reports and records shall be submitted to the Department according to the schedule above:

- a. The dates, exact location, and time of measurements;
 - b. The individual(s) who performed the measurements;
 - c. The results of methane level measurements, for monitoring wells and for facility structures. Results shall be submitted on a form provided or approved by the Department.
34. The methane gas collection system shall be installed upon placement of final cover as designed in the application drawings dated March 30, 2013, unless an alternate design is submitted to and approved by the Department.

35. 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:
- a. aggregate information on the types, amounts, and sources of waste received during the calendar year. Listed types should be divided minimally into residential and nonresidential. The sources of waste should have cities and/or counties listed individually.
 - b. a contour drawing of the landfill showing areas filled during the report year and total areas filled.
 - c. estimated remaining capacity, in terms of volume or tons of waste. Include documentation that the remaining volume is sufficient to handle Chickasaw County's waste volumes identified in the Chickasaw County Solid Waste Management Plan.
 - d. an updated disclosure statement for the permittee. If all information from the previously submitted disclosure statement is unchanged, a letter stating such may be included in lieu of an updated disclosure statement.
 - e. if the operator is a private concern, an updated disclosure statement. If all information from the previously submitted disclosure statement is unchanged, a letter stating such may be included in lieu of an updated disclosure statement.
 - f. an adjusted closure and post-closure cost estimate.
 - g. an audit of the financial assurance document, if necessary.
 - h. a modified financial assurance document, if necessary.
 - i. documentation demonstrating that the facility personnel have been properly trained to recognize regulated hazardous waste and PCB waste.
 - j. documentation of compliance with operator certification requirements in accordance with state regulations.
 - k. a record indicating the dates, times, and locations where a head measurement greater than the maximum limitation of 30 cm on the liner was observed, the probable cause, and the actions taken to correct the problem, if necessary.
36. Operation of the facility shall be conducted in accordance with all applicable requirements of the U.S. Army Corps of Engineers.

37. Any significant changes to the approved closure or post-closure plan must be submitted to the Department for approval before being implemented.
38. Upon completion of disposal activities within cells 1-16, a surveyed landfill drawing shall be submitted to the Department showing final contours and the boundaries of waste disposal.