

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

Riverbend Environmental Services, LLC

has been granted permission to operate a solid waste management facility

located at

Sections 29, 30, 44, 46 & 69, Township 8 North, Range 1 East
Jefferson County

under the name of

Riverbend Environmental Services Landfill

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: August 9, 2011
Modified: JUL 0 8 2015
Expires: July 31, 2021**

Permit No. SW0320040549

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.
8. Signature Requirements. An application for the re-issuance, modification or transfer of this solid waste management permit and all permits required by this permit or other information requested by the Permit Board shall be signed as follows:
 - a. For a corporation: a president, vice-president, secretary, or treasurer of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation;
 - b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

- c. For a municipality, county, state, federal, or other public agency: either a principal executive officer or ranking elected official;
- d. The signature of a Duly Authorized Representative (DAR) shall be a valid signature under the state regulations, in lieu of the signatures described previously provided the following conditions are met:
 - i. The DAR is an employee of the entity holding the solid waste management permit.
 - ii. The DAR is identified to the Department by the ranking officer of the corporation, partnership, proprietorship, municipality, county state, federal or other public agency.
 - iii. The DAR is responsible for the overall management of the solid waste facility.

E. SITE SPECIFIC OPERATING CONDITIONS

- 1. The Construction of landfill components initiated prior to Department approval of the QA/QC plan shall be considered a violation of this permit unless otherwise authorized by the Department. The Department shall be notified of an approximate construction schedule at two weeks prior to liner and final cover construction activities.
- 2. The permittee shall be prohibited from the construction of any landfill component or from any disposal activities on the parcel of land located within Section 29, Township 8 North, Range 1 East, Jefferson County consisting of approximately 45 disposal acres beginning in the northernmost section of Cell 1 and terminating in the southwest section of Cell 2 as described in the approved application and more specifically described as 113 total property acreage, more particularly described in Deed Book BBB at page 436 recorded in the land records of Jefferson County, Mississippi. Construction and disposal activities shall be allowed within this area upon resolution of ownership or current lease agreement with the landowner of record and as directed by the Department.

3. Construction of the landfill 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 materials which would not be suitable buffer material. Unsuitable materials shall be removed and replaced with buffer material having a 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 the 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, 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 each lift, the lift surface shall be scarified for proper bonding.
 - c. During the construction and preparation of the buffer subbase and the soil liner, the surface shall not be allowed to dry and crack before placement of the next layer. If desiccation cracks form, the surface shall be re-wetted, rehomogenized and recompactd to the depth of the cracks prior to placement of the succeeding layer.
 - d. Field density, permeability, and moisture content 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 due to heavy equipment, tearing, puncturing, exposure to the sun and any other source of damage. Field seams shall be oriented vertically along the side slopes. The protective layer shall be promptly placed over the geomembrane, and properly maintained until waste is placed over the area.
4. All borings drilled on the site in preparation of cell construction, which will not be converted to monitoring or supply wells, shall be properly sealed prior to any waste disposal activity.
5. 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.
6. Prior to the disposal of solid waste in Subcell 1-7, the dry oil well shall be adequately plugged, to the satisfaction of the Department, and a plugging record shall be submitted to the Department. The Department shall be notified at least two weeks prior to the inspection and plugging of the well.

7. Prior to the disposal of solid waste in Cell 2 or any subcell thereof, a detailed construction plan for Phase 2 methane monitoring wells shall be submitted to the Department for approval.
8. All applicable federal requirements regarding the training of personnel at the site shall be demonstrated to the satisfaction of the Department. Record of training events shall be submitted to the Department no later than February 28th of each year for the previous calendar year. Such records may be submitted with the required annual report.
9. Financial assurance shall be maintained for closure and post-closure costs, as required by State law, regulations and any associated agreed order issued by the Commission on Environmental Quality.
10. The disposal of solid waste shall be restricted to the approved permitted area, consisting of approximately 162 acres, and shall be within approved elevations maintaining a 25% slope on all exterior side walls and a 4% slope on the top of each cell area. The final waste height shall not exceed 432 feet mean sea level or 170 feet above natural grade.
11. At least two weeks prior to the placement of solid waste within a newly constructed cell or subcell within the permitted area, a construction quality assurance/quality control report(s) shall be submitted to the Department for review. The report(s) shall contain a certification from an independent professional engineer, registered with the State of Mississippi, that the area has been constructed according to the approved design plans and all applicable sections of the state regulations. The report shall also include field logs, results of testing, subgrade survey, top of liner survey, and construction testing method.
12. Prior to conducting any disposal operations within disposal cells constructed in accordance with this permit, the permittee shall comply with Section III.X Noise Factors of the regulations for each instance that the buffer distance between the facility and any single family dwelling unit, existing as of November 22, 1993, is less than 1500 feet. Compliance shall be demonstrated as follows:
 - a. The owner of such dwelling provides written consent to a reduced buffer distance of less than 1500 feet;
 - b. A demonstration is provided that indicates the facility is located, configured, designed, constructed and operated such that the noise level at the neighboring dwelling, caused by the normal waste management operations of the facility, will not exceed an eight-hour time weighted average (TWA) of 65 decibels between the hours of 7 AM and 7 PM, and an eight-hour TWA of 55 decibels between 7 PM and 7 AM.
13. 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. Modifications, changes or

alterations of the construction, operation, closure or post-closure plans shall be submitted to the Department for approval prior to implementation.

14. Modification to 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.
15. If the permittee desires to operate the facility using a private contractor, a complete disclosure form for the contractor shall be submitted to and approved by the Mississippi Environmental Quality Permit Board (Permit Board) or the Permit Board's designee as set forth in Section 17-17-807 et seq., Mississippi Code Annotated and all regulations promulgated pursuant thereto. Such disclosure form shall be approved by the Permit Board before the contractor may begin operation.
16. In areas of the facility in which the disposal area is less than 500 feet to the property line, adequate screening, whether natural or artificial, shall be established and maintained to restrict the offsite view of the facility, as described in the application. Such screening shall be established within 90 days of action by the Permit Board.
17. The service area of the facility shall be consistent with the approved service area listed in the Jefferson County Solid Waste Management Plan. Solid waste generated by areas outside the approved service area shall be prohibited from disposal, unless specifically approved by the Commission on Environmental Quality (Commission).
18. A waste disposal grid record shall be maintained in the operating record to record the types of wastes disposed within a particular three dimensional coordinate. At a minimum, the following shall be recorded:
 - a. Date of waste acceptance;
 - b. Coordinate location;
 - c. Generator or source of wastes;
 - d. Type of wastes (residential, commercial, industrial, etc.).
19. Asbestos containing material shall be accepted for disposal in accordance with the asbestos management plan contained within the approved operating plan demonstrating compliance with EPA NESHAP regulations 40 CFR 61.153 and 61.154 as submitted to and approved by the Department.

20. 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.
21. No industrial process waste shall be disposed at this facility without the permittee obtaining the following information:
 - a. Generator's name and address
 - b. Transporter's name and address
 - c. Name of waste
 - d. Process generating the waste
 - e. Physical and chemical properties of the waste
 - f. Quantity of waste
 - g. Certification from the generator of the waste that the waste is not a regulated hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA) and the Mississippi Hazardous Waste Management Regulations.
22. The permittee shall forward the information required by Condition E.21 of this permit to the Department of Environmental Quality, Environmental Compliance and Enforcement Division, and shall not accept the industrial process waste unless approved by the Department. If the Department does not provide objections or approval for the industrial process waste within 14 days from date of submittal, the permittee may assume that the Department has no objections to the industrial process waste. The Department may require additional information prior to making a decision regarding acceptance of the industrial process waste.
23. Industrial process waste shall mean any solid waste generated as a result of manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of RCRA, except uncontaminated packaging materials and containers, uncontaminated machinery components, tires, land clearing or landscaping wastes, office wastes, cafeteria wastes, and construction and demolition wastes.
24. Vehicles entering the facility shall be operated and maintained to prevent the loss of liquids or solid waste material. Vehicles failing to meet this requirement, after one warning to the owner and/or driver, shall be refused acceptance at the site until the problem is resolved.
25. All solid wastes shall be covered each day at the close of operations, or more frequently, to control disease vectors, fires, odors, blowing litter, and scavenging. Cover shall consist of at least 6 inches of earthen cover material or an alternate approved method of cover. An alternate method of cover may be used if a specific description and plan of cover application is submitted to and approved by the Department.

26. The permittee shall conduct random inspections of incoming loads, unless the permittee executes other means to ensure that incoming loads do not contain regulated hazardous wastes, PCB wastes or other unauthorized wastes. Such inspections shall occur once per every twenty (20) waste loads received, but no less than once per operating day. The permittee shall maintain a record of all inspections.
27. The permittee shall immediately notify the Department if a regulated hazardous waste or PCB waste is discovered at the facility.
28. Litter and scattered debris at the facility, including property access roads, shall be collected every operating day and returned to the active disposal area.
29. Filled areas of the landfill, which have remaining capacity and which will not receive wastes within 30 days, shall receive an intermediate cover of twelve inches of earthen cover. An alternate cover system may be approved by the Department.
30. Final cover shall be placed on completed areas of the landfill in accordance with state regulations and the approved plans. Final cover application shall be certified by a Mississippi Registered Professional Engineer.
31. The condition of daily, intermediate and final earthen cover shall be routinely inspected by landfill personnel during the operation of the facility. Erosion, cracks, ponding, and other similar problems shall be promptly repaired.
32. The permittee shall conduct daily inspections of the landfill for leachate outbreaks from the disposal area. Any evidence of outbreak shall be immediately repaired. The permittee shall report any incident of leachate leaving the permitted disposal boundary to the Department within 24 hours of the incident.
33. Burning or smoldering wastes accepted at the facility shall be extinguished in an area separate from the active disposal area and shall not be unloaded into the active area until all smoldering debris has been adequately extinguished. Such wastes, however, shall not remain uncovered at the close of daily operations.
34. Should an accidental fire occur, the operator shall immediately take action to extinguish the fire and shall notify the Department, verbally, within 24 hours. A written report detailing the incident and response shall be submitted to the Department within 5 working days.
35. The landfill and each landfill subcell shall be constructed, operated, and maintained with berms, ditches, or other means such that uncontaminated surface waters are directed around and away from the landfill area. Uncontaminated surface water shall be diverted to onsite sedimentation basins.

36. The sedimentation basins shall be designed, constructed and maintained to collect and control, at a minimum, the water volume resulting from a 24 hour, 25 year storm event. Periodic dredging shall be conducted to maintain proper elevations and storage capacity.
37. Surface water which comes into contact with solid wastes and storm water which flows over the open disposal area shall be collected and disposed as leachate. Leachate shall be prevented from leaving the disposal area.
38. Leachate collection systems shall be cleaned, maintained, and pumped on a regular basis to ensure proper management of the leachate collection system.
39. The depth of leachate over the liner system shall not exceed 30 centimeters (cm) (11.81 inches), excluding trenches and sumps associated with the collection system. The depth of leachate over the liner system shall be monitored thus:
 - a. Measurements of leachate head shall be made daily.
 - b. Installation of an electronic leachate pumping system shall constitute daily measurement pursuant to the following conditions:
 - i. The permittee shall provide system records which indicate the following:
 1. Daily measurements;
 2. Quantities pumped;
 3. Proper calibration of system equipment.
 - ii. The permittee shall provide cleaning and maintenance records.
 - iii. The permittee shall provide records of any analysis and the method of leachate disposal.
 - c. The permittee shall notify the Department within 24 hours should the electronic pumping system fail or system records indicate a head of 30 cm (11.81 inches) or greater on the liner system.
 - i. The permittee shall immediately implement an alternate, manual pumping system upon failure of the electronic pumping system.
40. Leachate and gas condensate shall not be re-circulated nor disposed at the facility, unless a plan of operation for recirculation is submitted to and approved by the Department.

41. Groundwater monitoring shall be conducted at the facility in accordance with state regulations. Monitoring shall be conducted and reported semi-annually, unless other directed by the Department, according to the following schedule:
 - a. January to June: Due: August 31
 - b. July to December: Due: March 1 of the following year.
42. Groundwater samples may be obtained at any time during the monitoring period but shall be at least four months apart.
43. 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 established in Condition E.41 of this permit:
 - a. The dates, exact locations and time of sampling;
 - b. The individual who performed the sampling;
 - c. Results of groundwater level measurements and a map indicating the 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 statistical comparison of the analyses to background data;
 - i. A determination of statistically significant increases; and,
 - j. Chain of custody forms.
44. Groundwater assessment monitoring and corrective action, if necessary, shall be conducted at the facility in accordance with state regulations.
45. Methane monitoring shall be conducted quarterly and reported semi-annually, unless otherwise directed by the Department, according to the following schedule:
 - a. January to March: Due: August 31
 - b. April to June: Due: August 31
 - c. July to September: Due: March 1 of the following year
 - d. October to December Due: March 1 of the following year.
46. Methane measurements may be obtained at any time during the monitoring period but each monitoring event shall be at least 45 days apart.
47. The following reports and records shall be retained in the operating record and a copy shall be submitted to the Department according to the scheduled established in Condition E.48 of this permit:
 - a. The dates, exact locations, and time of measurements;

- b. The individual who performed the measurements;
 - c. The results of the methane level measurements , including the following locations:
 - i. Methane monitoring wells;
 - ii. Facility structures;
 - iii. Other enclosed spaces;
 - d. Results shall be reported on a form provided or approved by the Department.
48. Methane monitoring and corrective action, if necessary, shall be conducted at the facility in accordance with state regulations and the approved operating plan.
49. Construction, maintenance and operation of the facility shall be in accordance with all applicable requirements of the U. S. Army Corps of Engineers (USACOE), USACOE Permit MVK-ASW-2005-1449 and Mississippi Water Quality Certification WQC No. 2006004.
50. Construction, maintenance and operation of the facility shall be in compliance with all applicable requirements of the U. S. Fish and Wildlife Service.
51. Recyclable materials removed from the wastes received at the facility shall be collected and stored in a manner to prevent stormwater contamination located outside of the permitted disposal area. Such recyclable materials shall be transferred to a recycling operation monthly.
52. The permittee shall maintain a record of the recyclable materials removed from the accepted wastes and transferred as described in Condition E.51 of this permit. The record shall include a description of the recyclable materials, the tonnage, date of transfer and the receiving operation.
53. Any significant changes to the approved closure or post-closure plan shall be submitted to the Department for approval prior to implementation.
54. Upon completion of disposal activities, a survey shall be completed, by a professional land surveyor registered with the State of Mississippi, which indicates the final contours and the boundaries of waste disposal and shall be submitted to the Department.
55. A Quality Assurance/Quality Control (QA/QC) report for the closure of the facility according to the approved closure plan shall be prepared and certified by a professional engineer, registered with the State of Mississippi and submitted to the Department within 180 days following the beginning of closure.

56. The landfill shall be operated by a person who holds a current certificate of competency in landfill operations issued by the Commission in accordance with the state regulations. Such person shall have direct supervision over and be personally responsible for the daily operation and maintenance of the landfill.
57. An annual report shall be submitted to the Department each year no later than February 28 to include data regarding the preceding calendar year.
58. The annual report shall include the following information:
 - a. Aggregate information on the types, amounts and sources of wastes received during the calendar year.
 - i. Listed waste types should be divided into residential and non-residential;
 - ii. Sources of wastes should have cities, counties and/or parishes listed individually.
 - b. A contour drawing, to scale, 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;
 - d. 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. This disclosure requirement also applies to contract operators.
 - e. An adjusted closure and post-closure cost estimate, with detailed and/or itemized accounts for cost estimates;
 - f. An audit of the financial assurance document and the end-of-year value of the financial assurance mechanism;
 - g. A modified financial assurance document, if necessary;
 - h. Documentation and demonstration that the facility personnel have been properly trained to recognize regulated hazardous waste and PCB waste.
 - i. Documentation of compliance with operator certification requirements in accordance with state regulations.
59. The permittee shall comply with all other applicable requirements and regulations as established by the state regulations.