

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
Georgia-Pacific Monticello, LLC

has been granted permission to operate a solid waste management facility

located at
Section 36, Township 08 North, Range 21 West
under the name of
East 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: **MAR 17 2014**
Expires: **FEB 29 2024**

Permit No. SW0390040563

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 incorporates the final versions of the application materials submitted by the permittee in their entirety. 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 PREPARATION AND CONSTRUCTION REQUIREMENTS

1. Construction of the components of the landfill shall be conducted by qualified and experienced personnel. At least 14 days prior to initiating construction of the landfill or any cell or construction phase therein, the Department shall be provided an approximate site preparation plan, construction schedule and construction grade drawings on the affected area. The Department shall also be notified at least two weeks prior to liner construction activities of the subject cell or planned construction phase of the landfill.
2. A construction quality assurance (CQA) plan for the liner and leachate collection system shall be submitted to the Department for approval prior to initiation of site preparation activities. Tests for field density, moisture

content, permeability, and any other appropriate soil properties shall be conducted in accordance with the approved CQA plan. Test holes in the soil liner shall be sealed with bentonite, or another method approved by the Department.

3. Construction of the landfill and any individual cell or construction phase therein shall be conducted in accordance with the following, unless an alternate method is approved by the Department:
 - a. In preparation of the areas for liner construction, the in-situ subbase shall be inspected for cracks, large stones, other protrusions, and for solid materials which would not be suitable buffer material. Areas where unsuitable subbase conditions or groundwater seeps exist shall be excavated and the soils replaced with suitable soil. The surface shall be compact, smooth, uniform, and free of desiccation cracks.
 - b. Prior to placement of the recompacted soil liner system, the surface of the prepared subbase shall be scarified where possible for proper bonding with the liner. The liner shall be placed in 8-inch maximum lifts, evenly compacted to the density and moisture content required. Placement of the liner on the side slopes and interior cell 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 and/or preparation of the buffer subbase and the recompacted soil liner system, 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 recompacted to the depth of the cracks before placement of the succeeding layer.
 - d. As specified in the approved plans (Drawing 9330113-C10, Revision G), the liner will consist of the following components from bottom to top: 2 feet of recompacted clay (1×10^{-7} cm/sec), geosynthetic clay liner (5×10^{-9} cm/sec), 60-mil HDPE geomembrane liner, 24 ounce per square yard Geocushion, and 12 inch aggregate drainage layer.
 - e. The storm water management and surficial run-off collection system throughout the facility including the perimeter and interior diversion berms, side slope diversion swales, silt fence controls, and the sedimentation basins shall be constructed as per the approved Storm Water Pollution Prevention Plan drawings (Drawings 9330114-C01 through C05, Revision E and Drawing 9330113-C06, Revision G) dated August 2013 and in such manner so as to inhibit erosion and other damage.

- f. The landfill and each individual cell therein shall be constructed to direct uncontaminated surface water around and away from the landfill.
4. The permittee shall construct a groundwater monitoring system that will include an upgradient well located at the eastern side of the property and 6 total downgradient wells along the northern, southern, and primarily western sides of the property as described in the permit application dated September 2012. Five wells, MW-101 through MW-105 have been installed. MW-106 shall be installed prior to Phase 1A construction, and MW-107 shall be installed prior to Phase 3 construction.
5. The groundwater monitoring system shall be implemented and constructed in accordance with the state regulations and approved plans (Revision E) from the permit application dated September 2012. Prior to site preparation and liner construction activities at the landfill, the permittee shall conduct at least one initial groundwater sampling event to establish background groundwater quality data in accordance with state regulations.
6. Prior to the placement of any waste in the landfill, the following activities shall be conducted:
 - a. 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 as per the requirements of the Office of Land and Water Resources. A copy of the decommissioning form(s) shall be submitted to the Department after plugging of the wells.
 - b. Access restrictions and security measures must be installed and implemented.
 - c. An installation report shall be submitted to the Department for the groundwater monitoring system, to include methodology, well specifications, depths, and a surveyed drawing depicting well locations and well identification numbers.
 - d. At least 14 days prior to the placement of waste in the landfill, a groundwater quality report shall be submitted to the Department including the results of the initial background groundwater monitoring event(s) required by Condition E.5. If for any reason waste is not placed in the landfill within one year of the first background sampling event, a second groundwater sampling event shall be conducted in accordance with state regulations and the approved monitoring plans described in the permit application dated September 2012.
 - e. At least 14 days prior to the placement of waste in the landfill and in a

newly constructed cell or phase therein, a construction quality assurance (CQA) report shall be submitted to the Department for approval. The report should contain a certification from an independent registered professional engineer in the state of Mississippi that the area has been constructed according to the approved plans (Revision E, supplemented by Revision F – Drawing 9330113-C14 and Revision G – Drawings 9330113-C06, C09, and C10) from the permit application dated September 2012, and all applicable state regulations. The report shall also include field logs, results of testing, subgrade survey, top of liner survey, and construction testing methods.

7. Should historical or archaeological artifacts be discovered at any time within the landfill site, the permittee shall immediately notify the Department and shall contact the Mississippi Department of Archives and History for proper guidance.
8. Open burning of land clearing debris generated on site of the facility shall be allowed pending compliance with the following:
 - a. Land clearing debris to be burned shall be staged at least 100 yards from active or filled portions of the disposal area;
 - b. Burning operations shall be conducted in compliance with 11 Miss. Admin. Code Pt. 2, R. 1.3.G.;
 - c. Burning operations shall be conducted in compliance with all applicable local laws, ordinances, and/or regulations.
9. Activities involving the construction, operation, closure, and post-closure of the landfill shall be conducted in accordance with the state regulations and approved plans (Revision E, supplemented by Revisions F and G) from the September 2012 permit application as submitted to the Department.

F. OPERATING CONDITIONS

1. The facility shall be operated in accordance with the approved plan of operation included in the permit application dated September 2012, unless the Department approves an altered or modified plan of operation.
2. The permittee is authorized to landfill boiler ash, causticizing area wastes, wastewater treatment and process residuals, wood and yard waste, rubbish, and construction/demolition debris as described in the approved plan of operation included in the permit application dated September 2012. Any other wastes generated onsite must be approved by the Department prior to their disposal at this facility. No wastes generated offsite shall be

disposed of in this landfill.

3. The placement of waste shall be restricted to the approved permitted area consisting of Phases 1A, 2, and 3 as described by the Revision E drawings (supplemented by Revision F and G Drawings). This area consists of 19.6 acres for disposal, and the height will not exceed 314 ft (MSL).
4. Disposal area boundaries shall be clearly marked and maintained throughout the life of the facility. Placement of the permanent boundary markers shall comply with the following:
 - a. The markers shall be at least three (3) feet in height;
 - b. The markers shall be constructed of concrete posts, metal pipes, weather treated wood posts, metal fence posts or other marker materials as approved by the Department;
 - c. The markers shall be at least two (2) inches in diameter, with the exception of the metal fence posts, and shall be placed in the ground at sufficient depth to facilitate permanence.
 - d. Marker locations shall be located by a Professional Surveyor, registered with the State of Mississippi, and the certified survey indicating the locations and GPS coordinates of the permanent markers with a cover letter shall be submitted to the Department as part of the CQA Report to be submitted as part of Condition E.6.e of this permit.
 - e. The Permittee shall inspect the boundary markers monthly and repair or replace markers that have been damaged or inadvertently removed from the disposal boundary. Boundary marker replacement shall comply with Conditions F.4.a-d of this permit.
5. A formal modification of this permit must be approved by the Permit Board or the Board's designee prior to a vertical or horizontal expansion of the landfill as well as a significant change in the method of waste management or conditions of this permit.
6. The permittee shall manage the inspection and acceptance of any waste load as follows:
 - a. Incoming waste loads containing significant amounts of unauthorized wastes shall be refused at the site. Loads with incidental amounts of unauthorized wastes may be allowed to dump only after the unauthorized materials are removed from the load.
 - b. Unauthorized wastes discovered to have been inadvertently or accidentally dumped at the site shall be removed immediately.

- c. All unauthorized wastes removed from incoming waste loads or the active disposal area shall be transported to an appropriately permitted disposal facility or placed within a waste receptacle for later transfer.
7. Unloading and disposal of waste shall be controlled by the operator and shall be confined to as small an area as practical.
8. No removal of solid waste from the landfill shall be conducted without the approval of the Department.
9. Open burning of solid waste shall be prohibited. The Permittee shall implement all necessary fire prevention measures as outlined in the approved plan of operation dated September 2012. In the event of an accidental fire, the operator shall implement necessary steps to extinguish the fire and notify the Department within 24 hours.
10. Boiler ash materials, grits and dregs, or similar soil-like wastes permitted for disposal shall be used for intermediate cover as needed. The Department may require the placement of cover soils upon determination that these materials do not provide appropriate protection.
11. Appropriate actions shall be taken 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 landfill, from the access and transport roads, and from other facility components.
12. Operations shall be carried out to prevent the scattering of all windblown litter as well as minimize vector attraction at the landfill. Windblown and scattered litter and/or debris within the buffer zones, facility operations areas, and access roads shall be collected at the end of every operating day for proper disposal.
13. Security must be maintained at the landfill 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.
14. All-weather access and transport roads shall be constructed and maintained at the site to maintain operations during inclement weather conditions.
15. Vehicles entering the facility shall be operated and maintained to prevent the loss of liquids or solid waste material.
16. The Permittee shall at all times provide, properly operate, and maintain equipment and systems utilized to achieve compliance with the conditions

of this permit and all applicable laws, ordinances and regulations. The Permittee shall ensure proper training of all facility employees and ensure the employment of an adequate amount of employees required to properly operate the facility.

17. Solid wastes shall not be disposed in standing water, in any waters of the state, nor in any manner that may result in the wash-out of wastes.
18. The storm water management and surficial run-off collection system throughout the facility including the perimeter and interior diversion berms, side slope diversion berms, silt fence controls, and the sedimentation basins shall be properly maintained. Erosion, sloughing, or other damage which may affect the integrity of any of the conveyance systems shall be promptly repaired.
19. The perimeter and interior diversion berms, side slope diversion berms, and the sedimentation basins shall be constructed and maintained to control, at a minimum, the uncontaminated water volume from the facility resulting from a 24-hour, 25-year event storm. Periodic cleaning and/ or dredging shall be conducted as necessary to maintain capacity.
20. Surface water which has contacted waste, surface leachate flowing from filled areas of the landfill, and sub-surface leachate shall be collected and managed as leachate. Surface leachate and contaminated surface and/or groundwater shall not be allowed to flow offsite of the landfill, but shall be routed back to the main facility's wastewater treatment plant via force main as described in the permit application dated September 2012.
21. Leachate accumulation over the liner shall be controlled as follows:
 - a. The depth of leachate over the liner, excluding the trenches and sumps, shall not exceed 30 cm, except during major storm events that produce storm water at a rate faster than the pump system can remove it from the site. Should the permittee observe excess leachate head in the landfill after the 72 hours required for the pump system to remove a 24-hour, 25-year event storm, immediate action shall be taken to correct such conditions.
 - b. Prior to landfill construction, the Permittee shall submit approvable engineering drawings reflecting the Phase 1A and Phase 3 sump modifications needed as part of the approved system for monitoring leachate head over the liner.
 - c. Upon completion of landfill construction and its certification in accordance with Condition E.6.e. of this permit, the Permittee shall submit a modified Plan of Operation document. The modified plan shall include a procedure for measuring the leachate levels within the

Phase 1A and Phase 3 pump stations as a means of maintaining compliance with Part a. of this permit condition.

- d. The leachate collection system shall be cleaned, maintained and pumped as necessary to properly manage leachate collection. Measurements of leachate head shall be measured daily except for weekends and holidays in accordance with the modified Plan of Operation required by Part c. of this permit condition.
 - e. Records of daily measurements, quantities of leachate pumped, routine maintenance, pump shutdown or failure events, and any analysis shall be kept on site and available for inspection upon request.
22. All transport piping, pumps, and other structures utilized to transport leachate from the landfill to the wastewater treatment facility or within the landfill shall be properly maintained to ensure compliance with applicable permit conditions and in such a manner so as to prevent excessive leachate accumulation, leakage or spills. Any such leakage shall be repaired immediately.
 23. The facility shall be constructed, operated and monitored in such a manner so as to ensure that the Mississippi Groundwater Quality Standards are not exceeded by any activity of this facility.
 24. The landfill shall be constructed, operated and monitored in such a 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.
 25. Operation of the landfill shall be conducted in accordance with all applicable laws, regulations and permit conditions of the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service.
 26. The Department may require changes in the operating conditions of the landfill, including requiring more frequent intermediate cover, modifying leachate management conditions and implementing other control measures as necessary to prevent or correct conditions at the landfill which cause, contribute to, or allow environmental, public health, or public nuisance problems.

G. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. 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 items listed below:

- a. The amount of waste in tons deposited in the landfill during the calendar year;
 - b. A contour drawing depicting the top elevation of the landfill at the end of the report year;
 - c. An estimated remaining capacity, in terms of both volume and tons of waste;
2. Groundwater monitoring shall be conducted at the landfill in accordance with the approved groundwater monitoring plan from the permit application dated September 2012 to include all parameters listed in Appendix I of 40 CFR 258.
3. Groundwater monitoring shall be conducted semi-annually, 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	February 28 (of the following year)

Samples may be taken at any time during the monitoring period; however, all required sampling events (except background) shall be at least four months apart. The following records shall be retained in the operating record as well as compiled in a report to 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. A statistical comparison of analyses;
 - j. A determination of statistically significant increase; and
 - k. Chain of custody forms.
4. All groundwater samples shall be taken by qualified personnel as per EPA approved sampling procedures and chain of custody requirements.

5. 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 feasible upon becoming aware of such conditions and shall provide a written report within seven (7) days. The written report shall detail what problem has occurred and corrective measures taken to prevent the recurrence. The location and design of any replacement or corrective monitoring well shall be approved by the Department prior to installation.
6. Groundwater assessment monitoring and corrective action, if necessary, shall be conducted at the facility in accordance with the state regulations and the plans from the permit application dated September 2012 approved by the Department.
7. When requested by the Department, the permittee shall inform the Department of the next groundwater sampling schedule so that a representative of the Department may be present to collect a split or duplicate sample.
8. Upon the establishment of sufficient historical data or other suitable demonstration, the Department may consider a request for a variance or may require a variance to the monitoring points, monitoring occurrences, or monitoring parameters.

H. CLOSURE/POST-CLOSURE REQUIREMENTS

1. An updated closure / post-closure plan for the landfill shall be submitted to the Department for approval at least 120 days prior to initiation of final closure of the landfill. This plan shall include, at a minimum:
 - a. a description of and the construction details of the final cover system and the surface water control structures;
 - b. a construction quality assurance (CQA) plan for the final cover system components, drainage system features and any other appropriate closure components;
 - c. a plan for interior, exterior and subsurface drainage and dewatering of the landfill as appropriate;
 - d. a proposed schedule of closure activities; and
 - e. a description of the post-closure monitoring plans and a proposed schedule of monitoring for the approved post-closure monitoring

period having a minimum duration of 30 years.

2. An approved final cover system shall be placed on the completed areas of the landfill in accordance with the state regulations and the approved plans (Drawing 9330113-C14, Revision F) in the permit application dated September 2012.
3. Within 90 days of closure of the landfill, a Quality Assurance/Quality Control report shall be submitted to the Environmental Compliance and Enforcement Division for construction of the landfill cap. Include with this document a certified survey of the entire landfill with contours. The report shall also include field logs, results of testing and construction testing methods. Lastly, the report shall contain a certification from an independent professional engineer registered in Mississippi that verifies that the cap is constructed in accordance with the approved plan of operation from the permit application dated September 2012.
4. 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.
5. Any requests for 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.
6. The Department may require the permittee to implement a financial assurance mechanism for closure/post-closure activities at the landfill should the Permit Board determine it necessary. Should the Department determine the operation conditions at the site warrant the establishment of financial responsibility, the permittee would be required to estimate the costs of disposal of the maximum amount of wastes expected on-site before closure of the facility. At that time, the permittee shall be required to provide the Department with proof of financial responsibility issued in the amount of the closure cost estimate each year as part of the annual report required in Condition G.1 of this permit.