

# 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**

**City of Jackson**

has been granted permission to operate a solid waste management facility

located at

Sections: 2 – 3, Township: 6N, Range: 4W  
Sections: 34 – 35, Township: 7N, Range: 4W  
Section: 29, Township: 7N, Range: 3W  
of Hinds County

under the name of

**Holmes Land Application Site**

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**

  
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**AUTHORIZED SIGNATURE**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Issued: November 26, 2019**  
**Expires: October 31, 2029**

**Permit No. SW0250030493**

16598 PER20180001

## CONDITIONS

### A. EFFECT OF PERMIT

The permittee shall operate the solid waste management facility in accordance with the Mississippi Nonhazardous Solid Waste Management Regulations (11 Miss. Admin. Code Pt. 4, Ch. 1), applicable state and federal regulations, the approved permit application, and the conditions of this permit. Any changes, alterations, or modifications of the above referenced regulations which pertain to any condition of this permit shall supersede and replace the affected conditions of this permit. In such instances, the permittee shall comply with the altered condition(s) of the regulations.

### B. PERMIT ACTIONS

This permit may be modified, revoked, and/or reissued for good cause or noncompliance with the terms and conditions of the permit. The filing of a request for a permit modification, 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 Mississippi Code Annotated and regulations promulgated thereunder and is grounds for enforcement action, permit termination, revocation, reissuance, or 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, 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. Property Rights. It is the responsibility of the permittee to possess and maintain a sufficient interest in or right to the use of the properties described in this permit, including the access route(s).

The issuance of this permit does not convey any property rights or interest in either real or personal property; nor does it authorize any injury to private property, invasion of personal rights, or impairment of previous contract rights; nor any infringement of Federal, State, or local laws or regulations outside the scope of the authority under which this permit is issued.
8. Anticipated Noncompliance. The permittee shall give written notice to the Department at least 30 days in advance of any planned changes in the permitted facility or activity which may result in noncompliance with the requirements of this permit or the Mississippi Nonhazardous Solid Waste Management Regulations.
9. Modification of Permits. Any proposed modification to the approved application or plan of operations resulting in an expansion of the disposal area or a significant change in the method of waste management must be approved by the Permit Board or the Board's designee prior to implementation. Other proposed modification to the approved facility design or operations must be approved by the Department prior to implementation.

10. 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.
11. Disclosure. The permittee shall submit an updated disclosure statement to the Department by February 28 of each year. If all information from the previously submitted disclosure statement is unchanged, a letter stating such may be submitted in lieu of an updated disclosure statement.
12. Signature Requirements. The permittee shall ensure that an application for the reissuance, 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 of the Mississippi Nonhazardous Solid Waste Management Regulations
13. Contract Operator. If the permittee executes a contract with a private entity to operate the land application site, a complete disclosure statement for the contractor shall be submitted and approved by the Permit Board or the Permit Board's Designee as set forth in state law and regulations prior to the contractor beginning operations.

**E. AUTHORIZED WASTES**

1. The permittee is authorized to accept and land apply the following treated municipal wastewater sludges (biosolids):
  - a. Savanna Street wastewater treatment plant in Jackson, MS  
Waste: treated municipal wastewater sludge (biosolids)
  - b. Trahon wastewater treatment plant in Jackson, MS  
Waste: treated municipal wastewater sludge (biosolids)
2. Prior to land application, the permittee shall ensure that authorized biosolids comply with the Class B pathogen requirements in 40 CFR 503.32 and with the monitoring and analysis requirements of Section G of this permit.
3. The Department may approve biosolids from new sources after having approved written documentation of the name and address of the generator; the sludge analysis for all parameters listed in Section G of this permit; and any other information deemed pertinent.
4. The permittee shall ensure that new biosolids sources are located within the service area described in the Hinds County Solid Waste Management Plan. Biosolids

generated in areas not within the approved service area shall be prohibited from acceptance for land application at the sites authorized under this permit.

**F. LAND APPLICATION REQUIREMENTS**

1. Areas of Application

a. The permittee is authorized to land apply authorized wastes as per Section E to the approved fields designated in the application and in part F.1.b in accordance with the locational restrictions of this permit and the applicable locational restrictions of the Mississippi Nonhazardous Solid Waste Management Regulations. The application area boundaries shall be clearly marked or identified in accordance with the approved plan of operations during land application activities.

b. The approved land application areas are described as follows:

The Holmes Land Application sites include two fields located in Hinds County. The total property area is 1,084 acres with a proposed land application area of 382 acres.

Fields	Net Application Acres	Section; Township; Range
1	228	2 – 3; 6N; 4W 34 – 35; 7N; 4W
2	154	29; 7N; 3W

c. The permittee shall ensure that no biosolids are applied within 200 feet of the property line, except in areas where the off-site view of the property is restricted by natural or artificial screening. A buffer of 100 feet may be used where adequate screening exists and is maintained as identified in the approved plan of operations. No biosolids shall be applied within 100 feet of the adjacent property boundaries unless approved by the Department.

d. The permittee shall ensure that no biosolids are applied within 300 feet of any inhabited building, unless otherwise approved by the Department.

e. The permittee shall ensure that no biosolids are applied on delineated wetland areas, unless such application is conducted in accordance with the requirements of the U.S. Army Corps of Engineers and/or USDA Soil Conservation Service.

f. The permittee shall ensure that no biosolids are land applied within 250 feet of the banks of any river, stream, lake, reservoir or coastal water. The Department reserves the right to require greater buffer distances should the conditions of the operation warrant such change.

- g. The permittee shall ensure that no biosolids are land applied within the 100-year floodplain.

2. Operating Conditions

The permittee shall ensure that land application activities are conducted in accordance with the following conditions:

- a. The permittee shall provide written notification to the Department at least 7 days prior to beginning or resuming land application activities at any permitted field.
- b. Approved sludges shall be land applied in accordance with the approved plan of operations and the following methods:
  - 1. Surface application followed by incorporation into the soil, or
  - 2. Other acceptable means of application as approved by the Department
- c. The permittee shall ensure that incorporation is accomplished by applying the wastes uniformly and disking or plowing until the waste is adequately turned under the soil or thoroughly mixed with the soil. The permittee shall also ensure that incorporation is accomplished during or immediately following application.
- d. The permittee shall ensure that all biosolids transported to the site of application are applied on the same day as received. Any biosolids that cannot be applied on the same day shall be removed and disposed at another permitted land application site or permitted disposal facility or otherwise managed in a manner approved by the Department.
- e. The permittee shall ensure that application of sludge to permitted fields shall be done such that overloading does not allow for sludge to remain above the ground surface. The Department may require a hydraulic loading rate if deemed necessary to meet this condition.
- f. The permittee shall ensure that the land application activity is conducted in a manner that will prevent objectionable offsite odors, vectors, or other off-site nuisances.
- g. The permittee shall ensure that land application of sludge or other residue is not applied to saturated ground. Saturation may be determined by digging a hole one foot deep at the lowest point of the application area and observing for 30 minutes. If water appears in the hole, the soil is considered to be saturated.

- h. The permittee shall conduct the land application activities in such manner to ensure no contaminant will be allowed to enter any surface water or groundwater as a result of runoff or infiltration that would violate any water quality standard established by the Commission on Environmental Quality.
- i. The permittee shall maintain the soil pH of each receiving field at or above 6.5, unless otherwise approved by the Department. If the initial soil testing for the field pH is below 6.5, then the initial pH recorded is the lowest acceptable pH for that field.
- j. The permittee shall ensure that no food crops with harvested parts above the surface are planted at a site that has received biosolids until at least 18 months have passed from the date of the last application. For food crops with harvested parts below the surface, the permittee shall refer to 40 CFR 503.32 for guidance on the harvesting schedule following application of biosolids. For all other crops grown for indirect human consumption, the permittee shall ensure that at least 30 days have passed between the date of the last application and the date the crop is planted.
- k. The permittee shall control access to the fields used for land application to restrict unauthorized personnel from entering the land application areas during operation and for at least 12 months following the previous application.
- l. The permittee shall strictly prohibit the grazing of animals during operations and for 30 days after application.
- m. The permittee shall ensure that biosolids being land applied under this permit have been treated or otherwise managed in accordance with one of the vector attraction reduction requirements in 40 CFR 503.33.(b).(1)-(10).

**G. MONITORING, RECORDS, AND REPORTING REQUIREMENTS**

Unless otherwise approved by the Department, the permittee shall conduct sampling, monitoring, and reporting events as follows:

1. The permittee shall ensure all biosolids and soil samples taken as required under this permit for the purposes of monitoring or quality assurance shall be representative samples taken in accordance with sampling plan described in the approved plan of operations.
2. The permittee shall obtain biosolids analyses for each source accepted at a minimum of once per year, at a frequency to be determined by the conditions in G.3. The analyses (on a dry weight basis) must include pH, TKN, ammonia-nitrogen, nitrate-nitrogen,

total arsenic, total cadmium, total copper, total lead, total mercury, total nickel, total selenium, total zinc, oil and grease concentrations, and percent solids.

3. The permittee shall obtain analyses for each source of biosolids accepted at a site – specific frequency according to the amount of sludge applied per 365 – day period as listed below and outlined in 40 CFR 503.16.

Amount of Sewage Sludge (metric tons/short tons per 365 day period)	Frequency
Greater than zero but less than 290/319	Once per year
Equal to or greater than 290/319 but less than 1,500/1,653	Once per quarter (four times per year)
Equal to or greater than 1,500/1,653 but less than 15,000/16,534	Once per 60 days (six times per year)
Equal to or greater than 15,000/16,534	Once per month (12 times per year)

4. The permittee shall retain records of all monitoring information, including copies of all reports and records required by this permit, for a period of no less than 5 years. Records of monitoring information shall include:
- The dates, specific locations, and time of sampling or measurements;
  - the individuals who performed the sampling or measurements;
  - the date(s) analyses were performed;
  - the individual(s) who performed the analyses;
  - the analytical techniques or methods used;
  - the results of such analyses; and
  - the chain of custody
5. The permittee shall not land apply the sewage sludge if the concentration of any pollutant (dry weight basis) in the sewage sludge exceeds the following ceiling concentration:



<u>Pollutant</u>	<u>Ceiling Concentration (milligrams per kilogram)</u>
Arsenic	75
Cadmium	85
Copper	4300
Lead	840
Mercury	57
Nickel	420
Selenium	100
Zinc	7500

6. The permittee shall not exceed the following annual application rates for Plant Available Nitrogen (PAN) in accordance with the cover crop as listed below:

<u>Crop</u>	<u>Maximum P.A.N. (lbs/acre/year)</u>
Bahia Grass	160
Bermuda Grass	300
Fescue	120
Cotton	180
Corn	240
Clover, Alfalfa, Vetch	450
Grain Sorghum	180
Silage Sorghum	300
Millet	150
Rye Grass	220
Soybeans	300
Wheat	135

Other cover vegetation can be grown if approved by the Department. The permittee shall obtain MDEQ approval prior to the application of biosolids in excess of the annual PAN rates for the purposes of double cropping.

7. The permittee shall not exceed an annual application rate for cadmium of 0.45 lbs/acre/year.

8. The permittee shall not exceed the following cumulative pollutant loading rates from sludge application during the life of the sludge land application activity:

Cumulative Pollutant Loading Rates

<u>Pollutant</u>	<u>Pounds per Acre</u>
Arsenic	36
Cadmium	34
Chromium	2676
Copper	1338
Lead	267
Mercury	15
Molybdenum	16
Nickel	374
Selenium	89
Zinc	2497

9. The permittee shall maintain records listing the date(s) and areas on which sludge was applied, the quantity and source of sludge applied and the types of crops grown on each area.
10. The permittee shall annually, after the final application of the year or on the schedule in the approved application, obtain at least one composite soil sample from each field of the permitted sites on which sludge was applied. The soil samples shall be analyzed for pH, nitrate, total arsenic, total cadmium, total copper, total lead, total mercury, total nickel, total selenium, total zinc, and fecal coliform.
11. The permittee shall submit to the Department an annual report no later than February 28 of each year that includes information regarding the preceding calendar year. The annual report shall include the following information:
- The total quantity (in tons) of sludge or authorized waste applied to each field
  - The source(s) of sludge or authorized waste received for land application, including facility name and physical address
  - The total permitted land application area and total number of sites or fields within the permitted application area
  - The total area used for land application during the calendar year
  - The name and/or number of sites/fields used and the type of crops grown on those fields during the calendar year
  - The analytical results or other submittals or information as required by this permit, 40 CFR 503 and/or the Department
  - Updated disclosure information, where applicable

- h. A demonstration of compliance with the pathogen and vector attraction reduction requirements in 40 CFR 503.32 and 40 CFR 503.33.(b).(1)-(10), respectively. A signed and dated certification statement must accompany this demonstration as described in 40 CFR 503.17