

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

DeSoto Treated Materials, Inc.

has been granted permission to operate a solid waste management facility

located at

Section 7, Township 2 South, Range 12 West

Stone County

under the name of

Gate 7 Solid Waste Management

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: February 27, 2013
Expires: January 31, 2023

Permit No. SW0660030510

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. LAND APPLICATION SITE SPECIFIC CONDITIONS

1. Authorized Waste.

The permittee is authorized to land apply boiler ash generated from the chip-fired boiler only from the Desoto Treated Materials, Inc. plant at 941 South Magnolia Drive, Wiggins, Mississippi. No other waste material shall be mixed with or added to this waste material and land applied without the written consent of the Department.

2. Area of Application.

Boiler ash shall be land applied to the approved area only. The approved area, as defined in the permit application, (on Desoto Treated Materials, Inc. property) consist of approximately 10 acres (excluding buffer zones and other unused areas), and co-located with the class I rubbish disposal area, located in Section 7, Township 2 South, Range 12 West, Stone County.

3. Limitations.

- a. The permittee shall not exceed an annual loading rate for cadmium of 0.45 lbs/acre/year.
- b. The cumulative application of zinc, copper, nickel, lead, and cadmium from the ash shall not exceed the following limits during the life of the field:

Soil Cation Exchange Capacity (meg/100 gm)	Maximum Limit (lb/acre)				
	Zinc	Copper	Nickel	Lead	Cadmium
Less than 5	222	111	111	445	4.4
5 to 15	445	222	222	890	8.9
Greater Than 15	890	445	445	1780	17.8

4. Monitoring, Records and Reporting

- a. Samples taken for the purposes of monitoring shall be representative of the ash being land applied and also of soil where land application is being conducted.

- b. The permittee shall retain records of monitoring information, including copies of reports and records required by this permit for a minimum of five (5) years after closure of the facility.
- c. Records of monitoring information shall include:
 - 1. The dates, exact place, and time of sampling or measurements;
 - 2. The individuals who performed the sampling or measurements;
 - 3. The date(s) analyses were performed;
 - 4. The individual(s) who performed the analyses;
 - 5. The analytical techniques or methods used;
 - 6. The results of such analyses.
- d. The permittee shall maintain monthly records listing the areas on which ash was applied, quantity of ash applied, and the types of crops grown on each area.
- e. Unless otherwise determined by the Department, the permittee shall submit an annual activity report no later January 31 of each year, which contains the following information:
 - 1. The analytical results on a representative sample of the ash load(s) applied during reporting period (on dry weight basis) which must include pH, total phosphorus, total arsenic, total cadmium, total chromium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, and percent solids. Upon establishment of sufficient historical data which confirms that the loading of the aforementioned parameters pose no environmental problem, the Department consider a request for a variance to subject monitoring.
 - 2. The pH of the ash/soil mixture on each field receiving ash, as measured with composite samples taken quarterly.
 - 3. The quantity of ash in dry tons/acre land applied each month to each field and a tabulation of the cumulative quantity for each field.

4. The quantity of zinc, copper, nickel, lead, and cadmium applied to each field receiving ash, calculated in lbs/acre, and a tabulation of the cumulative quantities for each field.
 5. The name of the crop planted, or to be planted, on each field, and the corresponding limitation allowed under Sections E.3(a), (b).
 6. Every year or upon cessation of land application at the site, the permittee shall collect and report (to be reported in the annual report) the analytical results on at least one composite soil sample from the area on which ash was applied. The soil samples from the representative sites receiving ash shall be analyzed for cation exchange capacity, pH, total arsenic, total cadmium, total chromium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, and total zinc. Upon the establishment of sufficient historical data which confirms that the loading of the aforementioned parameters pose little or no environmental problems, the Department may consider a request for a variance or exemption to the monitoring requirements.
 7. Based on the annual reports of the ash load(s) applied and soil analysis, site observations, and any presence of an environmental problem, an application loading rate shall be re-submitted annually. Upon the receipt of this information, the Department may require a variance of the application rate.
 8. The Department may, based on the reported loading rates or other operational conditions, require more frequent ash and/or soil monitoring or may require groundwater or surface water monitoring where determined necessary.
5. Operational Standards. The permittee shall operate the facility in accordance with the approved plan of operation and the following conditions:
- a. No ash shall be applied to saturated ground.
 - b. The permittee shall maintain the soil pH of each receiving site at a level acceptable for normal agricultural activities.

- c. The permittee shall prevent the discharge of solid wastes and/or contaminated runoff from the land application activity into waters of the state, which would cause an environmental problem, a public nuisance or a violation of any water quality standard established by the Mississippi Commission of Environmental Quality.
- d. Land application of wastes shall be conducted by incorporation into the soil by applying the wastes uniformly and disking or plowing until the waste is adequately turned under the soil or thoroughly mixed with the soil.
- e. Incorporation of wastes shall be accomplished in accordance with the approved plan of operation.
- f. The Department may require more frequent incorporation, reduced application rates or other necessary measures, should the means of application of the ash as described in Section E.5.d above cause or contribute to an environmental problem, public nuisance or violation of any water quality standard or regulation established by the Mississippi Commission on Environmental Quality.
- g. No materials shall be applied on wetland areas, unless the activity is in compliance with the applicable requirements of the U.S. Department of the Army Corps of Engineers.
- h. Moisture content shall be maintained in the ash at an appropriate level that would preclude problems from windblown ash, dust or other particulate; but should also be at an appropriate level to minimize potential for free liquids and contaminated surface runoff.
- i. Ash stockpiles shall be located, maintained or otherwise managed under the following conditions, unless otherwise approved by the Department:
 - i. Stockpiling of ash at the site of land application shall generally not exceed thirty days. In the event of extreme inclement weather conditions which prevent adequate access to a subject field, the stockpile may be maintained for up to a maximum of 60 days;
 - ii. The quantity of ash stockpiled at the site of land application shall not exceed the amount predetermined to be applied at the specific site;

- iii. In accordance with Section E.5.c, appropriate berms, drainage features, run-on and run-off controls, etc. shall be established at ash stockpile sites to prevent discharge of contaminated run-off. In the event that a public nuisance or environmental problem results from the ash stockpile sites, the Department may require increased runoff control measures and preventive actions at the stockpile sites, including such measures as the use of tarp covers over the stockpile; and
- iv. Stockpiles shall not be located on slopes which exceed a maximum of 15%.