MEMORANDUM OF UNDERSTANDING (MOU)

BETWEEN

Louisiana Department of Agriculture and Forestry (LDAF)

AND

Louisiana Department of Environmental Quality (LDEQ)

The above parties intend by this MOU to establish a working partnership to promote Best Management Practices (BMPs) for beneficially using organic solid waste materials. The BMP program allows for less LDEQ regulatory oversight of organic solid waste materials determined to pose minimal risk to human health and the environment if managed in an environmentally sound manner.

BMPs are intended to guide the collection, storage, and handling of organic solid waste materials such as, but not limited to, yard trash, vegetative debris, race track stable bedding, and agricultural & forestry production residues destined for soil enrichment or other approved beneficial use. BMP Plans defining appropriate locations, site preparation, and operation standards that minimize risk of adverse impact upon human health and environment must be approved by LDAF before beneficial waste management activities may commence.

Examples of organic solid waste materials that may be managed under approved BMP Plans include but not limited to:

- Woodwaste
- Vegetative debris
- Sugar mill bagasse and bagasse ash, bagasse, and filter press mud from sugar mills
- Chicken litter
- Poultry carcasses
- Rice hulls
- Ash residue from burning organic solid waste materials
- Shells from crawfish and shellfish processing
- Vegetable peels and other waste from produce packing & processing
- Cotton gin trash
- Livestock and poultry litter, bedding, and composted livestock & poultry carcasses
- Waste and wastewater from livestock, poultry, and fisheries packing & processing

Facilities desiring to participate in the BMP Program must submit to LDAF a plan providing information according to the following guidance outline, as appropriate to the proposed beneficial activities:

Introduction

- Site location & description (with a plot plan layout).
    - Location: all BMP operations must be in compliance with all local, state, & federal zoning & land use regulations.
    - Buffer zone (around site perimeter to reduce adverse impact on neighboring land users).

Site Characteristics

- Provide pleasing aesthetics and visual perimeter screening.
- Minimize risk of nuisance and adverse environmental impact (control noise, dust, odor, runoff, leachate, and vectors such as flies, rodents, snakes, termites, etc.).
- Slope site for good drainage and collection of runoff and/or pile leachate.
- Ensure site has low permeability soils (clays) or a solid working surface (concrete, asphalt, container, etc.) to protect ground water. Consult local codes for guidance and requirements. Maintain control structures or natural land features adequate to control storm water run-on and collection of runoff.

Operation Plan

- Design site layout for all-weather operation, if applicable.
- Record incoming waste and sources of waste in a logbook. Inspect incoming waste at gate before unloading. Reject loads of unacceptable waste; record rejected loads in a logbook.
- Provide distinct areas for receiving, storing, mixing, composting, and chipping/grinding. Show material flow plan on site layout.
- Provide site access controls (ex. fencing with gates).
- Develop a plan for fire control and other emergencies; train personnel accordingly.
- At closure, remove all waste materials from site; restore site to usable condition.
- Describe length of waste/compost material storage.

In addition to the above guidance, BMP program applicants should address the following for specific beneficial activities planned for the organic solid waste material.

Composting

- Provide adequate site space for anticipated volumes and composting method utilized. Provide room to expand if desired or possible. Locate large piles or windrows away from wooded areas, power lines and structures. Piles should be accessible to fire control equipment. Avoid driving or operating heavy equipment on large piles since compaction increases internal heat buildup, which could increase risk of spontaneous combustion. Locate processing equipment (e.g. chippers, grinders, etc.) at least 500 feet from the nearest inhabited dwelling. Locate staging and processing areas at least 200 feet from the nearest property line and 250 feet from the nearest state water body (e.g. lakes, rivers, creeks, streams). Locate processed material (chips) at least 100 feet from site property boundaries, on-site buildings/structures, residential dwellings, commercial or public structures, potable water supply wells, well head protection areas/boundaries and septic tanks with leach fields.
- Provide a step-wise treatment plan showing how compost will be managed to enhance aerobic decomposition.
- Monitor composting progress (i.e. temperature, organic matter decomposition, etc.) and keep logs to document moisture and temperature. In preparing compost and/or mulch piles, take care to reduce risk of spontaneous combustion. Piled organic material (especially chipped or ground) can promote rapid microbial decomposition, generating heat and volatile gases. Temperatures in large piles of organic material can rise to 160°F or more, increasing risk of spontaneous combustion. To allow escape of volatile gases, maintain windrows dimensions no greater than 6 feet high and 10 feet wide. Piles or windrows shall not be compacted.
- Allow smoking only in designated areas well away from combustible material.

- Where nuisance odors occur, take immediate steps to alleviate the problem (i.e., pile turning, material blending, air flow improvement, control of moisture content).
- Store finished compost so as not to create a nuisance.

Land Application of Organic Solid Waste Materials

- Describe application/spreading procedure, along with projected amounts stockpiled before actual land application.
- Locate ash storage at least 200 feet from incoming organic solid waste material piles, finished mulch/compost, or chipping/grinding machinery. Wet ash prior to removal from an Air Curtain Destructor (ACD) device or earth pit. Re-wet stored ash as needed to minimize airborne dust emissions.
- Provide nutrient calculations and soil application (loading) rates based upon lab analysis. Whenever possible, use soil test data and ash analysis to determine appropriate application rates. Such information may be available through parish offices of the LSU Agriculture Extension Service.
- Ash shall not be land-applied during wind conditions to avoid airborne transport off-site of application. Ash shall not be land applied within 25 feet of surface waters or within 5 feet of drainage ways or ditches on sites stabilized with vegetation (double these distances on non-vegetated sites). Placed ash shall be promptly incorporated into the soil.

Backfill with Uncontaminated Bagasse on Site

- Cover bagasse weekly (and prior to forecasted rain events) using 4-6 inches of loamy soil.
- Bagasse shall not be placed in a pit during rainfall or into standing water.
- Maintain a log of soil cover applications (include date, time, cover depth, and texture of soil used).

Copies of LDAF-approved BMP Plans will be sent to the Waste Permits Division of LDEQ as notification of enrollment in the program. The LDAF approval letter will serve as the operating authority.

Prior to operating and if required by LAC 33:VII.401.A, BMP program participants who generate and/or transport solid waste must notify LDEQ of these solid waste activities. Notification must be in writing using a form available from LDEQ's Office of Environmental Services or through the department's website (http://www.deq.louisiana.gov/portal/tabid/2886/Default.aspx).

Facility storm water runoff or discharges may be subject to LDEQ Water Discharge Permitting. Questions concerning water runoff or discharges may be directed to Ms. Kim Corts at 225-219-3208 or email Kimberly.Corts@LA.GOV.

Facility air emissions or discharges may be subject to LDEQ Air Permitting. All air emissions and burning operations are subject to Louisiana air quality regulations (LAC 33:Part.III). The facility shall comply with all regulations and permit requirements. Questions concerning air emissions or discharges may be directed to Ms. Amanda Polito at 225-219-3389 or email Amanda.Polito@LA.GOV.

LDAF will consult with LDEQ's Waste Permits Division upon receiving any BMP request involving materials not listed in this MOU, materials that are explicitly regulated by LDEQ, or materials that may reasonably be

predicted to present nuisance or adverse environmental impact if not managed properly (ex. putrescent wastes that attract flies & rodents).

The LDAF Office of Soil & Water Conservation in conjunction with LDEQ will work to resolve complaints lodged against a facility operating under an approved BMP Plan. If directed, the facility must revise the BMP Plan to address identified issues. Failure of the facility to follow the approved BMP Plan may result in LDEQ assuming full regulation of the material, including loss of exempt regulatory status, environmental permitting requirements for the facility, remedial corrective action, and/or enforcement action.

NOTE: Formosan Termites
LDAF has quarantines in place to prevent the spread of Formosan termites. Quarantined parishes include, but are not limited to, Calcasieu, Cameron, Jefferson, Jefferson Davis, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany, Tangipahoa and Washington. The authorized local government and state agency are responsible to ensure that contractors mulching and hauling wood or vegetative debris are aware of, and compliant with, the regulations regarding quarantine requirements. Questions concerning quarantines may be directed to Mr. Tyrone Dudley at 225.925.4578 or 504.286.1125 or email tyrone_d@ldaf.state.la.us. For quarantines related to other plant and animal pests and diseases, contact Mr. Tad Hardy at tad.hardy@ldaf.state.la.us or 225.952.8100.

APPROVED BY:
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Baton Rouge, LA 70821-4313

Tegan B. Treadaway
Signature

April 2, 2015
Date

Mr. Bradley E. Spicer
Assistant Commissioner
Department of Agriculture and Forestry
Office of Soil & Water Conservation
P.O. Box 3554
Baton Rouge, LA 70821-3554

Bradley E Spicer
Signature

4/8/15
Date

Facility Name: _____

BEST MANAGEMENT PRACTICES PLAN

1.0 PURPOSE

The Best Management Practice (BMP) program established by the **Louisiana Department of Agriculture and Forestry's (LDAF) Office of Soil and Water Conservation** promotes Best Management Practices (BMPs) for beneficially using organic solid waste materials. The BMP program allows for less regulatory oversight from the **Louisiana Department of Environmental Quality (LDEQ)** of organic solid waste materials determined to pose no risk or minimal risk to human health and the environment if managed properly.

BMPs are intended to guide the collection, storage, and handling of organic solid waste materials such as, but not limited to, yard trash, vegetative debris, race track stable bedding, and agricultural & forestry production residues destined for soil enrichment or other approved beneficial use. BMP Plans defining appropriate locations, site preparation, and operation standards that eliminate or minimize risk of adverse impact upon human health and environment must be approved by LDAF before beneficial waste management activities may commence

Copies of LDAF-approved BMP Plans will be sent to the Waste Permits Division of LDEQ as notification of enrollment in the program. The LDAF approval letter will serve as the operating authority.

2.0 SITE-SPECIFIC INFORMATION

Materials at this facility that will be managed under this BMP Plan are:

Material	Source	Description	Quantity

Facility Name: _____

2.1 Facility Information

LEGAL NAME OF OPERATOR: _____

FACILITY NAME: _____

LDEQ AGENCY INTEREST #: _____ PARISH: _____

MAILING ADDRESS OF FACILITY: _____

_____

PHYSICAL ADDRESS OF FACILITY: _____

_____

NAME OF CONTACT PERSON: _____

TITLE OF CONTACT PERSON: _____

PHONE NUMBER: Office: _____

Cell: _____

Fax: _____

EMAIL: _____ WEBPAGE: _____

SITE LOCATION: Lat: _____ Long: _____
(Attach map of site location.)

2.2 Siting Considerations

1. **Does the proposed location conform to all local, state, and federal regulations and restrictions including zoning & land use regulations?** (Note: federal law restricts activities in wetland areas.)

   _____

2. **What operational and/or site perimeter controls (land buffer, vegetative screening, physical barrier, etc.) will be used to reduce adverse off-site impacts, especially on neighboring land users?**

   _____

Facility Name: _____

2.3 Site Characteristics

1. **How the site will be sloped?** As needed, a proposed site must be designed for optimum surface drainage, prevention of stormwater run-on, and collection of contaminated stormwater run-off or leachate from compost or facility materials. (Note: state law requires permits for any contaminated water discharge entering public waterways, including ditches.)

2. **Describe what measures, if any, are planned to make the facility aesthetically pleasing** (landscaping, fencing, etc.)

3. **Measures taken to prevent contamination of groundwater?** Describe the control methods such as whether the site has low permeability soil (clay) or a solid working surface (concrete, asphalt, container, etc.) to prevent groundwater contamination from waste handling activities.

3.0 Operation Plan

1. **Provide a material processing flow plan describing how material will be handled from gate receiving to product storage.**

2. **Demonstrate how the waste handling activities are designed for all-weather conditions.**

3. **Provide the method to track incoming waste loads and rejected loads.**

4. **Describe site access controls (ex. fence with gates).**

5. **Provide the site plan to control fires or other emergency situations, and how employees will be trained to respond according to the plan.**

3.1 Facility Closure Plan

1. **Describe how all waste will be removed and site restored to usable condition upon site closure.**

3.2 Site Environmental Programs/Permits

List the following permits required from LDEQ:

a. **Waste water discharge permit (for sanitary, pile leachate, contaminated stormwater)?**

b. **Air permit (for dust, chemicals, or combustion pollutants released to air)?**

Facility Name: _____

4.0 ADDITIONAL INFORMATION REQUIRED BY LDEQ

1. **Please provide any additional information describing how or why the proposed facility or activities will be managed in an environmentally sound manner.**

_____

_____

_____

Important Notes:

- Prior to operating and if required by LDEQ solid waste regulations, BMP program participants must notify LDEQ of solid waste activities at each site in accordance with LAC 33:VII.401.A. Notification must be in writing using a form available from LDEQ's Office of Environmental Services or through the department's website at (http://www.deq.louisiana.gov/portal/tabid/2886/Default.aspx).
- Facility storm water runoff or discharges may be subject to LDEQ Water Discharge Permitting.
- Facility air emissions or discharges may be subject to LDEQ Air Permitting. All air emissions and burning operations are subject to Louisiana air quality regulations (LAC 33:Part.III). The facility shall comply with all regulations and permit requirements.
- LDAF will consult with LDEQ's Waste Permits Division upon receiving any BMP request involving materials not listed in this MOU, materials that are explicitly regulated by LDEQ, or materials that may reasonably be predicted to present nuisance or adverse environmental impact if not managed properly (ex. food wastes that generate odors and attract flies & rodents).
- The LDAF Office of Soil & Water Conservation in conjunction with LDEQ will work to resolve complaints lodged against a facility operating under an approved BMP Plan. As directed, the facility must revise the BMP Plan. Failure of the facility to follow the approved BMP Plan may result in LDEQ assuming full regulation of the material, including loss of exempt regulatory status, environmental permitting requirements for the facility, remedial corrective action, and/or enforcement action.
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