GRETCHEN WHITMER

GOVERNOR

STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY



LANSING

LIESL EICHLER CLARK DIRECTOR

# MANURE, PAUNCH, AND PEN WASTE EXEMPTION

Pursuant to the provisions of Sections 11553(8) and 11507 of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and the rules promulgated under Part 115, R 299.4101 <u>et seq</u>., the following forms of solid waste are granted approval to be exempt from solid waste regulation if managed in compliance with the conditions listed below:

- 1. Manures not generated from the production of livestock or poultry
- 2. Pen wastes-Pen waste is defined as manure and mixed bedding material, such as wood chips, sawdust, shredded paper or cardboard, hay, straw, and other similar items normally used for this purpose, from holding pens and other areas of a site where animals defecate and urinate.
- 3. Paunch waste (stomach contents) from slaughtered animals provided it contains minimal amounts of blood and no chemical additives or drugs
- 4. Blood that has been sufficiently solidified with saw dust, wood chips, paper, or other compostable material, that passes the paint filter test, that is composted in compliance with Section III of this authorization.
- 5. Other similar wastes approved, in writing, by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Materials Management Division (MMD).

The described wastes are collectively referred to herein as the "Material." The Material may be generated from any of the following:

- 1. Slaughtering facility, which includes a mobile facility;
- 2. Racetrack;
- 3. Research facility;
- 4. Animal control facility;
- 5. Veterinary facility; or
- 6. Other locations generating wastes similar to the named facilities.

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## I. Disposal in Landfills or Wastewater Treatment Plants

- A. The Material may be disposed in a Type II Municipal Solid Waste Landfill (Landfill) licensed pursuant to Part 115, provided the disposal is consistent with the Landfill's waste acceptance policies and the Material is solidified sufficiently to pass the paint filter test.
- B. The Material may be disposed into a Municipal Wastewater Treatment Plant (Plant) provided it is done consistent with the Plant's procedures and the Material is transported in accordance with Part 121, Liquid Industrial By-Products, of the NREPA, if it contains free liquids.

#### II. Disposal by Land Application

The Material may be land applied, provided it is done in accordance with the following conditions:

- A. The Material shall be applied only to agricultural or silvicultural lands that need fertilization as demonstrated by laboratory soil tests. These agricultural fields must currently be in use, or will be used in the next growing season, for crop production or harvest in the case of agricultural land. Fall applications of Material shall be restricted to fall-planted crops such as winter wheat, forage stands, or for silvicultural use.
- B. Application of the Material to agricultural or silvicultural lands shall not exceed any of the following:
  - 1. The agronomic rate for the crop to be grown on the site subsequent to the application of Material to the site. The agronomic rate is defined as that rate that provides the nitrogen, phosphorus, and other nutrient needs of the crop but does not overload the soil with nutrients or other constituents that may eventually leach to groundwater, limit crop growth, or adversely impact soil quality.
  - 2. The nitrogen and phosphorus addition recommendation as stated in the results of the soil test.
- C. The Material shall not be applied to a site previously used for land application of biosolids, wastes, septage, or wastewater from any other business or facility, without written permission of the MMD.
- D. Material that is surface applied to agricultural soil shall immediately be incorporated into the soil after application to land, unless prior to application, EGLE approves an alternate time frame.

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- E. The Material shall not be applied in a manner that adversely restricts soil permeability or causes ponding, pooling, or runoff in the area.
- F. The Material shall not be surface applied to slopes exceeding a six percent grade or injected into slopes that exceed a 12 percent grade.
- G. The Material shall not be applied within the following isolation distances for the application methodology used at the application site:

	Application Methodology Distance in Feet	
	Surface	Subsurface
	<u>Application</u>	Injection
Municipal Water Supply Domestic Wells Homes and Commercial Buildings Public Roads and Property Lines Surface Water	2,000 150 500 150 150	2,000 150 100 25 50

- H. The Material shall not be applied to a site with a water table less than 30 inches below the surface of the soil at the time of application.
- I. The Material or constituents contained in the Material shall not come into direct contact with surface water, groundwater, or a wetland as defined by the NREPA, and the administrative rules promulgated thereunder, unless approved or permitted by EGLE.
- J. The application of the Material shall not cause erosion or sedimentation to occur in violation of Part 91, Soil Erosion and Sedimentation Control, of the NREPA or the rules promulgated under Part 91.
- K. Prior to application, the Material shall not be mixed with other wastes that are not inert as defined by Part 115 or the rules promulgated under Part 115, unless appropriate approvals or permits as required by state and/or federal law are obtained.
- L. Any Material that is removed, stored, transported, or land applied shall be managed in such a way so as to prevent nuisance conditions and the release of fugitive dust or visible emissions in violation of Part 55, Air Pollution Control, of the NREPA or the rules promulgated under Part 55.
- M. Vehicles used to transport the Material shall comply with the Michigan Motor Vehicle Code, 1949 PA 300, as amended (MMVC), and the rules promulgated under the MMVC. The Material shall be covered to prevent loss to the environment during transport and delivery to application sites.

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- N. Except as provided in this paragraph, land application of Material shall not occur after December 21 or before March 21. A facility may land apply the Material between these dates, if necessary, because of inadequate storage for winter, equipment failure, or unavailable alternate disposal options, provided the following conditions are met:
  - 1. The generator shall notify the MMD, in writing, at least 21 days in advance of the need to land apply anytime between December 21 and March 21. The MMD may approve an alternate time frame, if necessary, because of unforeseen circumstances. Notification shall be provided for each application using the Sample Site Identification Form (copy attached). The notification shall include, at a minimum, an explanation of the need to land apply, the maximum volume of the Material intended to be applied and justification for that volume, a mass balance for the proposed application period, and an explanation of how existing storage will be utilized to the maximum extent possible in order to minimize the volume of Material to be winter applied. The generator shall also submit a plan describing the actions that will be taken to ensure that land application will not be needed for subsequent winters. The MMD will provide timely review of the notification and will approve or deny the request verbally, followed in writing.
  - 2. All Material that is winter applied shall be subsurface injected, such that no Material is present on the land surface or in the injection furrow in contact with ambient air. The Material must be completely covered by soil in the injection furrow to minimize odors related to the Material, to reduce the potential for vector attraction, and to eliminate the possibility of off-site movement of the Material via surface runoff.
  - 3. The slope of winter application sites shall not exceed six percent. All injection applications shall occur perpendicular to the slope to minimize rill erosion in the ejection furrows from melt waters and precipitation events.
  - 4. Soil frost shall not exceed three inches in depth.
  - 5. Winter application of the Material shall comply with Part 31, Water Resources Protection, of the NREPA.
- O. The generator of the Material shall maintain records on the amount of the Material applied at each application site, site identification, and property description of each application site used. The generator of the Material shall maintain all records for five years after the Material was last applied and shall make them available for review by the Director of EGLE, or his/her authorized representative, upon request.

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## III. Disposal by Composting

- A. The Material shall be separated from other solid waste and maintained separately until used to produce compost.
- B. The Material shall be managed as a product or resource in a manner that does not violate Part 31 or Part 55 during composting, storage, or use.
- C. Composting shall be performed in a manner that prevents standing water and the attraction, harborage, or production of insects, rodents, or other vectors.
- D. Prior to commencing composting, the operator of the composting facility shall notify the Director of EGLE of the location of the composting operation and the type and amount of materials to be composted.
- E. The compost facility shall be properly sloped and graded to efficiently handle storm water.
- F. Nothing in this approval shall be construed to prevent the need for a facility operating pursuant to this approval to comply with local zoning requirements.
- G. The Material shall be incorporated into the compost pile immediately.
- H. The carbon-to-nitrogen ratio of the compost pile shall be maintained between 20 to 1 and 40 to 1.
- I. The windrow or pile edges and/or any processing or staging area of the composting facility shall meet the following location standards, unless alternate criteria are approved by the Director of EGLE:
  - 1. Not placed in a wetland.
  - 2. Not placed in a floodplain.
  - 3. Placed at least four feet above groundwater level on a liner or pad meeting the requirements of R 299.4130 or in another manner approved by the MMD.
  - 4. Placed at least 50 feet from adjacent property lines or surface water.
  - 5. Placed at least 200 feet from a residential drinking water well.
  - 6. Placed at least 2,000 feet from a Type I or Type IIa water supply well.
  - 7. Placed at least 800 feet from a Type IIb or Type III water supply well.

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8. Placed at least 500 feet from a licensed day care center or other receptors likely to be sensitive to any odors generated during composting.

# IV. This approval shall immediately become void for any of the following reasons:

- A. Additional information demonstrates that the Material is not appropriate for agricultural or silvicultural use.
- B. Additional information demonstrates that the Material is causing environmental contamination.
- C. New state or federal regulations are promulgated that would cause this approval to be invalid.
- D. EGLE, MMD, modifies or retracts this exception from solid waste regulation.

Violation of the conditions of this approval is subject to the enforcement provisions of Part 31, Part 55, Part 91, Part 121, and Part 115 or other applicable state and federal laws/statutes.

STATE OF MICHIGAN Department of Environment, Great Lakes, and Energy

By:

Rhonda S. Oyer, Manager Solid Waste Section Materials Management Division

2019 Date:

Attachment