



JOHN ENGLER Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"

HOLLISTER BUILDING PO BOX 30473 LANSING MI 48909-7973

INTERNET: www.deq.state.mi.us

RUSSELL J. HARDING, Director

REPLY TO:

WASTE MANAGEMENT DIVISION
PO BOX 30241
LANSING MI 48909-7741

FISH WASTE EXEMPTION

According to the provisions of Section 11506(1)(g) 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, specifically R 299.4111, R 299.4116, and R 299.4121, fish offal, whole fish, and wash water from fish cleaning containing over one percent solids (collectively known as the Material) are granted approval by the authorized representative of the Director (Director) of the Department of Environmental Quality (DEQ) to be managed if done in compliance with the conditions listed below:

I. Disposal in Landfill or Wastewater Treatment Plant.

- A. The Material may be disposed in a Type II Municipal Landfill licensed pursuant to Part 115 of the NREPA, 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 provided it is done consistent with the Plant's procedures and the Material is transported in accordance with Part 121, Liquid Industrial Wastes, of the NREPA.

II. Burial of Fish Wastes.

- A. No more than 1,000 gallons of Material may be buried on each acre of a site unless an alternate volume is approved, in writing, by the DEQ.
- B. A site may only be used one time for the burial of Material.
- C. The Material must immediately be covered with at least two feet of soil.
- D. The Material shall not come into contact with waters of the state.
- E. The Material must be buried at least 200 feet from an existing residential well, property line, road, or surface water.
- F. The Material shall not be mixed with other wastes that are not inert as defined by Part 115 of the NREPA or the rules promulgated under that Part, unless appropriate approvals or permits as required by state and/or federal law are obtained.
- G. Any Material that is buried 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 this Part.

- H. Vehicles used to transport the Material shall comply with the Michigan Motor Vehicle Code, 1949 PA 300, as amended, and the rules promulgated under that Act. The Material shall be covered so as to prevent loss to the environment during transport and delivery to an application site
- I. The generator of the Material shall ensure that all Material not land applied, buried, or composted in accordance with the conditions and restrictions contained herein is disposed at an appropriately licensed disposal facility.
- J. The owner/operator of the site shall notify the DEQ of the location, volume, and size of any site where fish wastes are buried. Notification shall be provided to the local Waste Management Division (WMD) district office as identified in Attachment 1.

III. Land Application of Fish Wastes

- A. The Material shall be applied only to agricultural or silvicultural lands that need fertilization as demonstrated by laboratory soil tests. These 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. It is highly recommended that fall applications of Material 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 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 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 WMD.
- D. Material that is surface applied to agricultural soil shall immediately be incorporated into the soil after application to land, unless prior to application, the DEQ approves an alternate timeframe.
- 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	
	<u>Surface Application</u>	<u>Subsurface Injection</u>
Municipal Water Supply	2,000	2,000
Domestic Wells	150	150
Homes and Commercial Buildings	500	100
Public Roads and Property Lines	150	25
Surface Water	150	50

- H. The Material shall not be applied to an application site unless the water table is at least 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 wetland areas as defined by the NREPA, and the administrative rules promulgated thereunder, unless approved or permitted by the DEQ.
- 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 and 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 of the NREPA or the rules promulgated under that Part, 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 of the NREPA, or the rules promulgated under that Part.
- M. Vehicles used to transport the Material shall comply with the Michigan Motor Vehicle Code, 1949 PA 300, as amended, and the rules promulgated under that Act. The Material shall be covered so as to prevent loss to the environment during transport and delivery to application sites.
- N. The generator of the Material shall ensure that all Material not land applied, buried, or composted in accordance with the conditions and restrictions contained herein is disposed at an appropriately licensed disposal facility in accordance with the conditions of Section I
- O. Except as provided below, land application of Material shall not occur after December 21 or before March 21

- P. A facility that needs to apply at times prohibited by Item O. because of inadequate storage for winter, equipment failure, or unavailable alternate disposal options may do so in accordance with the following:
1. The generator shall notify the WMD, in writing, 21 days in advance of the need to apply anytime from December 21 to March 21. The notification shall include, at a minimum, an explanation of the need to 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 WMD 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 so as to minimize odors related to the Material, to reduce the potential for vector attraction, and to eliminate the possibility of offsite 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 so as to minimize rill erosion in the ejection furrows from meltwaters and precipitation events.
 4. Soil frost shall not exceed three inches in depth.
 5. Winter application of the material shall be in compliance with Part 31, Water Resources Protection, of the NREPA.
- Q. For each application site, the owner/operator of a site shall submit the information included in the site identification form (SIF) as contained in Attachment 2. The completed SIF shall be received by the WMD at least three weeks prior to winter application, unless the WMD approves an alternate timeframe due to unforeseen circumstances. At the end of the three-week period, if the WMD has not identified the reasons that a site should not be used, the site may be used by the facility for winter application.
- R. 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 the DEQ, or his/her authorized representative, upon request.

IV. Composting of Fish Wastes.

- A. The generator of the Material shall ensure that all Material not land applied, buried, or composted in accordance with the conditions and restrictions contained herein is disposed at an appropriately licensed disposal facility in accordance with the conditions of Section I.
- B. The Material shall be separated from other solid waste and maintained separately until used to produce compost.
- C. 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.
- D. The composting shall be performed in a manner that prevents standing water and the attraction, harborage, or production of insects, rodents, or other vectors.
- E. The operator of the composting facility shall notify the Director of the location of the composting operation and the type and amount of materials to be composted.
- F. The compost facility shall be properly sloped and graded to efficiently handle stormwater.
- G. 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.
- H. The Material shall be incorporated into the compost pile immediately.
- I. The carbon-to-nitrogen ratio of the compost pile shall be maintained between 20 to 1 and 40 to 1.
- J. 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:
 - 1. Not placed in a wetland.
 - 2. Not placed in a floodplain.
 - 3. Placed in compliance with one of the following:
 - a. at least four feet above groundwater level;
 - b. on a liner or pad meeting the requirements of R 299.4130;
 - c. in another manner approved by the Director.
 - 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.

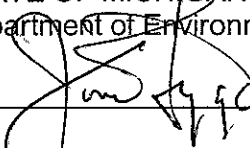
7. Placed at least 800 feet from a Type IIb or Type III water supply well.
8. Placed at least 500 feet from a licensed day care center or other receptors likely to be sensitive to any odors generated during composting.

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

1. The generator of the Material does not comply with the conditions of this approval.
2. Additional information demonstrates that the Material is not appropriate for agricultural or silvicultural use.
3. Additional information demonstrates that the Material is causing environmental contamination.
4. New state or federal regulations are promulgated, which would cause this approval to be invalid.

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

STATE OF MICHIGAN
Department of Environmental Quality

By:  _____

Jim Sygo, Chief
Waste Management Division

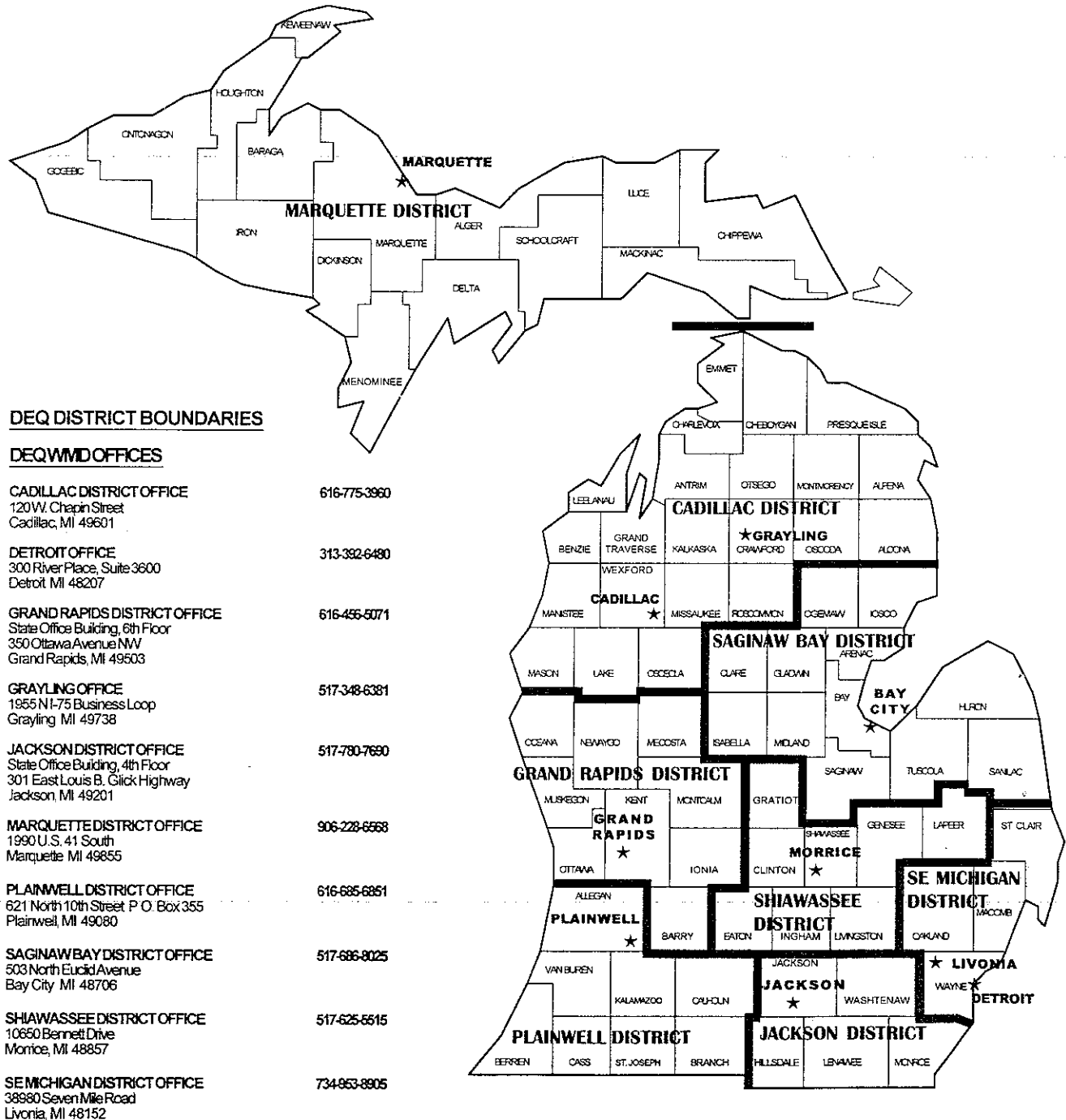
Dated: 12/07/2000

Attachments



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE MANAGEMENT DIVISION

District Boundaries and Offices
John Engler Governor ♦ Russell J Harding Director



ENVIRONMENTAL ASSISTANCE CENTER (for general information):
Telephone: 1-800-662-9278
Fax: 1-517-241-0673
Email: deq-ead-env-assist@state.mi.us

Pollution Emergencies: 1-800-292-4706

DEQ WMD Internet Home Page: www.deq.state.mi.us/wmd

SAMPLE SITE IDENTIFICATION FORM

Date: _____

Facility Name: _____

SITE INFORMATION

Township Name: _____

Section: _____ Township: _____ Range: _____

County: _____ Application Area (acres): _____

Land Owner (Print): _____

Address: _____

Telephone Number: (____) _____

Is the land farmed by the landowner? YES [] NO []

If the land is not farmed by the landowner, provide the name of the individual authorized by the landowner to farm the land.

Name: _____

Address: _____

Telephone Number (____) _____

A copy of the information contained in this sample form must be sent to the Supervisor of the Township in which the site is located.

This is a sample format provided for your use.