FISH WASTE EXEMPTION

This exemption pertains to fish processing wastes, fish hatchery sludges; fish offal, whole fish, and wash water from fish cleaning containing over one percent solids (collectively known as the Material).

Before transport for disposal or use, the generating and receiving facility must manage the Material to avoid releases and so no nuisance conditions are created. One of the following disposal or use options chosen would determine the specific requirements. Either the Michigan Department of Environmental Quality (MDEQ), the Michigan Department of Agriculture (MDA), or the US Environmental Protection Agency (USEPA) may oversee the requirements. Authority conferred on the MDEQ from the following:

- Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).
- Part 55, Air Pollution Control, of the NREPA.
- Part 91, Soil Erosion and Sedimentation Control, of the NREPA.
- Part 115, Solid Waste Management, of the NREPA.
- Part 117, Septage Waste Servicers, of the NREPA.
- Part 121, Liquid Industrial Waste, of the NREPA.
- Michigan Right to Farm Act, 1981 PA 93 (Act 93), MCL286.471 to 286.474 and managed under the Generally Accepted Agricultural Management Practices (GAAMPS), or a Comprehensive Nutrient Management Plan approved under the Michigan Agriculture Environmental Assurance Program.

In accordance with the provisions of Sections 11506(1)(g) and 11507, Part 115 of the NREPA, and the rules promulgated under Part 115, specifically R 299.4111, R 299.4116, and R 299.4121, the Material is granted approval to be exempt from solid waste regulation by the authorized representative of the Director of the MDEQ. This exemption amends and replaces the exemption issued on December 12, 2000.

This exemption is subject to the following:

I. Disposal in Landfill

A. The Material may be disposed in a Type II municipal solid waste landfill (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 at the site of generation or at a Part 115 licensed solid waste processing plant.
B. If solidification will occur at the landfill or at a licensed processing plant, those sites must notify the Resource Management Division (RMD) that they are an operating liquid industrial waste designated facility and meet Part 121 of the NREPA requirements.

C. If solidification will occur at the site of generation, the generator must contact the RMD District Office before beginning operations to discuss site conditions and operations to determine if any other waste regulations may apply.

D. Comply with Section VI, Transportation of Materials, in this document.

II. Disposal at Wastewater Treatment Plant

A. The wastewater treatment plant authorities must approve the disposal of the Material into their system.

B. If the Material is being transported to the wastewater treatment plant, the wastewater treatment plant must notify the RMD that they are operating a liquid industrial waste designated facility and meet Part 121, of the NREPA requirements including obtaining a site identification number. The Water Division (WD) must also be notified due to the potential adverse impact of this waste on the wastewater treatment plant.

C. Comply with Section VI, Transportation of Materials

III. 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 MDEQ.

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 Part 115, 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 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.

H. Comply with Section VI, Transportation of Materials, in this document.
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 appropriately licensed solid waste disposal facility in accordance with Part 115 of the NREPA.

J. The owner/operator of the site shall notify the MDEQ of the location, volume, and size of any site where fish wastes are buried. Notification shall be provided to the local RMD District Office as identified in Attachment 1.

IV. 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 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. It is highly recommended that fall applications of the 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, 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 (see the Septage Hauler Directory available on the Septage Program Web site at www.michigan.gov/deqseptage by navigating to "Online Services" and clicking on the "Septage Haulers Directory" link), or wastewater from any other business or facility, without written permission of the RMD.

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 MDEQ 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:

<table>
<thead>
<tr>
<th>Application Methodology</th>
<th>Distance in Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Surface Application</td>
</tr>
<tr>
<td>Municipal Water Supply</td>
<td>2,000</td>
</tr>
<tr>
<td>Domestic Wells</td>
<td>800</td>
</tr>
<tr>
<td>Homes and Commercial Buildings</td>
<td>800</td>
</tr>
<tr>
<td>Public Roads and Property Lines</td>
<td>200</td>
</tr>
<tr>
<td>Surface Water</td>
<td>500</td>
</tr>
</tbody>
</table>

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 hereunder, unless approved or permitted by the MDEQ.

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 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 of the NREPA, or the rules promulgated under Part 55.

M. Comply with Section VI, Transportation of Materials, in this document.

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 RMD, in writing, 21 days in advance of the need to land apply anytime from December 21 to March 21. 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 RMD 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 be in compliance with Part 31, 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 RMD at least three weeks prior to winter application, unless the RMD approves an alternate timeframe due to unforeseen circumstances. At the end of the three-week period, if the RMD 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 MDEQ, or his/her authorized representative, upon request.
V. 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 in this document.

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 of the NREPA during composting, storage, or use.

D. 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 MDEQ of the location of the composting operation and the type and amount of Material to be composted.

F. The compost facility shall be properly sloped and graded to efficiently handle storm water.

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 of the MDEQ:

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.

K. Comply with Section VI, Transportation of Materials, in this document. The Material shall be covered so as to prevent loss to the environment during transport and delivery to application sites.

VI. Transportation of Material

The transportation of Material must meet all of the following conditions.

A. All vehicles used in the transportation of the Material shall comply with the Michigan Vehicle Code, 1949 PA 300, as amended (MVC), and the rules promulgated under MVC.

B. The vehicle must be designed and loaded to avoid spillage of waste. All openings must be closed and doors or covers must be secured by an adequate latch or restraining mechanism to keep them closed while transporting solid waste that may blow or fall off the vehicle.

C. The hauler must maintain a record during transportation of what the Material is, where it is from, how much is on the truck, and where it is being taken for disposal. The transporter must provide a copy of the record to the generator and both the generator and the transporter must keep the record at least 5 years from the date of shipment. The record must satisfy the manifest and recordkeeping requirements under Part 121, as applicable.

D. No vehicle shall be parked in a residential area longer than necessary to collect the Material, unless it is parked more than 500 feet from adjacent residences. The unit must not be parked, stored, or established at any location where it can cause a hazard to health or at any residentially-zoned location to cause a nuisance.

E. Any spillage must be picked up as soon as possible and the area cleaned.
F. If the Material contains free liquids, as demonstrated by the paint filter test, it must be transported in compliance with one of the following:

1. By a vehicle licensed under Part 121 of the NREPA, if the Material is being managed under Sections I, II, III, IV, and V. This requires both the generating facility and transporter to obtain a site identification number and to follow the manifest requirements. A municipally-owned vehicle used to transport the Material is not required to be permitted and registered.

2. By a vehicle licensed under Part 117, of the NREPA, if the Material is being disposed under Sections I or II above.

3. By a vehicle licensed under Part 117, of the NREPA, if the Material is being managed under Sections III, IV, or V, provided the following conditions are met:
   
a. The Material may not be buried or land applied upon a Part 117 of the NREPA, licensed land disposal site.

b. Only a dedicated vehicle or one that has been decontaminated of human pathogens by lime stabilization between loads of the Material and other wastes. This requires that the pH of the material must be maintained above 12 for a minimum of 30 minutes.

G. If the Material does not contain free liquids (i.e. passes the paint filter test), the transporter must meet the requirements for solid waste transportation per Part 6 of the solid waste management act administrative rules and any applicable local requirements for permits or registration for solid waste transportation (the MDEQ does not license solid waste transporters).

VII. Approval Withdrawal

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

A. The generator, transporter or receiving (disposal) facility of the Material does not comply with the conditions of this approval.

B. Additional information demonstrates that the Material is not appropriate for agricultural or silvicultural use.

C. Additional information demonstrates that the Material is causing environmental contamination.

D. New state or federal regulations are promulgated that would cause this approval to be invalid.
Violation of the conditions of this approval is subject to enforcement provisions of Part 31, Part 55, Part 91, Part 115, Part 117, Part 121 of the NREPA; Act 138; and Act 93 or other applicable state and federal laws/statutes.

STATE OF MICHIGAN
Department of Environmental Quality

By: [Signature]
Steven R. Sliver, Chief
Solid Waste and Land Application Section
Resource Management Division

Dated: September 30, 2011

Attachments
This is a sample format provided for your use.

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.