

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY**

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**INTEROFFICE COMMUNICATION**

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OPERATIONAL MEMO GEN 13  
REVISION 1

November 2, 1998

TO: All Waste Management Division Supervisors  
FROM: Jim Sygo, Chief, Waste Management Division  
SUBJECT: Use of Yard Clippings Compost as Landfill Cover

This memorandum provides guidance on the use of composted yard waste as alternate daily cover, interim cover, or final cover at landfills licensed under Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451).

Background:

Section 11521 of Act 451, which bans yard clippings from landfills, became fully effective on March 28, 1995. Many landfill owners/operators around the state are instituting composting operations to help their customers comply with this ban. Yard clippings, when promptly collected and when processed properly, can be composted to yield a high quality end-product. Conversely, poor collection and processing techniques can result in a low quality end-product with no market value and little potential for use. This low-grade compost is frequently incompletely decomposed; supports plant growth poorly, if at all; and may be contaminated with plastic bag fragments and other materials.

Some operators are using, or have proposed using, incompletely composted material as alternate daily cover at Part 115 Type II and Type III landfills. The use of compost in the establishment of final cover has also been suggested.

Position:

The position of the Waste Management Division on the use of compost related materials for alternate daily cover is as follows:

-- Section 11521 of Act 451, prohibits landfill owners and operators from accepting "yard clippings" from any source as of March 28, 1995. "Yard clippings" are defined in Section 11520 of Act 451 as, "leaves, grass clippings, vegetable or other garden debris, shrubbery, or brush or tree trimmings less than four feet in length and two inches in diameter, that can be converted into compost humus."

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- Incompletely composted material, since it at least partially consists of material that can still be "converted into compost humus," must be considered to still be yard clippings that are subject to the prohibition on being placed in a landfill.
- Finished compost (i.e., that which is mature with the organic fraction completely decomposed) may be used as an alternate daily cover, providing it meets all the criteria listed in Operational Memo 115-10 for alternate daily covers.
- Finished compost may also be used to establish a vegetative growth zone for a final cap. Maturity of the compost may be determined by the Dewar self heating method, by failure of windrowed material to heat following turning and curing, or by other accepted testing methodology. The material must meet performance and aesthetic standards to ensure that it will promote the establishment of vegetation. This means that it will have to be fully composted and mature and screened to remove large particles and any visible contaminants (such as plastic fragments, sticks, stones, tennis balls, etc.). Compost used as final cover will most likely need to be mixed with topsoil and/or used as a top dressing layer over a layer of topsoil.
- Screening rejects are likely to contain a high organic fraction, as determined by the Dewar self heating method, by failure of windrowed material to heat following turning and curing, or by other accepted testing methodology. The material must meet performance and aesthetic standards to ensure that it will promote the establishment of vegetation. This means that it will have to be fully composted and mature and screened to remove large particles and any visible contaminants (such as plastic fragments, sticks, stones, tennis balls, etc.). Compost used as final cover will most likely need to be mixed with topsoil and/or used as a top dressing layer over a layer of topsoil.
- Screening rejects which are likely to contain a high percentage of sticks, stones, and other materials not amenable to composting may suitably be used as an alternate daily cover material. Screening rejects used as daily cover must meet all performance and analytical requirements for alternate daily cover outlined in Operational Memo 115-10.
- Yard waste may be land applied to interim cover material in order to help establish vegetative growth and prevent erosion. Operators should take care to apply yard waste so that vegetative growth is not stunted or otherwise negatively impacted by an excess of actively decomposing yard waste. All yard waste used as interim cover must be removed prior to placing additional waste in the landfill cell in question.
- Disposal options for low-grade yard clippings compost which do not meet the criteria for alternate daily cover outlined in Operational Memo 115-10 or incompletely composted yard clippings are limited. Incompletely composted yard clippings may be land applied at agronomic rates (if free of contaminants) or processed to allow the composting process to be completed. Low-grade compost (that which does not meet alternative daily cover criteria) will need to be upgraded, by screening or other processing, to specifications that make it suitable for agricultural, silviculture, horticultural or other acceptable uses.