



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Michigan Composting

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Definition of Yard Clippings

- According to Section 11506(14),
- “Yard clippings” means leaves, grass clippings, vegetable or other garden debris, shrubbery, or brush or tree trimmings, less than 4 feet in length and 2 inches in diameter, that can be converted to compost humus. Yard clippings do not include stumps, agricultural wastes, animal waste, roots, sewage sludge, or garbage.



CURRENT COMPOSTING REGULATIONS



Current Composting Regulations Overview

- Local Unit of Government Regulation
 - Zoning & Planning
 - Building Codes
 - Drain Commissioner
 - Roadways
 - County Health Department
- OSHA/MIOSHA
- MDARD
 - On-Farm Composting
 - Fertilizer Act
- EGLE Regulation of Yard Clippings Composting
 - Part 115, Solid Waste Regulations
 - Part 31, Water Resources
 - Part 55, Air Quality



Current Composting Regulations

- Local Unit of Government Regulation
 - Zoning/Planning Commission
 - Most local units require a permit before business commences
 - Compatibility with surrounding community
 - Site design could require a licensed professional



- Building Codes
 - Building design will require a licensed professional
 - Building Permit and inspections will be required

Current Composting Regulations

- Local Unit of Government Regulation
 - Drain Commission
 - Storm water runoff detention
 - Construction erosion control
 - Wetlands protection
 - Roadways
 - Identify Spring load restrictions
 - Additional traffic on local roads
 - County Health Departments
 - Respond to nuisance complaints (e.g. odor, noise)
 - Work with EGLE to regulate facility operations



Current Composting Regulations

- Federal/State Worker Safety Regulations
 - MIOSHA – Worker safety concerns for both compost facility operators and incoming deliveries.
 - OSHA – Work closely with MIOSHA to observe and prevent injury.



Current Composting Regulations

- On Farm Composting
 - A farm may accept up to 5,000 cubic yards of yard clippings and does not need to register with EGLE or MDARD
 - A farm may accept over 5,000 cubic yards and be registered with MDARD if:
 - The yard clippings are used to manage on-farm generated wastes
 - The farm operation does not accept monetary or other valuable consideration for accepting the material
- Farms that produce a finished product that is sold to a person are considered to be commercial operations that do not have nuisance protection under the Right to Farm Act.

Current Composting Regulations



- Production Regulations – Fertilizer Act (Michigan Department of Agriculture)
 - License is required to manufacture and distribute fertilizer, registration, inspection of materials, records, fees
 - If labeled as a fertilizer, the following information must be supplied:
 - Brand or product name, grade
 - Net Weight
 - Guaranteed NPK analysis
 - However, if the material produced is claimed as compost, the fertilizer label is not needed (i.e., no nutrient claims are made)

Current Composting Regulations

- EGLE Regulation of Composting Yard Clippings
- Section 21 of Part 115 regulates the composting of yard clippings under the following conditions:
 - Composted at the property where they came from.
 - Temporarily accumulated - section 11521(2)
 - Composted at a farm - section 11521(3)
 - Composted at a registered composting facility - section 11521 (4)
 - Composted and used at a licensed solid waste landfill
 - Composted at a processing plant
 - Composted at a site with no more than 200 cubic yards of yard clippings
 - Anaerobic digesters
 - Disposed of at a landfill or incinerator if diseased, infested or are invasive





Current Composting Regulations

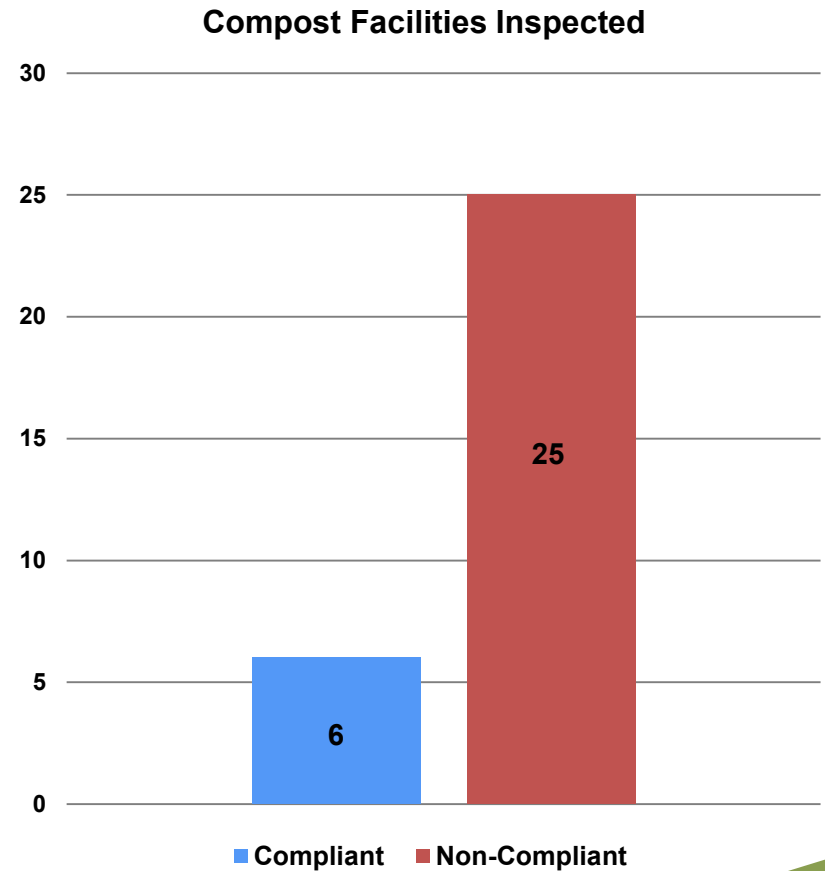
- Registered Composting Facilities
- Composting Facilities Must:
 - Register
 - Comply with location restrictions
 - Not be in violation or create a site of environmental contamination
 - Not have more than 5,000 cubic yards of material on any acre of property
 - Not speculatively accumulate material
 - Produce finished compost with not more than 1%, by weight, of foreign matter
 - Debag plastic bags by the end of each business day
 - Prevent the pooling of water
 - Properly manage storm water runoff
 - Not attract or harbor rodents or other vectors
 - Maintain records

So Where Are We Currently?

- Little funding = reduction in regulation enforcement
- Many composters without proper composting education
 - Mainly municipal sites
 - Take for free or very low cost
 - Give away for free or very low cost
 - Leads to nuisance odors, water issues, non-compliance with Part 115
- Unlevel playing field for Michigan composters

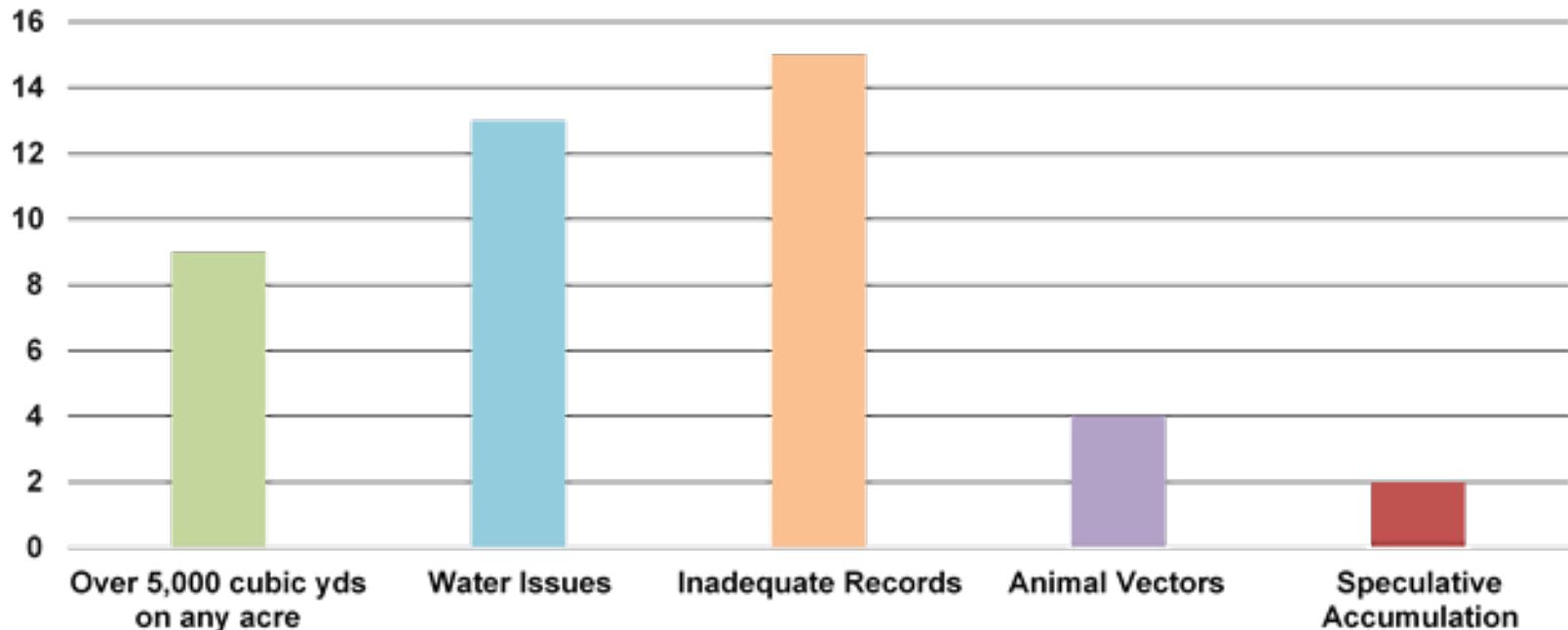
Michigan Compost Report Card

- Conducted 31 compost inspections all across Michigan in FY 2018
- 25 composting facilities were found to be non-compliant with one or more issues



Michigan Compost Report Card

Issues Observed at Registered Compost Facilities in 2018

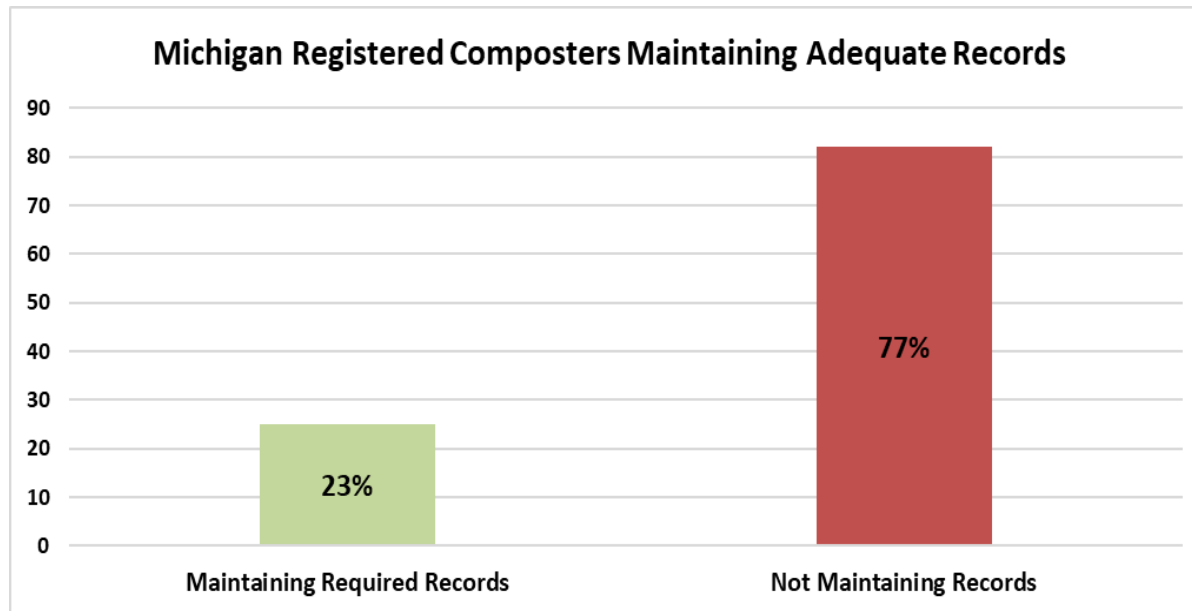


Note that some facilities failed inspection for more than one issue

Michigan Compost Report Card

Annual Reporting

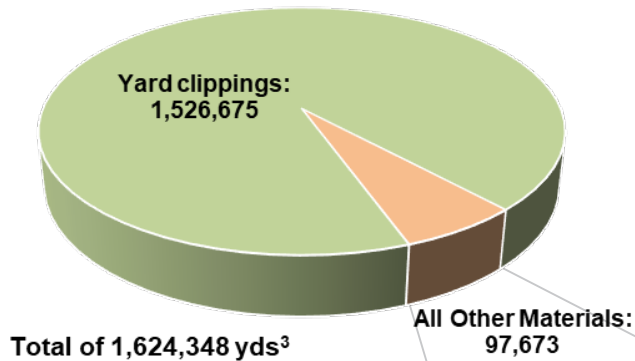
- All Registered Composting Facilities must report their volumes on an annual basis (Oct. 1 – Sept. 30)
- 2018 = requested to submit proof they are maintaining statutorily required records



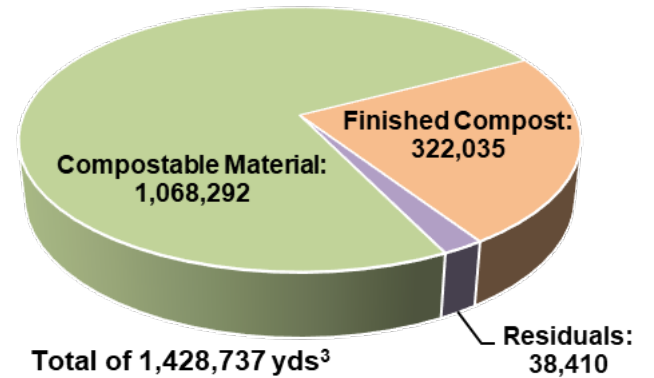
Michigan Compost Report Card

Annual Reporting

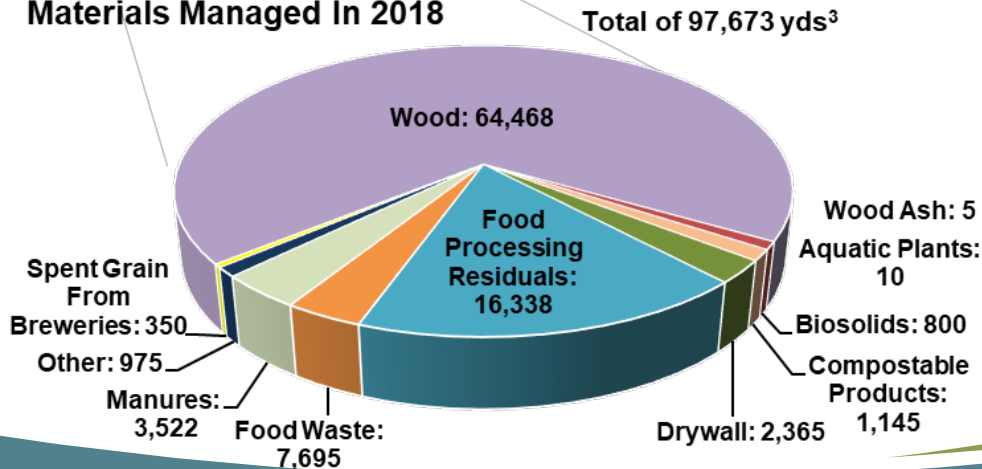
Cubic Yards Managed At Registered Composting Facilities In 2018



Cubic Yards Remaining On Site At Registered Composting Facilities End-Of 2018 Season



Cubic Yards Of All Other Materials Managed In 2018



Note: The data presented represents EGLE's best estimate of materials managed at Michigan's registered composting facilities from October 1, 2017, until September 30, 2018.

COMPOSTING REGULATIONS PROPOSED CHANGES



Two Classes of Organics

- Class 1 compostable material

- Yard waste
- Food waste
- Wood
- Aquatic Plants
- Paper Products
- Compostable products
- Spent grain from breweries
- Food processing residuals
- Manure or Animal Bedding
- Paunch
- Dead animals unless infectious or managed under BODA
- Other materials approved by EGLE



- Class 2 compostable material

- Mixed Municipal Solid Waste
- Biosolids
- State or Federal Controlled Substances
- Other compostable material that is not listed or approved as Class 1

Facility Size and Permitting Requirements

Exempt Facilities:

- Composted on the site where material was generated
- Composted and used on a farm
- Composted at a licensed landfill provided all the material is used at the landfill
- Composted at an exempt compost facility (less than 500 cubic yards of Class 1 compostable material)

Non-Exempt Facilities:

Small Facility

- 500 yds³ - 1,000 yds³
- Must notify EGLE that it is in operation
- Must not contain more than 5% of Class 1 compostable materials other than yard waste

Medium Facility

- 1,000 yds³ - 10,000 yds³
- Must obtain a Registration
- Annual Inspection
- No more than 5,000 yds³ per any acre of the site
- Must not contain more than 10% of Class 1 compostable materials other than yard waste

Large Facility

- Over 10,000 yds³
- Must obtain a General Permit
- Annual Inspection
- Financial Assurance
 - Each Site = \$20,000

Requirements for Exempt Facilities

- Less than 500 cubic yards of Class 1 Compostable Material
- Comply with local zoning
- Do not create nuisance conditions
- Do not violate water quality standards of Part 31



Requirements for Small Facilities

500 – 1,000 cubic yards

- Comply with local zoning
- Notify EGLE of operation
- Do not create nuisance conditions
- Do not violate water quality standards of Part 31
- Must not contain more than 5% of Class 1 compostable materials other than yard waste
- Report on a yearly basis the amount of compostable material managed at the site



Requirements for Medium Facilities

1,000 – 10,000 cubic yards

- Obtain a registration
 - registration fee
- Pass a yearly inspection
- Comply with local zoning
- Do not create nuisance conditions
- Do not violate water quality standards of Part 31
- Must not contain more than 10% of Class 1 compostable materials other than yard waste
- Manage a maximum of 5,000 cubic yards of compostable material per any acre
- Report on a yearly basis the amount of compostable material managed at the site

Requirements for Large Facilities

Over 10,000 cubic yards

- Must be consistent with the County Materials Management Plan or have local approval
- Must obtain a General Permit through EGLE
- Must develop and submit plans for review and approval
 - Operations plan
 - Site Plan
 - Odor management plan
 - Marketing plan
 - Training plan
 - Fire prevention plan
- Must pass annual inspection



Additional Requirements to Compost Biosolids

- Material must be composted on a liner, pad, or in a building
- If bulk applied, the owner/operator must develop a residuals management plan
- If, bulk applied, a biosolids fees must be paid on each ton of material



Residuals Management Plan Requirements

- Land application method
- Land application site list
- Land application site information
- Pathogen reduction plan
- Written approval from land owner
- County and township notification for each land application site
- Site restrictions if Class B biosolids
- Spill prevention and response plan

Financial Assurance

- Require from general permit facilities
- Broaden availability of financial test
- \$20,000 bond required for all sites that contain over 10,000 cubic yards of material





Thank you! |
Questions and Discussion

Michigan Department of
Environment, Great Lakes, and Energy

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