



Maryland Department of the  
Environment

## FACTS ABOUT: Composting in Maryland

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### **BENEFITS OF COMPOSTING**

- Composting reduces greenhouse gas emissions relative to landfilling and combustion. According to EPA's WARM Model, each ton of food scraps shifted from landfilling to composting reduces greenhouse gas emissions by 0.85 MTCO<sub>2</sub>e.
- Composting extends landfill or incinerator capacity and delays the need to site new landfills and incinerators.
- Businesses or institutions can reduce their waste disposal costs by composting organic materials. Because composting can be conducted on site or within the community, it can reduce the cost and fuel needed to transport materials long distances for disposal.
- Composting produces a valuable soil conditioner from materials that otherwise would become wastes. Compost displaces some of the need for chemical fertilizers and reduces the need for irrigation, saving money and natural resources.
- Composting creates jobs. A 2013 report by Institute for Local Self-Reliance estimates that in Maryland, each ton of material composted sustains twice the jobs as each ton landfilled.
- Use of compost has benefits for soil and water quality. Compost improves soil structure, increases water holding capacity, provides nutrients that are released slowly over time, improves soil pH, and helps control erosion. Compost can also be used to remediate certain contaminated soils.

### **ORGANICS GENERATED IN MARYLAND**

Organic materials such as food scraps, yard trimmings, and non-recyclable paper are a large portion of the total waste generated in Maryland, and in the U.S. as a whole. U.S. EPA estimates that food scraps were 14.5% of all municipal solid waste (MSW) generated in the U.S. in 2012 and yard trimmings were 13.5%. Of the MSW disposed, food scraps were an even larger portion, at 21.1%.

Data for Maryland confirms that organics are an important part of the State's waste stream. MDE estimates that almost 2.3 million tons of compostable materials were



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generated in Maryland in 2012. Several Maryland counties have conducted waste characterization studies, in which samples of trash are analyzed to determine the makeup of the disposed waste stream. Studies from Anne Arundel, Howard, and Montgomery Counties have shown that food scraps are among the top disposed items (by weight) in residential waste.

In addition to food scraps and yard trimmings, Maryland generates other organic materials that are appropriate feedstocks for composting. One example is animal manure and bedding. Maryland has more horses per square mile than any other state in the U.S., at an estimated 79,100 total horses 2010. An average 1,000 lb horse generates 35 – 50 lbs of manure every day, in addition to 8-20 lbs of bedding. The *On-Farm Composting Handbook*, by Rynk et. al, states that horse manure has “low odor potential,” “decomposes quickly,” and overall is an “excellent composting material.”

## **CURRENT STATUS OF COMPOSTING IN MARYLAND**

In 2012, over 842,000 tons of food and yard trimmings were recycled in Maryland. This number is probably an underestimate, however, because small-scale, home and farm composting is difficult to track and is unlikely to be reported to MDE. Composting in Maryland is currently much more prevalent for yard trimmings than food scraps. The food scrap recycling rate was about 8.5 % in 2012, while the recycling rate for yard trimmings was 70.9%. In comparison, the overall recycling rate for Maryland was 45.4%. Several Maryland counties collect yard trimmings curbside for recycling, and several others provide drop-off recycling of yard trimmings. Maryland law prohibits disposal of separately collected loads of yard trimmings.

There are 13 known composting facilities existing in Maryland as of August 2014, though again, this almost certainly omits some small-scale facilities that process their own materials. Of these 13, there are 4 that accept food scraps and most of the others compost yard trimmings (one composts sewage sludge).

In 2013, legislation passed requiring MDE to create regulations for composting under the recycling law. This change will create a clearer pathway for new food composting facilities in Maryland.

