#### MARYLAND DEPARTMENT OF THE ENVIRONMENT

Land Management Administration • Waste Diversion and Utilization Program 1800 Washington Boulevard • Baltimore MD 21230 410-537-3000 • 1-800-633-6101 • www.mde.maryland.gov

# Composting Resources for State Agencies

State government is uniquely positioned to support organics diversion in Maryland – it can play a role as feedstock supplier, compost user, public educator, and compost producer. Chapter 692, Laws of 2012 increased the State Agency recycling rate to at least 30%, to be implemented by July 2014. As significant organics generators, State agencies will need to increasingly explore composting and other organics diversion strategies to meet their recycling goals.

Establishing New Organics Programs

Composting at Work Guide: <u>This guide</u> was created by the Chittenden Solid Waste District in Vermont but is applicable or adaptable to any workplaces in Maryland. It contains practical tips on how to get started and address challenges such as staff training and odor prevention.

**Bins, Posters, and Signs**: Training staff to properly separate acceptable from unacceptable materials is an important part of a program's success. San Francisco has an <u>online "sign maker"</u> for compost, recycle, and landfill signs, which could be adapted for State Agencies to use over office, lunch room, or food court bins. The City's <u>toolkit website for businesses</u> contains a wealth of additional sample resources useful for collection in an office setting.

**U.S. EPA's WARM Model** allows any entity that controls the management of waste to assess the greenhouse gas impacts of a particular waste management scenario, relative to the baseline. The Model is available as an excel spreadsheet and allows the user to input material types, tonnages, and the method of management (source reduction, landfilling, combustion, recycling, or composting). Greenhouse gas emissions reductions and energy usage are calculated.

**USDA's U.S. Food Waste Challenge** was announced in June 2013 and seeks to engage all participants in the food market in addressing food waste. Participants post a list of activities that they will do to reduce and recycle food scraps. The current list of participants includes trade associations, large corporations, and government agencies. In addition to goal-setting, the program provides examples of strategies other organizations are adopting. Click <a href="here">here</a> to join, or <a href="see who else is participating">see who else is participating</a> (click on each partner's name to see its plan).

**MDE Food Composting**: <u>This presentation</u> details Maryland Department of the Environment's implementation of food scrap and soiled paper collection at its office.

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**Green Purchasing Committee 2011 Report:** This <u>report</u> by Maryland's Green Purchasing Committee, includes an assessment of the feasibility and options for a statewide government composting program.

### On-Site Composting

In addition to planning for successful source-separation and collection of organics, each agency should carefully consider options for processing the collected materials. For many agencies, this will mean contracting with a hauler to remove compostables and transport them to a composting facility. Be sure to discuss the following issues with your potential organics hauler:

- Are there any types of organics that are not accepted? Ask specifically about meat, paper towels and other non-recyclable paper, and yard trim (if generated).
- What are the logistics of the collection system? Is material collected at a set interval or on call? How and where should the material be set out for collection? Does the hauler provide any bins, signage, or training that the agency can use?
- Where does the material go for composting?
- What kinds of compostable products are accepted (if any)? This is important because some composting facilities accept certain compostable plastic food service ware and compostable plastic bags, while others do not.

Some State facilities may have the space to process their own materials on site. This is particularly beneficial where the Agency also has a use for the compost, such as in landscaping of State property. By composting their own materials on site, agencies can avoid costs and energy expenditures needed to have organics hauled off site and to have compost purchased and brought on site.

State facilities may be suitable hosts for in-vessel composting systems. These systems have a reduced residence time, smaller footprint, can be highly automated thereby reducing staff demands, and can reduce odors.

Case Study: Virginia Department of Corrections uses in-vessel composting at its James River/Powhatan correctional facilities to handle food waste from prison cafeterias. 62-gallon bins are used to store and transport the food from the dining halls to the machine and chipped pallets are added to obtain the proper mix. Liquid collects in the bottom of the vessel and is reintroduced to the materials automatically by a pump. Residence time in the composter is 14 or 28 days, with a subsequent 90-day curing period outside. Virginia DOC has since expanded its capacity to 3 in-vessel units serving 5 correctional facilities and the University of Richmond, with a total capacity of 12,000 pounds per day. In 2011, 143 tons of materials were processed (98 tons of food waste, 45 tons of chipped pallets). The finished compost is used for landscaping, orchards, and greenhouses on DOC and University of Richmond Campuses. For more information, see Virginia DOC, James River Correctional Center In Vessel Composter, Presentation from Virginia Food Waste Workshop (2006) and Virginia DEQ, Overview of Local Composting Infrastructure, slide 14, Presentation from Surplus Food Recovery Workshop (2012).

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## Compost Procurement and Use

Using compost and supporting compost markets is State policy. State Finance and Procurement Article, § 14-409 reads in the relevant parts:

Consideration and preference. -- A State or local unit responsible for the maintenance of public lands in the State, to the maximum extent practicable, shall give consideration and preference to the use of compost in any land maintenance activity that is to be paid for with public funds.

Goal. -- It is the goal of the Department of General Services to:

- (1) compost, to the extent practicable, all landscape waste on State property that is under its operation for use as fertilizer in landscaping activities; and
- (2) increase the percentage of landscaped area fertilized by compost each year.

The following resources can help State agencies in the procurement and use of compost:

- The Department of General Service's <u>website</u> on green purchasing includes general information about selecting environmentally preferable products.
- The Institute for Local Self Reliance's Report, <u>Building Healthy Soils With Compost to Protect Watersheds</u>, describes uses and benefits of compost for improvement of the soil and water quality, complete with case studies and FAQs.
- U.S. EPA-funded research by the Composting Council Research and Education Foundation resulted in a report, <u>Compost Use on State Highway Applications</u>, which details projects conducted by various states, success stories, and compost specifications.
- U.S. Composting Council's <u>Compost Locator Map</u>, <u>Biocycle's Find-a-Composter</u>, or <u>Mid-Atlantic Composting Directory</u> can assist in identifying sources of compost.
- A 2011 report prepared for CalRecycle examines several potential uses of compost and BMPs for protecting water quality that relate to compost use and production. Crohn, David, University of California, Riverside, <u>Compost Best Management Practices and Benefits</u> (Prepared for CalRecycle) (2011).

#### Outreach and Promotion

In addition to leading by example through their own collection and composting programs, State agencies can help support composting in Maryland by promoting and educating citizens on the process and benefits of composting. Especially where your agency has a mission that relates to the environment, agriculture, or food, consider spreading awareness of composting through one of the following methods:

 Celebrate U.S. Composting Council's International Compost Awareness Week. This annual composting publicity and education campaign occurs during the first full week of May. The

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Council's <u>website</u> provides a manual with ideas and tips on promoting the week, a sample proclamation, and other educational resources. It also holds an annual composting-themed poster contest with winning posters available for purchase.

- Link to MDE's Composting Website from relevant pages of your website and refer people to MDE for additional information on composting in Maryland.
- If you do start a composting program at your agency, promote it on your agency website, through press releases, or, if you choose an on-site system, consider providing tours.

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