## Fact Sheet

# Food Waste for Delivery to Oregon Composting Facilities

### Preparing food waste includes keeping plastic contaminants out

#### Background

This fact sheet explains the importance of properly preparing food waste sent to composting facilities in Oregon. A particular concern for composting facilities is that the food waste they receive is free of non-compostable plastic packaging remnants that can contaminate the final compost product.

#### Food waste composting facilities

Composting facilities are operations that process various organic feedstocks into a finished product called compost. Composting can be an efficient method for recycling organic materials that might otherwise be disposed of in a landfill. Avoiding placement of these materials in a landfill, where they decompose, prevents the release of methane, a significant greenhouse gas.

Compost use offers numerous benefits: when incorporated into soil, it can improve soil tilth and fertility; it can provide a more stable form of nitrogen less susceptible to leaching into water supplies; on heavy soils, it helps reduce compaction and increases infiltration. Incorporation of compost into soil stores carbon, helping reduce atmospheric carbon.

For years, composting facilities in Oregon have successfully composted feedstocks such as yard debris, animal manures and agricultural crop residues, producing clean, nutrient-rich compost. Contamination from non-compostable materials such as plastic packaging has not been a problem in the past.

With issuance of the first commercial-scale food waste composting facility permit in spring 2010, Oregon composting facilities began accepting greater volumes of food waste from commercial sources. By fall 2011, DEQ expects to issue compost permits authorizing the acceptance of all types of food waste (including meat, dairy and eggs) to at least 10 more composting facilities, creating opportunities for food waste composting statewide.

**Food waste as a composting feedstock** Food waste is produced from households, restaurants and other food service establishments, grocery stores, food and produce processing facilities, agricultural crop residues, butcher shops and slaughter houses, breweries, creameries and many other facilities. This waste can be a wonderful ingredient to a composting system. When added in the correct proportions, food waste can add necessary moisture and essential nutrients to create an excellent compost product.

#### **Contamination problems**

While food waste is a welcome addition as a feedstock, it also poses a problem that can compromise finished compost quality. Specifically, non-compostable plastic packaging in food waste feedstocks can contaminate the final compost product.



Spoiled food waste in packaging received at a composting site.

In addition to lowering compost quality, feedstock contamination poses a labor, garbage management and nuisance issue at composting sites. When compost facilities produce compost from plastic-contaminated feedstock, bits of blowing plastic can litter the facility and nearby residential neighborhoods.

While a compost site can install equipment to clean up contaminated feedstocks and contaminated finished compost, it is never completely successful. Plastic bag film is almost impossible to completely screen out once it is ground up and becomes a part of a composting pile. Bits of plastic bags can hide behind compost clumps and particles during the screening process and may end up in the finished compost.



State of Oregon Department of Environmental Quality

Land Quality Solid Waste Policy & Program Development 811 SW 6<sup>th</sup> Avenue Portland, OR 97204 Phone: (503) 229-5696 (800) 452-4011 Fax: (503) 229-6977 Contact: Bob Barrows, Eugene, barrows.bob@deq.state.or.us (541) 687-7354 http://www.oregon.gov/DEQ/

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#### Most plastic packaging isn't compostable

Some packaging, made of paper, is compostable and is okay to send to a composting facility. Some plastic cups, plates and utensils are compostable and okay to send to a composting facility, if allowed by that facility. Unfortunately, most plastic and plastic-lined products and packaging are not compostable and it is impossible to completely remove these contaminants from a compost pile once introduced.

#### Separating packaging from food waste

Providing a clean, <u>source-separated</u> feedstock for recycling markets and composting facilities has always been the basis for successful waste recovery efforts in Oregon since passage of the Opportunity to Recycle Act in 1983. Sourceseparation means the generator (residents, businesses and industry) separates recyclable and compostable materials from garbage at their home or business. Garbage is trucked off for disposal and recyclers/composters have a clean supply of feedstock material, free of contaminants that can cause problems in the manufacturing and composting processes.



Rich, dark, clean finished compost.

Clean, uncontaminated organic feedstocks are essential for compost sites to produce a quality, plastic-free, finished compost product. The most effective way to provide clean food waste feedstocks is for generators to remove plastic packaging and other contaminants before they transport loads to compost sites.

Composting facilities in Oregon are not allowed by DEQ permit to accept plastic and other noncompostable wastes for composting, nor are they designed to handle contaminated waste. DEQ expects generators of composting feedstocks to send only compostable material to compost sites for composting. To ensure that compost sites receive only clean feedstock loads, DEQ requires composting facilities to inspect incoming feedstock and reject contaminated loads from active composting piles. Generators may see additional management and/or disposal fees for rejected loads.

#### Assistance

Assistance is available to help food waste generators with ways to provide clean food waste for composting and improve recycling programs. In the Portland metro area and Marion County, local governments offer free resources and onsite assistance to stores to educate and train employees on what is acceptable for composting programs. See the following websites for information:

#### Portland Composts:

http://www.portlandonline.com/bps/index.cfm?c =41682

Marion County Public Works - Environmental Services: <u>http://www.mcrecycles.net</u>

Other local government agencies also can provide assistance. DEQ can help find education and training assistance and assist with large feedstock generators.

#### Regional contacts for more information:

DEQ Northwest Region Stephanie Rawson 2020 SW Fourth Ave, #400 Portland, OR 97201 Tel: (503) 229-5562 E-mail: rawson.stephanie@deq.state.or.us

#### **DEQ Western Region**

Bob Barrows 165 East 7th, Suite 100 Eugene, OR 97401 Tel: (541) 687-7354 E-mail: <u>barrows.bob@deq.state.or.us</u>

#### **DEQ Eastern Region**

Bruce Lumper 400 East Scenic Drive, #307 The Dalles, OR 97058 Tel: (541) 298-7255 ext. 240 E-mail: <u>lumper.bruce@deq.state.or.us</u>

#### **Alternative formats**

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