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Policies to Promote Composting

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Obstacles to Expanding Composting

- # Lack of collection infrastructure
- # Lack of composting capacity
- # Siting difficulties
- # Lack of regs/permitting to facilitate compost operations
- # Competition with cheap disposal



Outline

- # Snapshot of existing Maryland policies
- # Policies needed to expand composting
 - Review of local and state policies endorsed by DC Regional Organics Task Force
 - Other model local and state policies to consider



Snapshot of Maryland Regs

- # Permits “natural wood waste recycling” facilities (MDE, last updated 1999)
- # Permits for sewage sludge composting (MDE)
- # Regulates compost products (MDA, last updated 1995)
- # Stormwater discharge permits (MDE)



DON'T need a solid waste permit:

- # Yard waste composting (as long as no large wood included) and you have a market for compost
- # Food waste and manure MAY not need a disposal permit, but depends
- # Governmental natural wood waste operations are exempt
- # On-farm composting IF it's waste from onsite only



Model State Policies:

www.newrules.org

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Composting

Composting may be one of the most vital strategies for curbing greenhouse gas emissions. It is an age-old process whose success has been well demonstrated in the U.S. and elsewhere. Composting facilities are far cheaper than landfills and incinerators. Adopting this approach would provide a rapid and cost-effective means to reduce methane and other greenhouse gas emissions, increase carbon storage in soils, and could have a substantial short-term impact on global warming. Below you'll find some interesting composting rules that have been adopted by communities and states. Here's a breakdown of the state's with rules in two categories: expanding on-farm composting and performance-based standards criteria for composting facilities.

Organic discards — food scraps, leaves, brush, grass clippings, and other yard trimmings — comprise one quarter of all municipal solid waste generated. Of this amount, 38% of yard trimmings end up in landfills and incinerators; for food scraps, the wasting rate is 97.8%. Paper products comprise one-third of all municipal solid waste generated. While 52% of paper products are recovered, paper is still the number one material sent to landfills and incinerators. This waste represents a tremendous opportunity to prevent methane emissions from landfills through expanded recycling, composting, and anaerobic digestion programs. At the same time, compost can also restore depleted soils with nutrient-rich humus and organic matter, providing ancillary benefits that are not realized when systems of incineration and landfilling are used.

NOTE: The U.S. Environmental Protection Agency Region III, Mead Foundation, Park Foundation, Marpat Foundation and the Lang Family Foundation provided funding support for the development of ILSR's summary of select state composting regulations.

State and Local Composting Rules by Various Categories

On-Farm Composting and Permit Exemptions	Performance Based Standards	Ban on Yard Trimmings in Landfills	Ban on Food Scraps in Landfills and Mandatory Composting
<ul style="list-style-type: none"> • California <small>(/node/3000)</small> • Iowa <small>(/node/3010)</small> • Maine <small>(/node/3002)</small> 			



San Francisco's organics are composted at the Jepson Prairie Organics facility near Vacaville, CA.

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[iowa-rules-and-programs](#)

Iowa has some good regulations to encourage on-farm, small-scale food scrap composting. The rules allow composters to accept up to two tons of food scraps from off-site per week without obtaining a solid waste permit. The composters must comply with specific site and operating requirements or their exempt status may be revoked. Facilities composting over two tons of food residuals and yard waste per week in any combination from off premises must obtain a permit and adhere to the solid waste composting requirements stipulated in state rules. [More](#) (/environment/rules/composting/composting-

State

Composting - Florida Rules and Programs

[\(/environment/rules/composting/composting-florida-rules-and-programs\)](#)



[\(/environment/rules/composting/composting-florida-rules-and-programs\)](#)

The Florida Department of Environmental Protection recently revised Chapter 62-709 of the Administrative Code, which regulates composting operations. The Department also revised several related forms including the Application for a Permit to Construct/Operate a Solid Waste Management Facility for the Production of Compost and the Annual Report form. The changes should make it easier to compost in Florida and smaller facilities may qualify as a pilot project with reduced regulatory oversight. [More](#)

State

Composting - Maine Rules and Programs

[\(/environment/rules/composting/composting-maine-rules-and-programs\)](#)



Maine adopted new state composting rules on February 18, 2009. The state legislature mandated that the Departments of Agriculture and Environmental Protection collaborate to ease the regulatory burden on agricultural composting operations and revise the volume and types of materials that may be composted without a permit from the state. The state must differentiate between composters processing "municipal sludge, septage, industrial sludge or other materials with a higher risk of contamination" and agricultural composting operations, which are defined as "composting that takes place on a farm and uses only animal manure, animal carcasses and offal, fish waste, leaves, wood chips, animal bedding and other vegetative waste, produce and other vegetable and food waste." [More](#) (/environment/rules/composting/composting-maine-rules-and-programs)

State

Composting - California Rules and Programs

[\(/environment/rules/composting/composting-california-rules-and-programs\)](#)



California has thorough regulations that are specifically tailored to composting. Most composting operations are required to apply for a permit; however there are exemptions for some types of operations. For example, facilities that have less than 500 cubic yards of compost on-site, of which less than 10 percent is food scraps, are exempt from the requirement to obtain a permit. In addition, in-vessel composting of up to 50 cubic yards is allowed without a permit. Composting operations that are deemed a greater risk of causing environmental harm are required to either notify the enforcement agency or apply for a full permit. [More](#) (/environment/rules/composting/composting-california-rules-and-programs)

State

Composting - Washington Rules and Programs

[\(/environment/rules/composting/composting-washington-rules-and-programs\)](#)

Oregon

Fact Sheet

New Rules Regulating Composting Facilities

Background

On Aug. 20, 2009, the Oregon Environmental Quality Commission adopted new rules for regulating composting facilities. The new rules became effective Sept. 14, 2009, when they were filed by the Secretary of State. This document provides a brief summary of the new rules. For additional information and copies of the rules, please see the contact information below.

Introduction

Composting facilities are operations that process certain organic feedstocks into a finished product called compost. The most commonly used feedstocks for composting are yard debris, wood waste, manure and food waste. Composting can be an efficient method for recycling organic materials that might otherwise be disposed of in a landfill, and by avoiding uncontrolled anaerobic decomposition in landfills, it prevents the release of methane, a significant component of greenhouse gas.

The use of compost 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; and on heavy soils, compost helps reduce compaction and increases infiltration. Incorporation of compost into soil stores carbon, helping to reduce atmospheric carbon.

Composting also contributes to achieving the state's solid waste recovery goal of 50 percent by 2009. In 2006, 41 permitted composting facilities in the state composted more than 591,000 tons of feedstock, accounting for 15 percent of all solid waste diverted from landfills.

DEQ supports and encourages composting. At the same time, DEQ is aware that, if not conducted in the proper manner, or if conducted at an improper location, composting presents potential environmental problems, most notably to surface water and groundwater.

What is the objective of the new rules?

The new rules provide a regulatory program that encourages composting by clarifying environmental requirements, exempting more small facilities, making the rules more focused

and efficient and providing regulation tailored to the potential environmental harm at each facility, while ensuring all operations protect public health and the environment.

Significant changes to the composting rules

The new rules are addressed in Oregon Administrative Rule Chapter 340, Divisions 93, 96 and 97. They make the following significant changes to the structure of DEQ's composting program:

- All facilities, both existing and new, will be screened to evaluate the degree of environmental risk posed by the facility. Low-risk facilities will operate under a *registration permit*. Higher-risk facilities will be required to provide an *operations plan* for DEQ approval that addresses the identified risks. These facilities will operate under a *composting permit*.
- The rules adopt performance standards that clearly describe the environmental standards every composting facility must meet.
- The rules give operators the responsibility and flexibility to design, construct and manage their operations – subject to DEQ approval – to meet the performance standards.
- DEQ will focus its inspection, technical assistance and compliance efforts on facilities that present significant environmental risks.
- The rules remove limitations on feedstocks agricultural composters may use. They also require that agricultural composters meet the same performance standards as all other composters.

Other changes to the composting rules

The new rules also:

- Redefine feedstock types based on physical contaminants and pathogen-carrying properties.
- Exempt more small facilities (under 100 tons of feedstock per year) from screening and permitting.



State of Oregon
Department of
Environmental
Quality

Land Quality Division

Solid Waste Program
811 SW 6th Ave.
Portland, OR 97204
Phone: (503) 229-6832
(800) 452-4011
Fax: (503) 229-6977
www.oregon.gov/DEQ/

Local Policies:

Expand Yard Trimmings Diversion

- # Region-wide ban on collection of yard debris in plastic bags
- # Require set-out in kraft bags or reusable container
- # Require weekly yard debris separation and set-out
- # Target a wide range of yard debris (grass, leaves, brush, garden trimmings)
- # Offer curbside collection service year-round, with option to not collect in/require off-season
- # Promote backyard composting and grasscycling

Supported by the DC Regional Organics Task Force

Plastic Bags Cost Money



25% of operating costs at this facility

Toronto



**SORRY. WE ONLY PICK UP
LEAVES IN REUSABLE CONTAINERS
OR KRAFT PAPER BAGS.**

*Remember, leaves and yard waste are recycled into
compost. And while kraft paper bags break down into
compost, sadly, plastic doesn't. So this season use*



kraft paper bags, bushel baskets



or other large,



open-top containers.

For more environmentally-friendly suggestions,

visit www.city.toronto.on.ca/compost

or call 416-392-4546.



State Policy

- # State ban on disposing yard debris in landfills and incinerators

Supported by the DC Regional Organics Task Force

Delaware findings on state bans

- # Definition of “yard waste” varies by state
- # Scope and enforcement vary by state
- # States with bans receive significantly less yard materials than those without
- # Bans increase on-site handling of yard debris
- # For DE, disposal would decrease from 234 lbs/cap to 76 lbs/cap (with about 30% of material reduced treated on-site)

Source: *Analysis of the Impact of a Yard Waste Ban On Landfill Quantities and Household Costs*, DSM Environmental Service for the DE SWM Authority, Sept. 14, 2004

Additional Local Policies:


Yard Trimmings Diversion

- ❏ Require landscapers to recover yard debris
 - New York City
- ❏ Ban yard trimmings from disposal facilities
 - Sonoma County, CA; Nova Scotia
 - Frederick Co., MD; Northern New Castle Co., DE
- ❏ Set up drop-off sites for materials not collected at curbside
 - Boulder, CO; Fargo, ND; Kitsap Co., WA
- ❏ Give purchasing preference to local compost
 - Duke University
 - King County, WA
- ❏ Require all public agencies adopt yard debris reduction practices

What NYC Residents and Landscapers Need to Know About Yard Waste Removal Regulations
Including NYC's Yard Waste Composting Law
(Local Law 40 of 2006/Introduction 431-A)

Yard Waste Set-Out Requirements for NYC Residents


- NYC residents living in districts designated for seasonal yard-waste collection must set out their yard waste for Department of Sanitation collection on the dates specified through official DSNY notification in either paper leaves & leaf bags (two 30-50 gallon capacity) or unlined rigid containers (16-32 gallon capacity). Residents can also set out tree limbs and branches in securely tied bundles no more than 2 feet high and 4 feet long. Also avoid Asian Longhorned Beetle control measures below.
- Fines for lack of compliance: \$25 for the first violation, \$50 for the second violation, \$100 for the third and each subsequent violation.
- For info on the Department of Sanitation's yard waste collection program, call 311 or visit www.nyc.gov/dsny.
- Special Asian Longhorned Beetle Control Measures to prevent further introduction, all wood from trees in quarantined areas is subject to special handling. Before discarding tree stumps or firewood, residents in Brooklyn, Manhattan, and Queens must schedule an appointment for Special Parks and Recreation pickup. For more info on the Asian Longhorned Beetle or to schedule an appointment for wood debris collection, call 311 or visit www.nyc.gov/dsny.



Landscaper Generated Waste

Yard waste generated by landscapers cannot be set out for Department of Sanitation collection nor dispersed in or around the curb or street.

- Landscapers must collect and dispose of any yard waste that they generate at a permitted composting facility. Notification: If the DSNY Commissioner gives written notice that there isn't sufficient capacity at permitted composting facilities within NYC or within 10 miles of the borough where yard waste was generated, landscapers may dispose of yard waste at any permitted solid waste facility.
- Fines for lack of compliance: \$200 for the first violation, \$1,000 for the second violation within a twelve-month period after the first violation, \$2,000 for the third or subsequent violation within a twelve-month period after the first violation.
- For info on how to dispose of yard waste at the Fresh Kills Compost Site, contact David Nuccio at the NYC Department of Sanitation, Bureau of Waste Disposal, 917-237-5962, disposal@dsny.nyc.gov.



City of New York, Michael R. Bloomberg, Mayor
Department of Sanitation, John J. Chenery, Commissioner

Additional State Policies:

Yard Trimmings Diversion

- # Ban use of plastic bags for yard trimmings
 - MN's compostable bag law forbids use of conventional plastic bags for yard trimmings collection in the Twin Cities area
 - # Allow tax deductions on state income tax
 - Compostable bags
 - Backyard composting bins
 - # Give purchasing preference to local compost
 - # Require yard debris collection and composting
 - Oregon, Iowa, Maine, West Virginia
 - # Require all public agencies adopt yard debris reduction practices
 - California
-

Additional Local Policies:

Food Scraps Diversion

- # Publicize food donation programs
- # Start a pilot food recovery program
 - Curbside
 - Drop-off
 - Public events
 - Government cafeterias
- # Add food scrap recovery to solid waste plans
- # Release RFP for food recovery services
- # Maintain web site on food scraps diversion
- # Work with other jurisdictions on facility siting
- # Advocate for improved state policies



Additional State Policies:

Composting Infrastructure

- # Develop model zoning ordinances
 - # Streamline regulations/permitting
 - Adopt performance based permitting regs
 - Allow small on-farm food scrap composting
 - Require permitted facilities to have trained operators
 - # Train all regulators
-

Managing the compost process

- # Good management can make or break the operation
- # Minimize odors and other environmental impacts
- # Make best use of materials, equipment, and labor available
- # Good operator who understands the compost process and knows how to troubleshoot
- # Temperature is the primary yardstick of the composting process
- # Pathogens/aspergillus fumigatas



Performance-Based Regs

Oregon

- Defines 3 tiers of feedstocks
 - Tier 1: yard trimmings, wood wastes, ag crop residues, vegetative food wastes
 - Tier 2: Tier 1 + manure + animal beddings
 - Tier 3: Tiers 1, 2 + dead animals, mixed food waste
- Achieve pathogen reduction
- No unsafe discharge of leachate or stormwater
- Prevent odors

Promoting Small-Scale Composting

Oregon permit exemptions:

- 20 tons per year of meat and source separated post-consumer scraps in aerated static pile or windrow
 - 40 tons per year of meat and source separated post-consumer scraps in-vessel
 - Up to 100 tons per year of yard trimmings, industrially produced vegetative food scraps
-

Promoting Small-Scale Composting

Washington permit exemptions:

- Substrate for growing mushrooms on-site
 - On-site vermicomposting
 - 40 cubic yds or less of yard trimmings, pre-consumer food scraps, and manure and animal bedding from herbivorous animals (on-site) OR less than 250 cubic yds on-site at any time
 - Agricultural composting when all ag wastes are generated on-site and all finished compost is used on-site
 - When ag waste generated off-site, compost used on-site, volume is limited to 1,000 cubic yards on-site at any time
 - For agricultural composting, if compost is sold off-site, than a farm management plan meeting conservation practice stds is required.
-

Promoting Small-Scale Composting

California permit exemptions:

- Mushroom farming
 - Vermicomposting
 - Agricultural material derived on-site of which no more than 1,000 cubic yards is sold or given away per year
 - Green material, compost, or chipped and ground material if 500 cubic yds or less is on-site at any one time, the compostable materials are generated on-site, and if no more than 1,000 cubic yds of materials are sold or given away per year. Compostable material may also include up to 10% food material by volume.
 - In-vessel composting with a capacity less than 50 cubic yds
-

Promoting Small-Scale Composting

- **Maine:** permit exemptions if in a 30-day period the facility accepts less than:
 - 10 cubic yds of leaf, vegetative, or other residuals with a C:N ratio greater than 25:1
 - 5 cubic yds of food and other residuals with a C:N ratio between 25:1 and 15:1
 - 5 cubic yds of fish or other residuals with a C:N ratio of less than 15:1
 - **Maine:** Agricultural composters that compost between 5 and 30 cubic yds of food and other residuals with a C:N ration between 25:1 and 15:1, but must submit a compost management plan and gain approval from the Dept. of Ag, Food & Rural Resources.
-

Promoting Small-Scale Composting

- # Iowa: permit exemptions for composters accepting up to 2 tons per week of food scraps from off-site
 - # Rhode Island: Registration and approval, but not full permit, is required for agricultural composters if they accept:
 - Not more than 10 tons per day of pre-sorted produce or vegetative scraps
 - Not more than 1 ton per day of pre-sorted kitchen, restaurant, or municipal food scraps
 - Not more than 1/2 ton per day of unprocessed meat and fish wastes
-

Promoting Small-Scale Composting

Pennsylvania

- Makes a general permit available for on-farm composting
 - Farmer can sell or distribute compost
 - Compost facility cannot exceed 5 acres
 - Cannot accept more than 500 tons or 1,000 cubic yds per year source separated food waste and cannot accept more than 3,000 cubic yds of total material
 - Must submit names and locations of off-site waste generators and amounts and types of waste received
 - Need a site plan and procedures to assure compost quality
 - Windrows must maintain a temperature of 55 deg C for 15 days; aerated static piles and in-vessel systems must have a temperature of 55 deg C for 72 consecutive hours
-

Promoting Small-Scale Composting

- # Massachusetts permit exemptions for:
 - Leaf composters with less than 10,000 tons on-site at one time
 - Many types of on-farm composters such as up to 20 cubic yds per day of vegetative scraps, or up to 10 cubic yds or 5 tons per day of food material (registration required as well as meeting performance stds)
 - Agricultural composters may accept materials from off-site



Additional State Policies:

Building Markets for Compost

- # Develop compost benefit and usage education programs
 - # Require state agencies procure soil amendments by specifying composts certified by the Seal of Testing Assurance
 - # Give preference in purchasing to in-state-produced compost
-

Additional State Policies:

Miscellaneous

- # Require “pay-as-you-throw” or SMART
 - # Promote Industrial Revenue Bond programs for composting facility construction capital
 - # Monetize climate benefits of composting
 - # Build and maintain comprehensive web site
 - # Target large generators by providing resources and technical assistance
 - # Provide compost use training, and compost use specs and guidance
 - # Implement purchasing specs for compostable food service ware
-

Oregon



Oregon Department of Environmental Quality

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Solid Waste

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Composting Program

Composting contributes to Oregon's waste recovery goals thanks to the efforts of commercial and agricultural composting operations and citizens who compost in their back yards. On this page you will find information on permits and permit applications, recent studies on quality issues, updates on the Department's policy work, and links to lots of useful information on how to make and use compost.

Policy

Composting Facility Rules

The amended composting rules adopted by the Environmental Quality Commission in August 2009 were filed by the Secretary of State and became effective September 14, 2009. You may read and download the rules at the Secretary of State's Web site.

- Fact sheet: [New Rules Regulating Composting Facilities](#) PDF
A summary of the adopted rules.
- Secretary of State's Web site:
 - [Division 93](#)
 - [Division 96](#)
 - [Division 97](#)

Commercial Composting

- [Best Practices: Nursery Composting](#) PDF
- [Clopyralid information](#)
- [Fact sheets](#)
- [List of composting facilities](#)

A sortable query available as a downloadable file (as a PDF, Excel, Access or CSV file), that includes landfills, material recovery



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[Web page](#)

[Materials for Teaching Residents About Composting](#)
[Outline and talking points](#)
MS Word 23 KB
[Poster: Composting is Easy](#)
PDF 293 KB

[Vermicomposting: Indoor Composting with Worms](#)
[Web page](#)

[Open Burning \(of certain organic materials when composting is not practical\)](#)
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WASTE & RECYCLING

Supermarket Recycling in Massachusetts

[Introduction](#)

[Supermarket Recycling Program Certification](#)

[Recycling & Reuse Assistance for Supermarkets](#)

[Background Information & News](#)

Waste & Recycling: Supermarket Recycling in Massachusetts

Introduction

Recycling and composting organics and other waste materials is good both for the environment and for business.

The Massachusetts Department of Environmental Protection (MassDEP) and the [Massachusetts Food Association \(MFA\)](#), through a [Memorandum of Understanding](#), have partnered to establish a voluntary [Supermarket Recycling Program Certification](#) that encourages supermarkets to develop sustainable programs for recycling and reusing organics and other materials.

Participating stores not only save money, but also improve their compliance with existing Massachusetts [waste disposal bans](#) (rules that prohibit disposal of certain materials that can be recycled). MassDEP developed this page to help supermarkets establish and grow sustainable recycling programs.

[Back to Supermarket Recycling index](#)

Waste & Recycling: Supermarket Recycling in Massachusetts

Supermarket Recycling Program Certification

By obtaining Supermarket Recycling Program Certification (SRPC) status, a full-service grocery store can qualify for relief from some regulatory requirements. To participate in the voluntary program, a supermarket needs to set up and maintain a comprehensive recycling and reuse program, and document its efforts by submitting a certification to MassDEP. The benefit: truckloads of trash from that store will not be subject to comprehensive inspection when they arrive at transfer stations or disposal facilities.

Additional State Policies:

Miscellaneous, cont.

- ⌘ Prohibit the use of claims such as “biodegradable” unless these claims are verified
- ⌘ Ban disposal of commercial food residuals once an adequate processing infrastructure has been established
- ⌘ Require each county develop and adopt a recycling plan that includes recycling of yard trimmings and food residuals



Recommendations (for MD)

- # Clarify current regs in dedicated Compost web page
 - # Champion food residual composting at the state level
 - # Streamline regulations/permitting
 - Adopt performance based permitting regs
 - Consider integrating permits for food residual composting with natural wood waste composting
 - Better facilitate on-farm food residual composting
 - # Train all regulators
-

Contact

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