COMPOSTING is inherently local; it supports local green jobs, farmers and other businesses. Indeed, farmers have a vital role to play in producing and utilizing compost to grow crops and restore depleted soils. State permitting rules can facilitate on-farm and other small-scale operators, thus helping to expand and diversify the composting infrastructure.

Eleven states — Iowa, Maine, Massachusetts, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Washington, West Virginia and Wisconsin — are surveyed here for their noteworthy efforts and differing approaches in getting more farms and other small-scale operators to compost, especially food scraps.

Brenda Platt, Rachel Ross, and Melody Poland

Farmers have a vital role to play in producing and utilizing compost to grow crops and restore depleted soils.

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PROMOTING THE PRACTICE

SUPPORTIVE RULES FOR SMALL-SCALE COMPOSTING

Threshold Determination: Science or Politics?

Thresholds are a crucial component to state policies that involve exemptions for small-scale composters. High
but its new rules, effective April 1, 2012, composting regulations and may elimi-

tory path. Currently Iowa is revising its cess and is often a much easier regula-

IDNR “wants to remove hurdles” to Iowa is governed by permit-by-rule, as

in the administrative code was the one with stakeholders” and that the amount

determined by a “rule-making process ing barrier of the permit process —

Oregon Administrative Rules Chapter 340, Divisions 093-0080 (Variances and Permit Exemptions), 096-0606 (Special Rules Pertaining to Composting: Applicability), and 097 (Solid Waste Permit Fees) 2010

Pennsylvania The Pennsylvania Code, Title 25 Environmental Protection, Chapter 281 and 287.101 2005

Rhode Island Rules and Regulations for Agricultural Composting 2003

Washington WAC Title 173, Section 350-220 Composting facilities 2003

West Virginia 33CSR3 Title 33 Legislative Rule Department of Environmental Protection Division of Waste Management Series 3: Yard Waste Composting Rule 3.5.b: Exemptions 2001

Wisconsin Wisconsin Administrative Code Chapter NR 502.12 Yard, farm, food residuals and source-separated compostable material composting facilities 2012


Table 1. State laws describing exemptions for small-scale composters (11 states surveyed)

<table>
<thead>
<tr>
<th>State</th>
<th>Title of Composting Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>IAC Environmental Protection 567, Chapter 105.2-105.5(455B, 455D)</td>
</tr>
<tr>
<td>Maine</td>
<td>06-096 Department of Environmental Protection Maine Solid Waste Management Rules: Chapter 410</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>MassDEP Site Assignment Regulations for Solid Waste Facilities 310 CMR 16.08: Applicability</td>
</tr>
<tr>
<td>New York</td>
<td>DEC Regulations and Enforcement Chapter IV – Quality Services, Subpart 369-5.3: Composting Facilities</td>
</tr>
<tr>
<td>Ohio</td>
<td>OAC Chapter 3745-560 Composting Facilities</td>
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</tr>
</tbody>
</table>

Year Passed/ Most Recent Amendment
1998
2001
2003
2005
2008
2011
2012
2010

thresholds for the permit-exempt seem to increase participation in organics recy-

cycling, as it takes down the intimidating barrier of the permit process —

though some regulators argue it is not an onerous one.

Thresholds are determined in various ways. In Wisconsin, the amount “be-
lieved to be manageable at the time the composting rule was drafted” is written

into the law, says Jennifer Huffman, a composting specialist for Iowa’s Depart-
ment of Natural Resources. Huffman notes that "in the past 13 years, Arroyo-Rodri-

guiz cannot recall receiving com-

plaints specific to exempted farm com-

posting operations in Ohio. Since the exempt operations are smaller, the rare

problems that do arise are containable. However, regulators unfortunately do not have hard data tracking the impact of their policies. Not all states require registration or notification of facilities qualified as exempt; thus, an accurate

number of these operations and how much material is diverted from landfills because of their composting are largely unknown. States report that it would require too much staff and time to record this, as the exempt facilities are deemed low-risk. Based on the lack of recorded complaints though, it seems that all these state policies generally promote functioning small-scale composting fa-
cilities. However, it does not mean that regulators are content to keep regulations the same.

RAISING THE BAR

States have recognized the impacts of thresholds set too low for facilities that are wisely managed and have the ability to absorb more materials. New York is currently discussing raising their numbers from 1,000 to 5,000 cy/yr of source separated organics. According to Sally Rowland of New York State’s Di-

vision of Materials Management, there was no research to support the regist-

ration limit at the time it was decided, but “after implementing the food scrap composting registration for a number of years,” the division is “comfortable in proposing a regulatory revision to in-
crease the registration amount.”

In Wisconsin, farms can handle an amount of material, so we’ll accept more material. They just need to give operators the responsibility and flexibility to design, construct and manage their operations to meet the perfor-

mance standards. The three-tier system Oregon utilizes categorizes facilities by feedstock; however, the bottom-line is performance. Oregon Administrative Rule 340-096-0070(4) for example states that “All composting facilities must be designed, constructed, and operated in a manner that, to the greatest extent practicable, consistent with proper facil-

ity design and operation, controls and minimizes odors that are likely to cause adverse impacts outside the boundaries of the facility.” Such a law emphasizes
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Six years prior to Oregon’s revisions, Washington State adopted detailed performance-based standards in 2003. According to Chery Sullivan, Organics Specialist for the Washington State Department of Ecology, performance-based standards foster innovation and will continue to be supported through state programs like Waste 2 Resources. Ohio has followed suit; its regulation includes standards to be met without mandating how to do so. These rules foster innovation and take into account different site qualities, such as climate and soil type. Performance-based standards thereby acknowledge no one model is the best option for every facility.

HELPING FARMERS

States can also support small-scale farmers in their composting endeavors through two other approaches: technical assistance and rules that allow for the sale of finished compost. Technical assistance is available through compost schools that provide certification (Maine Compost School), on-site help from inspectors (Iowa’s Department of Natural Resources), and grants for innovative projects (funded by Oregon Department of Environmental Quality’s fee on every ton of waste disposed in landfills). These types of programs encourage newcomers to begin composting and give them the necessary tools to compost successfully.

In the Mid-Atlantic region, technical composting support for farmers has been offered through an outreach program coordinated by the Institute for Local Self-Reliance (ILSR) and funded by the U.S. Environmental Protection Agency/Region III since 2008. Based on consultations with farmers interested in food residuals composting but concerned about its feasibility on their land and associated financial demands, ILSR created a network of technical support. The team is comprised of individuals who are up-to-date about issues within their communities and their state permitting regulations, and are also known and respected by their peers. The service is in high demand and currently exceeds ILSR’s funding capacity to meet all requests. A similar design, which takes into account specific state needs, could be adopted by other states.

The opportunity to sell compost provides farmers with additional revenue, as compost is a value-added farm product. Many states have detailed guidelines. Massachusetts devised three categories of compost based on quality, for instance the concentration of heavy metals. The type of compost dictates where the compost can be used and sold. Pennsylvania allows substantial flexibility. Operators with the general permit can sell compost without restriction, provided that specific standards that ensure a safe product are met. Licensed facilities in Wisconsin are also free to sell all of their compost.

THE WEST VIRGINIA CASE

West Virginia addresses on-farm composting in a novel way: it categorizes acceptable feedstock types more broadly than most states. Passed in 2001, Title 33, Series 3 of the Department of Environmental Protection’s Division of Waste Management describes the state’s composting procedure. The rule exempts on-farm composting facilities that are less than five acres in area and handle less than 12,000 tons annually as long as they adhere to location and operational standards outlined in the Yard Trimmings Composting Regulations. The rule specifically addresses yard trimmings, however in-
cludes “other acceptable compostable materials which have been approved in writing [...] to produce a safe product for use as soil amendment/soil conditioner.” Permitted materials include off-site generated preconsumer and postconsumer food scraps as well as fish and poultry carcasses, poultry litter and animal manures, according to Steve Miller, Assistant Commissioner of the West Virginia Department of Agriculture. He states that the department is working on specifying livestock and wildlife carcasses as acceptable materials. West Virginia’s code also lets farmers sell their compost without restriction, but if they charge customers to accept food residuals then they must obtain permitting as commercial yard trimmings composting facilities. This does not apply if farmers ask for a “composting fee” to cover operational costs such as collecting materials and turning rows.

**FUTURE STEPS**

Compost regulations regarding small-scale operators are fortunately far from being stagnant. State regulators recognize the importance of evaluating the impacts of their codes and taking note of points to improve. The current rise of food discards, pre and postconsumer, handled by exempt facilities is one result of regulation revisions. Ohio’s performance-based approach will facilitate composting at the small-scale, local level where it can bring benefits to the community by allowing materials to be collected and used without requiring cost-prohibitive financial assurance. Wisconsin’s rules are being revised to include food scraps and West Virginia is expanding the reach of exempted materials allowed as well.

States like Washington are also exploring new technologies. “It’s about matching infrastructure with opportunity,” says Chery Sullivan, adding that “some feedstocks are better suited for certain technologies.” This is why Washington has invested in developing anaerobic digestion as a key element of the organic management infrastructure. Washington’s revised solid waste rule is on schedule to be effective at the end of this year. It includes exemptions that reflect the state’s commitment to more efficient composting options, and a new section addressing solid waste permitting for anaerobic digesters.

When it comes to composting, it is essential to minimize environmental impacts to land, air and water while diverting valuable feedstocks from landfills and incinerators. However, in order to grow composting capacity, prescriptive measures may be too narrow and restricting. This is further complicated by factors such as physio-graphical variation, localized environmental concerns and the size of individual operations. “Maybe the approach should be to require larger buffer zones (i.e., 500 feet setbacks from any residence not owned by landowner) and to use permit conditions to limit nuisance conditions (noise, odor, vectors, hours, of operation, etc.),” says Craig Coker of Coker Composting and Consulting. His recommended strategy emphasizes prevention of risks via performance rather than limiting materials handled. This method aligns with what some states are already doing in terms of shifting more attention to performance standards rather than strict thresholds.

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