State of Oregon
DEQ Department of Environmental Quality

Topic Paper: "Effectively Composted" Definition and Implementation

RMA Rulemaking 3: Prepared for Rulemaking Advisory Committee discussion

March 30, 2026

Summary of proposed amendments

This document presents three proposed amendments to Oregon Administrative Rules to clarify implementation of ORS 459A.965, Prohibition on promoting acceptance of certain materials for composting; pilot programs.

Two amendments modify definitions in OAR 340-093-0030 to:

- Define the currently undefined term "effectively composted" referenced in ORS 459A.965, and
- Remove "wax-coated cardboard" from the definition of "Feedstock."

The third amendment adds a rule to OAR 340-096-0060, clarifying DEQ's authority to determine whether a material is effectively composted.

Background context

Food serviceware and packaging marketed as compostable can present challenges to composting facilities if the material is not effectively composted. These include introducing contamination into finished compost, increasing contamination due to consumer confusion and look-alike plastics, raising facility costs to remove residual materials, and harming compost sales. More detail on contamination impacts is described in A Message from Composters Serving Oregon.

Compost is applied directly to soil in agricultural, landscaping, and community settings to improve soil structure and increase organic matter and nutrient content. If materials marketed as compostable do not meaningfully contribute to soil health, or leave persistent fragments or residues, the environmental and economic value of composting may be undermined. Reduced confidence in compost quality can affect farmers, gardeners, landscapers, and compost markets more broadly.

Effectively composted term

The term "effectively composted" appears in ORS 459A.965, adopted in 2021 as part of Oregon's Plastic Pollution and Recycling Modernization Act (Senate Bill 582). The statute prohibits local governments, service providers, composters, and others, from promoting the acceptance of certain materials for composting that cannot be "effectively composted."

> **459A.965 Prohibition on promoting acceptance of certain materials for composting**; pilot programs. (1) A person that operates or controls a collection program for yard debris or food waste or that operates or controls a compost facility may not promote for acceptance any material that cannot or will not be effectively composted.
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> (2) The Department of Environmental Quality, or entities approved by the department, may conduct research or pilot projects to examine the collection and compostability of materials and to identify materials that can and cannot be effectively composted. A pilot or research project may not exceed two years in duration.
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> (3) Nothing in this section prevents a composting facility from accepting materials that are not readily compostable and are incidentally collected as part of a collection program.

The term “effectively composted” is not defined in statute or rule. To implement this prohibition consistently, DEQ must interpret what “effectively composted” means in practice. In doing so, DEQ considered state policy in ORS 459.015, which identifies composting as a preferred management method and recognizes its role in reducing impacts on human well-being and environmental health.

Considerations

Whether a material can be effectively composted depends in part on facility type and operating conditions. Oregon composting facilities vary in active composting time, temperature, moisture, feedstock preparation, and screening practices. Many aerobic facilities complete active composting in six weeks or less, under fluctuating conditions. Laboratory testing used for product certification may demonstrate biodegradation under controlled conditions for up to 180 days, but those conditions do not replicate operating conditions at compost facilities.

Third-party certifications, such as Biodegradable Products Institute (BPI) or Compost Manufacturing Alliance (CMA), provide information based primarily on laboratory testing and, in some cases, selected field testing. Certification does not guarantee performance under all Oregon facility conditions. The distinction between laboratory compostability and real-world performance is central to interpreting the statutory term.

Anaerobic digestion presents additional considerations. All currently operating anaerobic digesters in Oregon are wet digesters. In these systems, compostable packaging and food serviceware are removed and disposed prior to digestion because anaerobic microorganisms do not break down these materials and the materials may interfere with system operation.

In evaluating how to interpret “effectively composted,” DEQ considered whether a material contributes to finished compost, whether it introduces environmental, public health, operational, or economic harm, and how facility-specific conditions influence performance. Due to the complexity of assessing full lifecycle impacts of compostable products, the proposed definition focuses on impacts at the composting facility and through the proper use of finished compost.

Accordingly, the proposed definition establishes a performance-based, facility-specific standard centered on contribution to soil health and avoidance of harmful residuals under real operating conditions.

Technical Workgroup

DEQ’s proposed rule changes below are informed by consultation with a Technical Workgroup, which met on Jan. 26 and Feb. 17, 2026. Workgroup charter and materials can be viewed on the 2026 RMA Rulemaking webpage.

Proposed draft redline rule language

DEQ is recommending three proposed rule changes, which follow below, to assist with implementation of ORS 459A.965. The proposed changes are identified with the use of **bold underlined** text for new language, and ~~strikethrough~~ for deletions.

1. OAR 340-093-0030(43) - Add a definition of ‘Effectively Composted’ to rule to clarify the statute as written in ORS 459A.965:
    - **Effectively composted is a material and facility-specific concept and means a material, allowed by law and accepted for composting at a composting facility, that, when composted at the facility:**
        - **Contributes to the beneficial soil properties of the final compost; and**
        - **Leaves an appropriate amount and type of biological, chemical or physical residue that does not harm the environment or public health when the compost is used properly at agronomic application rates or other appropriate uses.**
2. OAR 340-093-0030(47)(a) - Remove ‘wax-coated cardboard’ from the definition of type 1 feedstocks:

- (46) "Feedstock" means organic and other solid wastes used in a composting process to produce composted material, or used in a conversion technology facility to produce other products. For composting, four types of feedstocks are defined:
  - (a) Type 1 feedstocks include source-separated yard and garden wastes, wood wastes, agricultural crop residues, ~~wax-coated cardboard~~, vegetative food wastes including department approved industrially produced vegetative food waste, and other materials the department determines pose a low level of risk from hazardous substances, physical contaminants and human pathogens. Type 1 feedstocks also include digestate derived only from type 1 feedstocks.

3. OAR 340-096-0060 - Add a new rule, Section 7, that clarifies DEQ authority to determine what materials are effectively composted:
   - **(7)A composting facility, permitted by DEQ, must not accept any material for composting without DEQ approval. Packaging and food serviceware, as well as feedstock types 1, 2 and 3, must be approved by DEQ prior to acceptance for composting at a composting facility.**

Proposed implementation plan

DEQ intends to utilize existing regulatory frameworks and protocols to implement ORS 459A.965. As part of the permitting process, composting facilities must submit an Operations Plan with their permit application or permit modification that details the feedstock materials to be accepted by the facility. DEQ proposes to use this existing permitting procedure as the mechanism to determine if a material is effectively composted. This approach builds on existing permitting processes and does not create a new standalone approval program.

DEQ plans to develop an Internal Management Directive (IMD) to guide staff in interpreting and implementing ORS 459A.965, including how to determine if a material is effectively composted. This approval process is not intended to require reapproval of materials already authorized in a facility's approved Operations Plan, unless material composition or facility conditions materially change. The IMD will be available to the public and will provide transparency to composting facilities while helping DEQ implement the statute consistently.

Impacts of proposed amendments

Alignment with RMA framework: Removing wax-coated cardboard from the type 1 feedstock definition creates a simpler and less confusing feedstock type definition, as it removes packaging that is a covered product from a feedstock definition that is focused on low-risk organic materials used for composting such as yard debris, vegetative material and agricultural crop residues.

Fiscal or economic impacts: These amendments clarify ORS 459A.965 and help DEQ implement the statute in a transparent and consistent manner. For facilities proposing to accept food serviceware or packaging for composting, there will likely be a fiscal impact from the effort to collect data to submit to DEQ to support that the material can be effectively composted.

Equity impacts: These rule changes promote equity by increasing clarity and consistency in how materials are evaluated statewide. Reducing contamination in incoming feedstock increases compost quality and market confidence. In turn, this will:

- Ensure that compost applied in agricultural, landscaping, and community settings does not create unintended environmental or public health burdens.
- Promote consistent statewide standards, reducing uneven regulatory application that could disproportionately affect smaller facilities or rural communities.

- Maintain public confidence in compost quality, which supports equitable access to safe and effective soil amendments.

Committee discussion questions

1. Does the proposed definition appropriately balance flexibility across facilities with the need for clarity and enforceability?
2. Are there operational or market implications of requiring DEQ approval prior to acceptance that should be further addressed in rule language or supporting guidance?
3. Are there aspects of the proposed approval framework that could unintentionally create barriers for facilities or producers, and if so, how should those be addressed?

Contact

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