

National Organic Standards Board
Crops Subcommittee
Synthetic Compost Feedstocks Discussion Document
Compostable Synthetic Food Packaging Plastics and Cellulosic Fiber-Based Materials

Summary of NOSB Activity:

On August 30, 2023, the Biodegradable Products Institute (BPI) submitted a petition for rulemaking to the USDA. The petition asks the National Organic Program (NOP) to engage in rulemaking to update the compost regulations in order to create a narrow allowance for certain “compostable” synthetic substances to be included as compost feedstocks without adding these substances to the National List of synthetic substances allowed in organic crop production. The petition proposes allowing substances that meet compostability specifications at ASTM D6400-21, D6868-21, or D8410-21 to be considered allowed “compost feedstocks” in compost used on organic farms.

The National Organic Standards Board (NOSB) unanimously passed a proposal at the Fall 2024 meeting recommending amendments to the organic regulations that would confirm that synthetic compost feedstocks should be reviewed and approved for inclusion on the National List at 7 CFR 205.601(c) and aligns time and temperature requirements to compost industry standards.

For the Spring 2025 meeting, NOSB will be considering a formal proposal that confirms the need for all allowed synthetic compost feedstocks to be added to the National List through a two-third majority vote of the Board, followed by notice and comment rulemaking by USDA. This proposal is designed to convey clarity to the NOP regarding NOSB’s views on how synthetic compost feedstocks should be considered and allowed in compost used in organic crop production.

Summary of Review:

At NOSB’s Spring and Fall 2024 meetings, public commenters expressed strong and varied opinions about the appropriateness of including compostable polymers on the National List and allowing them in compost used on organic farms. In general, those wary of including these substances provided comments focused on two major areas of concern: 1) The potential for the compostable polymers, themselves, to contaminate soil and water; and 2) The overuse of single-use plastics, in general, and whether the allowance for compostable plastics in organic production would violate the National List criteria that requires all substances on the National List to be consistent with organic farming. Additionally, those commenters in support of allowing compostable polymers into compost used on organic farms cited these substances’ role in meeting waste reduction goals, their uniformity and consistency in degradation during the composting process, and the strength of the organic market to drive innovation and adoption of food waste reduction in order to meet greenhouse gas emission reduction goals.

In light of the BPI petition and NOSB’s role in reviewing the suitability of compostable polymers for their inclusion in the National List as compost feedstocks, the Crops Subcommittee (CS) is moving forward with information gathering in order to inform the potential National List addition motion at a future meeting. The CS ordered a Technical Report (TR) of resins and formulated products that meet ASTM D6400-21, D6868-21, or D8410-21 standards in order to inform the evaluation of whether these substances’ chemical properties align with the tenants of organic production.

NOSB is also engaging with organic stakeholders about composting as a driver of change towards sustainability, diverting food waste from the landfill and into composting operations, the role compostable polymers and other synthetic compost feedstocks play in meeting these waste reduction

goals, and reducing polyethylene plastic and other contamination in compost currently used on organic farms.

Lastly, the CS recognizes that compost poses unique challenges to organic production related to Unavoidable Residual Environmental Contamination (UREC), and that oversight of compost feedstocks is an essential element to preventing contamination of compost. Consistent with process-based compliance verification, the approval process for compost in organic production evaluates the entire composting system and does not ignore the presence of prohibited substances in compost feedstocks. In compost making, feedstocks could unintentionally carry prohibited substances into the compost making process. Compost operations make every effort to understand incoming feedstocks, while educating the public and adjacent industries on the importance of eliminating contaminants, and most commercial compost makers typically test their finished compost for pathogens, heavy metals, nutrients, and plastic contamination. Organic compliant compost operations demonstrate good faith efforts to make continuous improvement on preventing contamination of incoming compost feedstocks. Much like buffer zones in organic system plans, drift could occur on organic crops, but the difference between unavoidable residual environmental contamination and intentionally adding prohibited substances to organic crops is a bright line in organic compliance. In addition to the practice of avoiding and removing contaminants, the process of composting breaks down many contaminants on feedstocks into more benign constituents. At this stage, the CS views contamination as that which can be removed from compost feedstocks, and UREC as that which cannot be avoided. Utilizing preventive practices and strict oversight of compost feedstocks through the National List process aligns with organic principles, in contrast with the BPI petition's proposal to introduce a 'de minimis' allowance of new synthetic substances as compost feedstocks with no regular oversight into the organic regulations. The CS is supporting the process of continuous improvement in organic compost making by adding Research Priorities on the fate of prohibited substances in compost and the impacts and persistence of prohibited substances on microbial communities in finished compost.

Questions:

1. Does the current listing for newspapers or other recycled paper, without glossy or colored inks, as a synthetic compost feedstock adequately address the contamination concerns related with these types of products? Are there suggestions for improving this annotation to better reflect the role that paper has as a compost feedstock?
2. What are the risks and benefits to allowing all compostable polymers to be included as compost feedstocks in organic compost?
3. What are the risks and benefits to continuing the current prohibition on compostable polymers' inclusion in organic compost?
4. There have been suggestions to create an allowance for compostable food contact labels (e.g. fruit stickers) and compostable waste collection bags in order to reduce contamination in compost and get more food waste out of the landfill and into compost facilities, but to prohibit compostable plastics in organic compost when they're used in single-use service wear (e.g. cups, clamshells, utensils). What are the risks and benefits to this approach?
5. What are the unique contamination risks associated with composting food waste and the associated compostable polymers that typically come with food waste?
6. What other factors should NOSB consider when evaluating compostable polymers for inclusion on the National List?
7. Is the approach to evaluating UREC and contamination, as described in this document, consistent with organic principles?

Subcommittee Vote:

Motion to accept the discussion document on synthetic compostable polymers

Motion by: Nate Lewis

Seconded by: Brian Caldwell

Yes: 5 No: 0 Abstain: 1 Recuse: 0 Absent: 1