

MEMORANDUM TO THE NATIONAL ORGANIC STANDARDS BOARD

October 11, 2023

FROM: Jennifer Tucker, Ph.D.
Deputy Administrator
National Organic Program (NOP)

SUBJECT: Work Agenda Request: Compost Production for Organic Agriculture

This memorandum advances a petition for rulemaking that requests a revised regulatory definition of “compost feedstock.” The National Organic Standards Board’s (NOSB or Board) has also expressed interest in working on the topic. The National Organic Program (NOP) requests that the Board discuss and submit feedback or a recommendation on the topic of compost in organic agriculture.

Background on Compost in Organic Production

Compost is a soil amendment made from the microbial breakdown (i.e., decomposition) of plant and animal materials. Composting makes nutrients and other beneficial substances in plant, food, and animal waste products readily available. Many organic operations use compost as an integral part of their organic system plan for managing crop nutrients and supporting soil health.

The final rule establishing the organic regulations outlined compost production standards and provided a definition for compost ([65 FR 80548, Dec 21, 2000](#)). Currently, the USDA organic regulations allow natural substances as compost feedstocks, unless prohibited in 7 CFR 205.602. Only one class of synthetic substances - newspaper or other recycled paper without glossy or colored ink - are allowed as a compost feedstock; all other synthetic substances are prohibited. To make compliant compost, feedstocks must meet certain composting methods, including requirements for carbon-to-nitrogen ratios, temperature over time, and minimum turning (§205.203(c)(2)).

NOP has acknowledged that the compost production methods described in the regulations are not a complete list and producers need flexibility for variation in feedstocks and site-specific management practices. In 2011, NOP clarified the addition of allowed compost and vermicompost practices in organic production in the NOP Handbook guidance document [NOP 5021 – Compost and Vermicompost in Organic Crop Production](#).¹ These alternative compost methods are also cited in [NOP 5034-1 – Materials for Crop Production](#). Neither of these handbook documents expanded the allowance for compost feedstocks. Notably, in [response to comments](#) on NOP 5021, NOP explained that post-consumer waste, such as compostable plastic,

¹ Vermicomposting is a process where earthworms are used to break down plant and animal materials and introduce microorganisms. This produces a compost with high microbial activity and readily available plant nutrients.

are synthetic materials and would need an NOSB recommendation followed by rulemaking before they can be used in compost for organic production.

The NOP Handbook previously contained a guidance document (NOP 5016) that described the allowance of green waste and green waste compost in organic production systems.² This document also outlined an approach for responding to unavoidable residual environmental contamination (UREC) present in non-organic green waste materials, such as pesticide residues. This handbook document clarified that these feedstocks are allowed, as long as there was no direct application of prohibited substances during composting and that any residual pesticide did not contribute to the contamination of crops, soil, or water. The document was removed in August 2016 in response to a [lawsuit and judicial decision](#) that the guidance document required rulemaking under the Administrative Procedures Act.

Biodegradable Products Institute Petition to the United States Department of Agriculture

On August 30, 2023, the Biodegradable Products Institute (BPI) submitted a petition (attached) for rulemaking to the United States Department of Agriculture (USDA). The petition asks the NOP to engage in rulemaking to update the compost regulations. Specifically, BPI advocated to add a definition for “compost feedstocks” to the organic regulations and [replace the references to “plant and animal materials”](#) with “compost feedstocks.” BPI requested that the definition include materials that meet ASTM International’s compostability standards as allowed feedstocks.

BPI argues that these changes are needed to align with compostable packaging regulations adopted by states and to support climate-smart agriculture initiatives. In response to the prevalence of plastic waste in our environment, compostable packaging is becoming more common and available. To this end, several states have passed laws restricting or banning single-use, non-compostable packaging. Many of the states’ definitions for “compostable” rely on meeting ASTM International’s standards for compostability and prohibit the use of the term “compostable” on products that don’t meet these standards. California’s law specifically requires compostable materials to be an allowable input in organic production under the USDA organic regulations. Currently, the USDA organic regulations only allows composting of plant and animal materials ([7 CFR 205.203](#)), newspaper, and other recycled paper ([7 CFR 205.601\(c\)](#)). It isn’t clear if any compostable packaging would comply with these requirements.

BPI’s petition aims to resolve this issue by referencing the same ASTM International compostability standards under a new definition for “compost feedstock” in the USDA organic regulations. The petition also asks USDA to update the compost production standards listed in 7 CFR 205.203 and the definition of “compost” to refer to compost feedstocks rather than plant and animal materials. These changes would allow organic farmers to use compost made, in part, from compliant compostable packaging, aligning the USDA organic regulations with state laws.

² Green waste is biodegradable waste that can be composed of garden or park waste, such as grass or flower cuttings and hedge trimmings, as well as domestic and commercial food waste. Green waste is often collected in municipal curbside collection schemes or through private waste management contractor businesses.

The National Organic Standards Board Request to the National Organic Program

Independent from BPI's rulemaking petition, the NOSB has been working on a compost work agenda request in the Crops and Executive Subcommittees. The Board has discussed how the data initially used to develop the compost requirements is outdated and how technology has advanced since the development of the compost standards in the USDA organic regulations. For example, healthy compost piles can have carbon-to-nitrogen ratios as low as 15:1, where the USDA organic regulations require a minimum ratio of 25:1. Further, the United States Compost Council recommends turning windrow compost piles less frequently than the regulations require. The Board also discussed the need to support small-scale farmers producing compost, potential sections of the USDA organic regulations to revise, and how to address prohibited materials in the composting process.

The Board's discussion led to an official work agenda request to the NOP on September 21, 2023. The request asks to refine definitions related to compost and add a definition for "compost feedstock" in 7 CFR 205.2, update the composting requirements in 7 CFR 205.203 to maintain consistency with the revised definitions, and explore whether contamination thresholds would satisfy the requirements to prevent contamination with prohibited substances.

National Organic Program's Request to the National Organic Standards Board

The NOP asks that the Board work on the topic of compost in organic production, and submit feedback or a recommendation that addresses the requests and issues raised in the BPI petition for rulemaking, as well as the issues raised by the Board. NOP also requests that the board consider the following issues: if and how previous Board work on related topics (e.g., [anaerobic digestate](#); contamination of farm inputs³) may be relevant to this compost work agenda item; how the alternative compost methods listed in [NOP 5021 – Compost and Vermicompost in Organic Crop Production](#) may be impacted by any recommended changes and whether these production methods should be included in the USDA organic regulations; and how to address unavoidable residual environmental contamination (UREC), as well as potential contamination of compost by commonly composted materials. For example, the NOP received inquiries asking whether a small amount of commercial yard waste bags with synthetic ink would make an entire batch of municipal compost ineligible for organic production. Please review BPI's rulemaking petition, relevant past NOSB work, and information related to the 2016 lawsuit regarding green waste when considering how to address unintentional contamination of compost.

Thank you in advance for your work on this topic, and we look forward to your discussion.

³ This work included a [2014 discussion document](#) and a [2015 plan](#).



August 30, 2023

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Hon. Jennifer Tucker
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Re: Petition for Rulemaking/CFR Part 205.

Dear Dep. Administrator Tucker,

I am delighted to submit to you and the Agricultural Marketing Service the attached Petition for Rulemaking.

This Petition seeks adjustment to and clarification of the regulations regarding compost and compost feedstocks under the National Organic Program (“NOP”). Its purpose is to bring the NOP compost regulations into a stable and working relationship with emerging state laws that address the climate crisis—laws that mandate the composting of post-consumer food waste and the reduction or elimination of single-use plastic packaging that cannot be recycled or composted.

An urgency arising from the implementation deadlines set by the states and the climate crisis itself, together with the roadmap set forth by the court in *Center for Env. Health v. Vilsack* (2016), underpins this submission. We look forward to cooperating with the Department and its advisory body, the National Organic Standards Board, to advance this critical request.

If you have any questions, please contact me at your convenience.

A handwritten signature in blue ink, appearing to read "Rhodes Yepsen", with a long horizontal flourish extending to the right.

Rhodes Yepsen
Executive Director
Biodegradable Products Institute (BPI)



Petition for Rulemaking¹

To: Agricultural Marketing Service

Submitter: Biodegradable Products Institute

Petition: To Add a Definition of “Compost Feedstock” and Conforming Amendments to the National Organic Program to Harmonize the Program with New State Laws and Presidential Climate Directives.

Date: August 31, 2023

¹ This Petition is submitted pursuant to section 553(e) of the Administrative Procedure Act (A.P.A.) and 7 C.F.R. §1.28 (Petitions). Petitioner respectfully requests the Agricultural Marketing Service (“AMS”) initiate a rulemaking to amend the National Organic Program (“NOP”), 7 C.F.R. Part 205, as set forth herein.



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I. Introduction

This Petition seeks important updates to the federal organic compost regulations that have been unchanged for nearly twenty-five years. The proposed amendments are based on the commercial availability of compostable materials and products that are being incorporated into new state laws designed to combat climate change and to restrict or prohibit nonrecyclable/compostable single-use packaging that is ending up in our soil and oceans. The present organic regulations governing compost and compost feedstocks were written before these new, compostable materials were developed and thus inadvertently prevent them from being used by organic composters.

This Petition seeks to have the materials and products that meet the American Society for Testing Materials (“ASTM”) standards for compostability be designated as allowed compost feedstocks.² The packaging materials that meet the ASTM compostability standards are presently allowed as food contact substances in packaging for organic food but anomalously are disallowed as a compost feedstock. This Petition seeks to eliminate this anomaly and avoid future conflicts with state laws that are increasingly relying on hard deadlines that mandate use of ASTM compliant-compostable food packaging instead of single-use, non-compostable plastics. The proposed amendments are entirely consistent with the climate priorities of this Administration and existing federal organic law and policy.

Inaction will compel organic compost manufacturers that serve organic farmers to make an unfortunate choice between refusing food scraps and green waste in an ASTM compliant-compostable package to maintain organic status, or abandoning organic composting for the far larger market for composting ASTM compliant packaging that states, like California and Washington, are creating. Inaction also impedes the National Organic Standards Board’s (“NOSB”) policy goal that organic production be treated as a paradigm of “climate-smart” production as that term is used by USDA.³ The requested amendments build on the NOSB’s policy assertion and expand rather than restrict the role of organic farmers and compost manufacturers in the emerging circular economy. As this Petition demonstrates the Organic Foods Production Act (“OFPA”) authorizes and may compel the simple rulemaking requested.

Petitioner respectfully requests timely initiation of notice and comment rulemaking due to the urgency arising from impending state deadlines, discussed herein.⁴

² Petitioner notes that the NOP already incorporated the ASTM specifications discussed herein at 7 C.F.R. §205.203; *see also Section V* (Proposed Amendments).

³ *See e.g. Organic is Climate Smart Agriculture*, Memorandum to AMS Deputy Administrator (NOSB Feb. 2023) (stating climate-smart production already exists—and its organic).

⁴ The OFPA requires the Secretary consult with the National Organic Standards Board regarding development of program standards. *See generally* 7 U.S.C. §6503(c); §6518. Due to the impending state law deadlines, BPI requests the Secretary initiate rulemaking and simultaneously seek appropriate consultation with the NOSB.



II. Interests of Petitioner

The Biodegradable Products Institute (“BPI”) is a science-driven organization that supports a shift to the circular economy by promoting the production, use, and appropriate end of lives for materials and products that are designed to fully biodegrade in specific biologically active environments, such as compost. BPI is the leading authority on compostable products and packaging in North America. All products certified by BPI meet ASTM standards for compostability, are subject to eligibility criteria around the connection to food scraps and yard trimmings, meet prohibitions on the use of fluorinated chemicals (PFAS)⁵, and must display the BPI Certification Mark to help identify the item as compostable. BPI’s certification program operates in conjunction with education and advocacy efforts designed to help keep food scraps and other organics out of landfills. BPI members make products that are used by organic brands for packaging.

BPI is organized as a member-based nonprofit association, is governed by a Board of Directors. BPI frequently participates in the development of organic policy and the proceedings before the National Organic Standards Board (“NOSB”).

III. Requested Action

In support of manufacturers and users of organic compost and climate-smart state and federal policies operative in all economic sectors, this Petition asks that AMS add a definition of “compost feedstock” to the federal organic regulations, 7 C.F.R. §205.2, and to make certain conforming and clarifying adjustments to the related regulations. *See Proposed Amendments, Section V.*

IV. Discussion

A. Factual Background

“One third of global greenhouse gas emissions caused by human activity can be attributed to the way we produce, process and package food.”⁶ According to EPA, “Landfills are the third-largest source of CH₄ emissions in the United States.”⁷ It is also well understood that non-compostable plastic trash fills our oceans.⁸ The positive role of compost in the organic system of

⁵ See EPA’s Recommended Standards and Ecolabels Address Per- and Polyfluoroalkyl Substances (PFAS), available at <https://www.epa.gov/greenerproducts/how-epas-recommended-standards-and-ecolabels-address-and-polyfluoroalkyl-substances>.

⁶ See Composting Consortium, available at <https://www.closedlooppartners.com/composting-consortium/> (last visited 1-18-23).

⁷ U.S. EPA, Overview of Greenhouse Gases, available at <https://www.epa.gov/ghgemissions/overview-greenhouse-gases#> (last visited August 3, 2023).

⁸ See e.g. Breaking the Plastic Wave, at p. 9, Pew Charitable Trust (last update Oct. 2020)(“An estimated 11 million metric tons of plastic waste enter the ocean every year.”); see also C. Ostle et al., “The Rise in Ocean Plastics Evidenced From a 60-Year Time Series,” *Nature Communications* 10 (2019); 7 *Ocean*



agriculture and in the emerging climate-smart programs and policies at the federal and state levels underpins this Petition.⁹

Since the 1940's, composting plant and animal materials has been a central organic soil management activity.¹⁰ At the time the NOP was established in 2000 composting was primarily an on-farm activity using on-site plant and animal materials.¹¹ Spurred in part by the organic farming industry, a commercial compost industry emerged and is expected to significantly expand.¹² Commercial operations compost municipal food waste, green waste (or yard debris) and compostable products in carefully monitored settings.¹³ In addition to its role in organic farming, the role of compost in reducing the need for more landfills and abating greenhouse gas generation has led to new state mandates that seek to decrease consumer reliance on single-use

Conservancy, "Stemming the Tide: Land-Based Strategies for a Plastic-Free Ocean" (2015); 8 J.B. Lamb *et al.*, "Plastic Waste Associated With Disease on Coral Reefs," *Science* 359, no. 6374 (2018): 460-62; 9 S. Chiba *et al.*, "Human Footprint in the Abyss: 30 Year Records of Deep-Sea Plastic Debris," *Marine Policy* 96 (2018): 204-12; 10 J.L. Lavers and A.L. Bond, "Exceptional and Rapid Accumulation of Anthropogenic Debris on One of the World's Most Remote and Pristine Islands," *Proceedings of the National Academy of Sciences* 114, no. 23 (2017): 6052- 55; 11 R.W. Obbard *et al.*, "Global Warming Releases Microplastic Legacy Frozen in Arctic Sea Ice," *Earth's Future* 2, no. 6 (2014): 315-20; 12 N.J. Beaumont *et al.*, "Global Ecological, Social and Economic Impacts of Marine Plastic," *Marine Pollution Bulletin* 142 (2019): 189-95.

⁹ See e.g. Press Release, FSA (May 2021)(noting compost grant will "Reduce municipal food waste; divert food waste from landfills."); see also e.g. A Lifecycle Model to Evaluate Carbon Sequestration Potential and Greenhouse Gas Dynamics of Managed Grasslands, eds. Marcia S. DeLonge, Rebecca Ryals, and Whendee L. Silver, University of California Berkeley, Department of Environmental Science, Policy, and Management. (Applications of composted organic matter to grasslands can contribute to climate change mitigation while sustaining productive lands and reducing waste loads.); see also Ryals, R. and Silver, W. Effects of organic matter amendments on net primary productivity and greenhouse gas emissions in annual grasslands, *Biological Applications*. 23(1) 2013:46-59; Ryals, Rebecca, *et al.* Grassland compost amendments increase plant production without changing plant communities, *Ecosphere*, 2016, 7(3):1-15; Silver, Whendee L., *et al.* Carbon Sequestration and Greenhouse Gas Mitigation Potential of Composting and Soil Amendments on California's Rangelands. A Report for California's Fourth Climate Assessment. August 2018.

¹⁰ See e.g. The Living Soil, by Lady Eve Balfour (Faber and Faber 1943); see also *New Yorker Magazine*, p. 16 The Compost Lady, (July 21, 1951) (oral interview with E. Balfour discussing compost).

¹¹ See Final Organic Rule, 65 Fed. Reg. at p. 80559 (Dec. 21, 2000) ("Plant and animal materials include raw animal manure, composted plant and animal materials, and uncomposted plant materials.").

¹² See e.g. The New Plastics Economy, The World Economic Forum, Ellen MacArthur Foundation and McKinsey & Co. EPA's data shows that yard trimmings compost diversion has grown 5-fold since 1990. See e.g. www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials#composting; see also www.calrecycle.ca.gov/Publications/Details/1652 (California's infrastructure report showing substantial growth.); see also S. Kaza *et al.*, "What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050" (International Bank for Reconstruction and Development, The World Bank, 2018).

¹³ See e.g. ASTM-6400-21, Section 3.1.3 ("composting is "a managed process that controls biological decomposition.") (Dec. 2021)(available at www.astm.org); see also U.S. Composting Council's resources on accepting compostable packaging, available at https://www.compostingcouncil.org/page/CompostableProducts.



plastic packaging and products that are not compostable.¹⁴ State policies to incorporate these materials into its economy are in conflict with the NOP regulations developed in the late 1990s that restrict organic compost feedstocks to “plant or animal materials” and exclude novel materials that are compostable.¹⁵

Three important developments demonstrate the timeliness of this Petition. The first is the widespread emergence of compostable plastic materials (sometimes called bioplastics) that can replace most non-compostable plastic materials associated with food packaging, foods scraps and green waste.¹⁶ The second is the awareness of the climate-change crisis and the harmful environmental consequences of single-use, non-compostable food packaging on marine and terrestrial ecosystems.¹⁷ The third is new state laws that restrict or ban non-compostable plastic packaging and require increased composting of food and green waste *together* with its compostable packaging materials specifically to combat climate change. It is against this backdrop that the organic regulations, which do not allow packaging that meets ASTM compostability specifications as an organic compost feedstock and have been unchanged since 2000, must be re-examined.¹⁸

The first two points are generally well settled. States are meeting the third point, the climate crisis, with policies in harmony with federal priorities.¹⁹ Specific to this Petition, states are: (1) requiring food packaging and single-use products to be either reusable, recyclable, or compostable²⁰ and (2) requiring accurate labeling of compostable food packaging and products

¹⁴ See Section IV(A)(1)-(2) herein; see also e.g. Method for Estimating Greenhouse Gas Emissions from Diversion of Organic Waste from Landfills to Composting Facilities, California EPA, Final Draft 2017 (composting municipal organic waste results in “decreased soil erosion, reduced fertilizer use, reduced herbicide use, reduced use of fertilizers.”) see also *fn* 16 herein.

¹⁵ See 7 C.F.R. §205.2 (definition of “compost”); *Id.* at §205.203 (practice standards for on farm compost); see also U.S. Compost Council, Compostable Products: A Primer for Compost Manufacturers, at p. 6 (noting that compostable plastics are not allowed where composting site “only manufacture[s] compost approved for use on certified organic farms (e.g., “OMRI-Approved”)” (May 2021)(available at www.compostingcouncil.org. (last visited 12-15-22)).

¹⁶ See Compostable Products: A Primer for Compost Manufacturers, U.S. Composting Council, (May 2021), at p. 7 (“Bioplastics is a generic term that includes both ‘biobased’ and ‘biodegradable/compostable’ plastics. Biobased refers to a polymer/plastic in which the carbon, in part or whole, comes from renewable plant-biobased resources. Biodegradable refers to end-of-life in which the plastic/polymer carbon is completely converted to carbon dioxide by microbial metabolism.”); see also Song JH, Murphy RJ, Narayan R, Davies GB. Biodegradable and Compostable Alternatives to Conventional Plastics. *Philos Trans R Soc Lond B Biol Sci.* (July 2009) (“Biodegradable plastics...often comprise polymer blends that contain partly biogenic (renewable) carbon derived from biomass and partly petrochemical carbon.”).

¹⁷ See *fn* 3; see also J.R. Jambeck et al., “Plastic Waste Inputs From Land Into the Ocean,” *Science* 347, no. 6223 (2015).

¹⁸ See *Final Organic Rule*, 65 Fed. Reg. at p. 80548-80684 (Dec. 21, 2000); see also 7 C.F.R. §205.2 (definition of “compost”); *Id.* at §205.203 (practice standards for on farm compost).

¹⁹ See *Policy Background*, Section IV(B)(4) herein.

²⁰ See e.g California Assembly Bill 1201 (Oct. 5, 2021); California Senate Bill 54 (June 2022); see also Wash. House Bill 1799 (June 9, 2022) (copies attached).



to ensure they can be easily composted *together* with the food waste they contain.²¹ This *fully compostable* waste stream is achieved by incorporating standard specifications for compostable plastic packaging set by ASTM.²²

The ASTM standards for compostability like ASTM D6400, D6868, and D8410 are strict. For example, ASTM D6400 at Section 3.1.3 notes composting compliant plastic packaging results in only: “carbon dioxide, water, minerals, and stabilized organic matter.” ASTM D6400 at Section 3.1.2 requires compostable plastic to yield “CO₂, water, inorganic compounds” and leaves “no toxic residue.” ASTM D6400 at Section 5.1.3 prohibits compost that adversely affects “plant growth” when compared to compost derived solely from plant and animal materials. For purposes of this Petition, a “compostable product” meeting ASTM specifications means it fully biodegrades (composts) under a managed process and thus fully comports with the NOP’s definition of compost as the product of a managed biological process.²³ The overlaps between ASTM specifications and correlative organic requirements and policies strongly supports adoption of the requested amendments or at a minimum a full vetting by notice and comment rulemaking.

The States’ advanced definitions of “compostable products” written more than twenty years after the NOP first regulated compost, have necessarily moved past the “plant and animal materials” limitation to incorporate current materials science. Even more impactful is the States’ integration of composting of municipal waste with new labeling laws and severe restrictions or bans on future commercial use of certain single use, non-compostable, non-recyclable packaging. Reliance on novel materials that facilitate the diversion of food scraps to composting is precisely the kind of innovation that climate change abatement requires and the proposed amendments in the Petition will bond organic agriculture more firmly to the circular economy. This Petition briefly considers the new state laws and their potential conflicts with the existing organic regulations. It is these conflicts that this Petition seeks to resolve.²⁴

²¹ “Contamination from non-compostables is often the primary problem for compost manufacturers...” See U.S. Compost Council, [A Compost Manufacturers Decision-Making Guide to Accepting or Rejecting Compostable Products](#), at p. 5.

²² See ASTM International, <https://www.astm.org/about/overview/fact-sheet.html>. (last visited August 3, 2023). Compare e.g. 7 C.F.R. §205.203(c) (improve soil organic matter content) and §205.203(e)(1) (block disallowed synthetic substances).

²³ See e.g. ASTM-6400-21, Section 3.1.2 (defining “compostable plastic” and principally distinguishing it from “biodegradable plastic” because it degrades in a “controlled environment” that is “a managed process that controls biological decomposition.”) (Dec. 2021)(available at www.astm.org); see also *infra*, Section A(1)-(2) (discussion of state definitions); Compare to §205.203 (c).

²⁴ As noted elsewhere, the NOP has not only incorporated ASTM specifications for bioplastic compostability, but also incorporated related specifications from ISO and the EU. The multiple jurisdictions that are moving forward with compostability requirements based on third-party specifications and their incorporation by the NOP strongly supports conducting the requested rulemaking. See [§ 205.3](#) (listing compostability requirements of various third-party specifications that NOP “incorporated by reference”).



1. Washington State

The Washington legislature found, “landfills are a significant source of emissions of methane, a potent greenhouse gas. . . . [and the state’s management policy seeks] diversion of organic materials from landfills.”²⁵ Local governments are directed to “increase” diversion of organic waste to “composting” facilities; seek smart siting of composting facilities to handle increased diversion requirements; and to “procure more of the (resulting) compost” for local use.²⁶ The legislature set an aggressive goal of reducing by 75% the organic waste materials going to landfills by 2030.²⁷ To accomplish this local governments must manage “organic materials” through “composting..or similar technologies.”²⁸ Compost feedstocks include “organic materials” *and* “compostable products.”²⁹ However, “organic materials” are not allowed as a compost feedstock if the resulting compost is rendered “unsuitable for general public or agricultural use” due to contamination with chemical or biological residues.³⁰

A key purpose of requiring compostable plastic products to be conspicuously and consistently labeled is to “reduce contamination [from non-compostable items] of the waste streams handled by compost and organic material management facilities and improve the economic viability” of compost operations.³¹ The performance of compostable plastic products is distinguished from conventional plastic products by meeting “ASTM Standard Specification D6400.”³²

2. California

Like Washington, California has enacted laws requiring the accurate labeling of compostable plastics and adopted policies regarding the infrastructure and local government support for compost production and use.³³ California too recognizes food packaging products are “deemed compostable” if they meet ASTM Standard Specifications.³⁴ But California has gone further and declared that in 2026 a compostable plastic product meeting ASTM Standard D6400 may not continue to be sold in California as “compostable” unless it is (or is solely composed of) “an

²⁵ See Wash. HB 1799 at Section 1.

²⁶ *Id.* at Section 1(a-h).

²⁷ *Id.* at Section 101.

²⁸ *Id.* at Section 105 (30).

²⁹ *Id.* at Section 803(1) (“Compostable products” include plastic or plastic coated products including “food packaging and food service products” that meet ASTM D6400 or ASTM D6868); see also *Id.* at Section 804 (A compostable plastic film bag, like produce bag, is also a compostable product.).

³⁰ *Id.* at Section 105(29)(b).

³¹ *Id.* at Section 1(i).

³² *Id.* at Section 802 (7)-(9)); 803(1).

³³ See e.g., Ca. Assembly Bill 1201(Oct. 2021); Ca. Senate Bill 54 (June 2022). In June 2022, California imposed a ban on all single-use plastic consumer packaging and products that are not recyclable or compostable, effective in 2032, see Section 42050(b); see also Section 42040 (E)(1)(a “covered product” includes “plastic single-use packaging” and plastic single-use food service ware”).

³⁴ See Section 42357(a) (1); see also Section 42357(b). Like the NOP, California also recognizes related product specifications like ISO and the European Union. Compare 7 C.F.R. § 205.3 (incorporation of ASTM, EU and ISO compostability standards).



allowable agricultural organic input under the requirements of the USDA National Organic Program.”³⁵

California’s mandate that food scraps be collected for composting, and that compostable packaging be an “allowable agricultural input” under the NOP highlights the need for the requested rulemaking because ASTM-compliant packaging materials are *not* presently allowed as a compost feedstock under the NOP because they are not “plant or animal” in origin. California has squarely placed the matter in the NOP’s hands by requesting harmonization.

Washington and California have imposed ASTM specifications for compostable plastic products into their respective consumer product labeling laws, and more states have acted in 2023, such as Minnesota³⁶ and Colorado.³⁷ Maryland has a slightly different approach to mandating composting but is consonant with ASTM compostability standards.³⁸ As a matter of state law, therefore, all compostable plastic products meeting ASTM specifications for compostability are presently an allowed compost feedstock in Washington, California, Maryland, Colorado, and Minnesota.³⁹ Additionally, California and Washington State mandate that the compostable portion of solid waste streams be separately collected from households and businesses to be composted. This will soon squarely place the issue in the forefront of the mind of consumers.⁴⁰

B. Legal Framework

1. The Organic Foods Production Act Authorizes the Proposed Amendments.

In the OFPA Congress directed the Secretary of Agriculture to develop and implement regulations to “facilitate interstate commerce” in organically produced products.⁴¹ The Secretary

³⁵ See Section 42357(g)(1)(b). The deadline may be extended if California determines NOP action to designate a new allowed “allowable organic input for compost is imminent” which is the goal of this Petition. Moreover, the grounds for not enforcing this section include determining whether a bifurcated waste stream of compostable material, organic and non-organic, is practically and economically feasible, which it obviously is not.

³⁶ See H-1315 <https://trackbill.com/bill/minnesota-house-file-1315-requirements-for-labeling-items-as-biodegradable-or-compostable-modified/2286040>

³⁷ See SENATE BILL 253 https://www.leg.colorado.gov/sites/default/files/2023a_253_signed.pdf

³⁸ The Maryland General Assembly House Bill 264/Senate Bill 483 known as the “Solid Waste Management – Organics Recycling and Waste Division – Food Residuals” law was passed in 2021. It went in to effect in January 2023. The law requires certain persons that generate food residuals to separate said residuals and divert them from landfill or refuse disposal systems. Among the acceptable diversions are sending the food residuals to organic recycling centers which are defined *inter alia* as composting operations. Maryland defined: (d) Compostable plastics that are, within the length of time and process employed at the composting facility at which they are used, capable of biological decomposition to a degree that they result in marketable compost meeting the standards established by the Secretary of Agriculture.” See also HB 1349 which defines compostable plastic as needing to meet ASTM D6400 or D6868 <https://mgaleg.maryland.gov/2017RS/bills/hb/hb1349T.pdf>

³⁹ See fn 14, *supra*.

⁴⁰ See fn 9, *supra*.

⁴¹ 7 U.S.C. §6501(3).



delegated the power to the Agricultural Marketing Service (“AMS”) to develop the required regulations.⁴² Congress did not define compost or compost feedstocks in the OFPA. Instead, Congress said all materials or substances that are the result of “naturally occurring biological processes” like composting or fermentation, are not synthetic and thus are allowed in organic farming.⁴³ This statutory language appears to plainly exempt the products of composting from the National List procedure used for permitting otherwise disallowed synthetic substances.⁴⁴ AMS defined “compost” by echoing Congress: compost is the a naturally occurring process whereby “microorganisms break down plant and animal materials.”⁴⁵ This definition was adequate for the 1990’s but could not have anticipated the innovative food packaging materials that originate with neither plants or animals but are nonetheless compostable. Overlooking Congress’ and its own focus on the acceptable biology of composting, AMS added a prophylactic compositional requirement that any finished compost not “contain[s] a synthetic substance not included on the National List.”⁴⁶ AMS did not further clarify the meaning of the word “contain” and did not define “compost feedstock” or discuss the definition of “synthetic” but nonetheless restricted compostable feedstocks to “plant and animal materials”—a limitation not chosen by Congress.⁴⁷

This Petition requests AMS expand the acceptable materials for making organic compost by defining “compost feedstock” to include compostable materials meeting the designated ASTM specifications, while retaining the pre-existing allowance for plant and animal materials feedstocks. This is certainly within the ambit of the authority granted by the OFPA because Congress did not restrict the identity of compost feedstocks provided the finished compost was the product of “naturally occurring biological processes.” This petition outlined briefly above that ASTM specifications require the natural biology of composting to render the subject material fully degraded into constituent elements.⁴⁸ The existing compositional standard for finished organic compost—that it not “contain” a prohibited synthetic substance—must obviously be understood to refer to the well settled *de minimis* doctrine that is already commonly

⁴² 7 C.F.R. §2.79 (a)(8)(liii).

⁴³ See e.g. 7 U.S.C. §6502(21) (definition of “synthetic”) (defining synthetic substances as “formulated or manufactured by a chemical process” and excluding “substances created by naturally occurring biological processes.”; see also § 205.2 (Organic Production) (“integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.”).

⁴⁴ 7 U.S.C. §6517(c)(1) (National List) (setting procedure for allowing synthetic substances “otherwise prohibited.”). Petitioner notes the treatment of compost feedstocks has not been entirely even. For example, AMS designated “newspapers or other recycled paper” as “compost feedstocks” but did not examine their content or list the specific synthetic substances they might contain. See 7 C.F.R. § 205.601 (Synthetic Substances Allowed for use in Organic Crop Production) (listing one allowed synthetic compost “feedstock”). Similarly, paper-based planting aids were designated “synthetic” and allowed without specific analysis of each synthetic substance present in the allowed product.

⁴⁵ 7 C.F.R. § 205.2 (definition of Compost); see also 7 C.F.R. § 205.203(c)(2) and (e)(1) (practice standards for making compost and a final composition standard).

⁴⁶ 7 C.F.R. § 205.203(e)(1)(compost composition).

⁴⁷ 7 C.F.R. § 205.2 (definition of Compost).

⁴⁸ The organic regulations currently define “biodegradable” in a manner consistent with the legal review conducted herein. The phrase “biological decomposition into simpler biochemical or chemical elements” appears to be a cognate of the phrase “naturally occurring biological processes” chosen by Congress. See e.g. 7 C.F.R. §205.2 (definition of biodegradable).



applied in organic certification.⁴⁹ This Petition thus proposes a conforming amendment that a finished compost product not contain more than *de minimis* amounts of synthetic substances not on the National List. Making reliance on the *de minimis* doctrine explicit does not alter the existing compositional standard, but instead clarifies its application for organic farmers, compost manufacturers and accredited certifying agents (“ACAs”).

Petitioner notes that, if adopted, the requested amendments will render the sole reference to “compost feedstocks” presently on the National List either superfluous or in need of adjustment.⁵⁰ Because paper contains many synthetic substances which are not specifically identified in the National List designation, and it is not composted under scientific standards like those discussed herein, the present allowance for “compost feedstocks” on the National List highlights the need for the proposed amendments. Thus engagement with the NOSB to amend the National List appears a necessary adjunct to the immediate rulemaking requested by this Petition.

2. The Proposed Amendments are Supported by Recent Judicial Analysis.

The requested amendments are supported by the analysis appearing in a federal court case in 2016. In *Ctr. for Env't Health v. Vilsack*, the Court invalidated a compost-related Guidance issued by the NOP.⁵¹ The Guidance was challenged on procedural grounds that it was really a new regulation that should have been subject to notice and comment rulemaking under the A.P.A.⁵² The offending language in the Guidance was: “Green waste and green waste compost that is produced from approved feedstocks, such as, non-organic crop residues or lawn clippings may contain pesticide residues.”⁵³ The plaintiffs claimed the Guidance violated the regulation that compost not “contain” an unapproved synthetic substance, 7 C.F.R. § 205.203(e)(1), and was therefore “a legislative rule which triggered the APA's notice and comment requirements.”⁵⁴ AMS argued that the Guidance “merely clarified that organic producers can use green waste compost with *de minimis* background levels of pesticide residue” and it was not a new rule but instead merely clarified the meaning of the word “contains.”⁵⁵

The court rejected AMS’ contention that the Guidance was an interpretive clarification of the meaning of “contains” as used in the regulation for two main reasons. First, because the Guidance did not “apply to all compost” but instead applied only to “green waste” compost.⁵⁶

⁴⁹ See e.g. Black's Law Dictionary at p. 388 (5th ed. 1979)(defining: *de minimis non curat lex* which is usually translated as the law does not concern itself with trifles.) See e.g. 21 C.F.R. §170.39 (Threshold for Regulation of Food Contact Substances in Food Articles) (allowing presence of substances at levels that pose no “health or safety concern” and “no significant adverse impact on the environment.”); see also 7 U.S.C. §6510(f)(OFPA barring conflict with authority of FDA and EPA).

⁵⁰ See National List of Approved Synthetic Substances, available at <https://www.ecfr.gov/current/title-7/subtitle-B/chapter-I/subchapter-M/part-205/subpart-G> (“Newspapers or other recycled paper, without glossy or colored inks.”).

⁵¹ *Ctr. for Env't Health v. Vilsack*, No. 15-CV-01690-JSC, 2016 WL 3383954 (N.D. Cal. June 20, 2016).

⁵² *Id.* at 4.

⁵³ *Id.*

⁵⁴ *Id.* at 5.

⁵⁵ *Id.* at 6.

⁵⁶ *Id.* at 8.



The court reasoned a clarification would apply to all compost feedstocks and this one did not. And second and most importantly, the use of the word “contains” in the Guidance was found by the court “to mean more than a *de minimis* amount.”⁵⁷ Based on AMS’ failure to construe the word “contains” as allowing only a *de minimis* presence, the court concluded:

NOP 5016 amended 7 C.F.R. § 205.203(e)(1) and was therefore a legislative rule change. * * * [I]t was subject to the APA's notice and comment provisions. Defendants’ failure to follow these procedural rulemaking requirements was unlawful. (Citations omitted by Petitioner).⁵⁸

Two simple points are key. First, the holding against AMS was purely procedural⁵⁹ and second, the Court was likely prepared to accept the challenged Guidance had it allowed only a *de minimis* pesticide presence and had it applied to all compost rather than solely to green waste compost.

This Petition corrects the error identified by the Court by requesting notice and comment rulemaking and proposing to harmonize ASTM standards with the *de minimis* doctrine. It seeks only to allow ASTM-compliant products as organic compost feedstocks and does not seek to amend 7 C.F.R. § 205.203(e)(1)’s prohibition on compost that contains disallowed synthetics. Out of an abundance of caution it does ask AMS to expressly recognize the application of the generally applicable *de minimis non curat lex*⁶⁰ doctrine to all finished compost under 7 C.F.R. § 205.203(e)(1). If accepted, this will conform the regulations to the applicable common law that the Court in the compost case cited—a doctrine that is rather obviously applied every day by USDA’s accredited certifying agents. It will also provide meaningful direction to compost manufacturers, certified farmers and accredited certifying agents. This request will also state explicitly in the context of organic production what has always been operative in organic handling where packaging for organic *food articles* are composed of ASTM compliant compostable materials.⁶¹ It would conflict with the OFPA and be nonsensical to conclude the same materials that are acceptable for *direct contact with organic food* are unacceptable as a feedstock for organic compost.

3. ASTM Specifications for Compostability of Plastic Materials are already Incorporated into the NOP Regulations.

⁵⁷ *Id.* at 9. (The Court clarified that AMS failed to limit the word “contains” to *de minimis* amounts in Guidance 5016 finding instead that “under NOP 5016 there are *no* tolerance levels.”)

⁵⁸ *Id.* at 16.

⁵⁹ “This case asks whether the Agency was required to give public notice and an opportunity to comment prior to adoption of NOP 5016.” *Id.* at 5; *see also Id.* at 12 (“the question here is *not* whether NOP 5016 would pass muster under an APA substantive challenge”)(emphasis added by Petitioner).

⁶⁰ *See Blacks Law Dictionary*, (5th Ed. 1979) (“The law does not concern itself about trifles.”); *see also e.g. Nemerofsky, Jeff, What is a Trifle Anyway*, 37 *Gonzaga Law Rev.* 315, at p. 324 (2001-2002) (noting courts have applied the *de minimis* doctrine since the 15th century in cases including “contract, tort, civil and criminal matters.”).

⁶¹ *See supra, fn 29*; *see also* 21 C.F.R. §170.39; 7 U.S.C. §6510(f).



Permitting ASTM compliant compostable plastics to be organic compost feedstocks is certainly a change from the existing approach, but it is consistent with existing organic policy and regulations. The NOP is familiar with ASTM specifications and has already incorporated the compostability specifications into the NOP regulations.⁶² For example, biodegradable bio-based mulch film, as defined in Section 205.2, expressly incorporates the following specifications: ASTM D6400, ASTM D6868, EN 13432, EN 14995, or ISO 17088 specifications.⁶³ Similarly, manufactured “paper pots” are considered an allowed synthetic production aid that may be incorporated into the soil provided applicable ASTM specifications are observed.⁶⁴ The reliance on ASTM specifications is a well settled precedent that easily accommodates the Petition’s proposed amendments.

4. The Proposed Amendments Comport with Federal and State Climate Change Mitigation Policies.

The United States and the world face a profound climate crisis. We have a narrow moment to pursue action at home and abroad in order to avoid the most catastrophic impacts of that crisis and to seize the opportunity that tackling climate change presents.⁶⁵

The President set this agenda his first week in office. Accordingly, “Addressing Climate Change” is designated one of the USDA’s four principal priorities.⁶⁶ The White House placed additional policy emphasis on natural, climate-positive solutions like biomanufacturing⁶⁷ and organic agriculture.

To build, restore, live and work in concert with nature will lead to significant benefits for both people and the planet. * * * Natural solutions can reduce emissions, remove carbon from the atmosphere and lock it away, make ecosystems more resilient, and lower climate change risks for people.⁶⁸

⁶² 7 C.F.R. §205.3.

⁶³ See *Id.* generally. The incorporated standards appear at 7 C.F.R. §205.3 and include ASTM, European Union and ISO standards for the labeling and biodegradability of packaging designed and intended for aerobic decomposition, or composting.

⁶⁴ See 7 C.F.R. §205.3 (Paper-Based Crop Planting Aid); 87 Fed. Reg. 68021, 68025 (noting paper pot composition “should be determined by a laboratory test (ASTM D6866)”); see also pg. 3, National Organic Program, Paper Pots and Containers, Nexight Group and Organic Materials Review Institute, technical report, July 26, 2019, <https://www.ams.usda.gov/sites/default/files/media/PaperTRFinal7262019.pdf>. (noting the many synthetic substances used to strengthen paper pots “[M]ay already come into incidental contact with organic food via packaging.”).

⁶⁵ Tackling the Climate Crisis at Home and Abroad, Executive Order 14008 (January 27, 2021).

⁶⁶ See USDA homepage at <https://www.usda.gov/>. (last visited August 4, 2023).

⁶⁷ See BOLD GOALS FOR U.S. BIOTECHNOLOGY AND BIOMANUFACTURING, available at <https://www.whitehouse.gov/wp-content/uploads/2023/03/Bold-Goals-for-U.S.-Biotechnology-and-Biomanufacturing-Harnessing-Research-and-Development-To-Further-Societal-Goals-FINAL.pdf>.

⁶⁸ See e.g. White House Council on Environmental Quality, White House Office of Science and Technology Policy, White House Domestic Climate Policy Office, Opportunities for Accelerating Nature-Based Solutions: A Roadmap for Climate Progress, Thriving Nature, Equity, and Prosperity. (Nov. 2022).



And just days ago Secretary Vilsack called for widespread collaboration and innovation on agricultural research and policies to,

[S]hare best practices and information as we all learn more about how to mitigate and adapt to a changing climate, and in order to produce more, while minimizing environmental impacts, we must leverage innovation and foster new ways of doing things.⁶⁹

A central pillar of USDA's effort to respond to the climate crisis and drive innovation in agriculture is the *Partnerships for Climate-Smart Commodities*.⁷⁰

[A] climate-smart commodity is defined as an agricultural commodity that is produced using farming... practices that reduce greenhouse gas emissions or sequester carbon.⁷¹

According to AMS, organic agriculture is a paradigm of climate-smart agriculture.

[O]rganic has great potential to reduce the generation of greenhouse gases and increase production systems' resilience to changing climate patterns. Climate-smart practices used by organic farms include management practices that maintain or improve the natural resources of an organic farm; practices that support biodiversity; and avoidance of synthetic fertilizers.⁷²

In light of the policies expressed above, the proposed amendments will (1) harmonize the state and federal definitions of compost feedstocks and preempt conflicts regarding the definition of finished compost products; (2) refresh the outdated organic regulations based on scientific advancements and innovation in materials science; and (3) expressly align with the *de minimis* presence doctrine that restricts the presence of synthetic substances in finished organic compost; and (4) lower or eliminate the waste stream segregation costs of organic compost manufacturers; (5) improve the quantity, quality and availability of compost for organic farming; and (6) support the NOP's work agenda request for Climate-Smart Agriculture, that aligns with state composting goals; and (7) reduce the administrative burdens on AMS, the NOSB and Accredited Certifying agents regarding compost feedstocks and traces of synthetic substances therein.

Moreover, from a cost-benefit perspective, the requested changes can be expected to result in cost savings for compost manufacturers and organic farmers which in turn leads to lower consumer costs. Composters that choose to accept food scraps and compostable packaging would no longer need bifurcated (separate) feedstock streams that are highly costly and space intensive.

⁶⁹ Press Release No. 0162.23 (Aug. 3, 2023).

⁷⁰ See e.g. Press Release No. 0038.22.

⁷¹ See 86 Fed. Reg. 54,149, at 54,150 (Sept. 30, 2021); see also Fact Sheet: Partnership for Climate Smart Commodities, at p. 1. (USDA Feb. 2022); see also <https://www.usda.gov/climate-solutions/climate-smart-commodities> (stating key criteria of successful projects: "Greenhouse gas and/or carbon sequestration benefits and equity are key among project evaluation criteria.")(last visited August 3, 2023).

⁷² Memorandum to the National Organic Standards Board, J. Tucker, Ph.D., Deputy Administrator AMS (Feb. 23, 2022).



Organic farmers would have access to more organic compost instead of a dwindling amount from just yard trimmings, which in turn benefits organic consumers. It is not expected that the requested changes will have a significant economic impact on a substantial number of small business entities.⁷³

V. The Proposed Amendments

Petitioners' proposed amendments are submitted herewith as Attachment A.

VI. Conclusion

For the foregoing reasons, the Petition should be granted. Petitioners also request any other rulemaking action deemed necessary by AMS to permit the proposed amendments to have their desired effect while comporting with the demonstrated urgency of this request.

⁷³ See Executive Order 12866; Executive Order 13563; The Regulatory Flexibility Act, 5 U.S.C. §§'s 601–612; The Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4).



PROPOSED AMENDMENTS⁷⁴

Petitioners request a rulemaking to add a new definition of “Compost Feedstocks” and to amend the definition of “Compost” to incorporate the new definition. A related amendment clarifies that the “*de minimis*” doctrine applies to determinations regarding the composition of compost under 7 C.F.R. § 205.203(e).

1. Amendment to 7 C.F.R. §205.2:

Compost. The product of a managed process through which microorganisms break down ~~plant and animal materials~~ **compost feedstocks** into more available forms suitable for application to the soil. Compost must be produced through a process that combines **compost feedstocks** ~~plant and animal materials~~ with an initial C:N ratio of between 25:1 and 40:1. Producers using an in-vessel or static aerated pile system must maintain the composting materials at a temperature between 131 °F and 170 °F for 3 days. Producers using a windrow system must maintain the composting materials at a temperature between 131 °F and 170 °F for 15 days, during which time, the materials must be turned a minimum of five times.

2. Amendment to 7 C.F.R. §205.2 adding a new definition:

Compost Feedstocks means “Animal and plant materials, and materials meeting compostability specifications ASTM D6400-21, D6868-21, or D8410-21, used for making compost.”

3. Amendment to 7 C.F.R. §205.203:

(a) The producer must select and implement tillage and cultivation practices that maintain or improve the physical, chemical, and biological condition of soil and minimize soil erosion.

(b) The producer must manage crop nutrients and soil fertility through rotations, cover crops, and the application of plant and animal materials **and compost**.

(c) The producer must manage plant and animal materials, **and compost** to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances. Animal and plant materials **and compost** include:

(1) Raw animal manure, which must be composted unless it is:

(i) Applied to land used for a crop not intended for human consumption;

(ii) Incorporated into the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface or soil particles;
or

(iii) Incorporated into the soil not less than 90 days prior to the harvest of a product whose edible portion does not have direct contact with the soil surface or soil particles;

⁷⁴ Strikethrough indicates language to be removed and bolded underlining indicates language to be added.



(2) Composted ~~plant, and animal materials~~ **compost feedstocks** produced through a process that:

(i) Established an initial C:N ratio of between 25:1 and 40:1; and

(ii) Maintained a temperature of between 131 °F and 170 °F for 3 days using an in-vessel or static aerated pile system; or

(iii) Maintained a temperature of between 131 °F and 170 °F for 15 days using a windrow composting system, during which period, the materials must be turned a minimum of five times.

(3) Uncomposted plant materials.

(d) A producer may manage crop nutrients and soil fertility to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances by applying:

(1) A crop nutrient or soil amendment included on the National List of synthetic substances allowed for use in organic crop production;

(2) A mined substance of low solubility;

(3) A mined substance of high solubility: *Provided*, That, the substance is used in compliance with the conditions established on the National List of nonsynthetic materials prohibited for crop production;

(4) Ash obtained from the burning of a plant or animal material, except as prohibited in [paragraph \(e\)](#) of this section: *Provided*, That, the material burned has not been treated or combined with a prohibited substance or the ash is not included on the National List of nonsynthetic substances prohibited for use in organic crop production; and

(5) A plant or animal material that has been chemically altered by a manufacturing process: *Provided*, That, the material is included on the National List of synthetic substances allowed for use in organic crop production established in [§ 205.601](#).

(e) The producer must not use:

(1) Any fertilizer or ~~composted plant and animal material~~ that **has more than *de minimis* traces of** ~~contains~~ a synthetic substance not included on the National List of synthetic substances allowed for use in organic crop production;

(2) Sewage sludge (biosolids) as defined in [40 CFR part 503](#); and

(3) Burning as a means of disposal for crop residues produced on the operation:

Except, That, burning may be used to suppress the spread of disease or to stimulate seed germination.