

June 6, 2019

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Dear Mr. Kimbrell:

Thank you for submitting a Rulemaking Petition to the U.S. Department of Agriculture (USDA) on behalf of the Center for Food Safety (CFS) on January 16, 2019.

In your petition, you ask USDA to carry out four actions:

1. Issue regulations excluding certification of hydroponic agricultural production, implementing and based on the National Organic Standards Board (NOSB)'s April 29, 2010 expert recommendation on Production Standards for Terrestrial Plants in Containers and Enclosures.
2. Specifically, amend 7 C.F.R. 205.105, Allowed and prohibited substances, methods, and ingredients in organic production and handling, to prohibit hydroponic systems.
3. Ensure that ecologically integrated organic production practices are maintained as a requirement for organic certification as defined by the Organic Foods Production Act (OFPA) and its regulations.
4. Revoke any existing organic certifications previously issued to hydroponic operations.

Organic hydroponic systems have been controversial. Some groups support the organic certification of these systems, while others are opposed to their certification. Despite this controversy, the record is clear that the National Organic Program (NOP) has consistently allowed for the certification of hydroponics operations, as long as the certifier determines that the system complies with the USDA organic regulations. That position has consistently been reiterated on the NOP website and in other contexts.<sup>1</sup> Based on this, many operations have obtained certification by meeting the existing requirements for organic crop production. Given the clarity and consistency of the NOP's approval of organic hydroponics, we do not agree with your contention that the existing framework for evaluating whether hydroponic systems may be

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<sup>1</sup> See, e.g., <https://www.ams.usda.gov/sites/default/files/media/Hydroponics%20package.pdf> (stating that “[t]he USDA organic regulations do not currently prohibit hydroponic production.”)

certified as organic has created inconsistent standards.<sup>2</sup> Rather, the NOP's position that hydroponic systems are allowed has remained consistent over time.

NOP acknowledges that the National Organic Standards Board issued a recommendation in April 2010 that hydroponic operations should not be allowed as organic. However, after analyzing this recommendation, the NOP determined that the recommendation did not provide sufficient details to support moving forward with guidance or rulemaking. In addition, the recommendation conflicted with a 1995 NOSB recommendation, which stated that hydroponics could be certified as organic, if done in compliance with OFPA and the USDA organic regulations.

Given differing and incomplete recommendations from the NOSB as well as differences of opinion among stakeholders, NOP decided to further evaluate the issue by forming a task force to perform a focused analysis of hydroponics and aquaponics. To that end, in September 2015, the USDA Agricultural Marketing Service (AMS) convened a Hydroponic and Aquaponic Task Force. The task force included sixteen (16) individuals representing the soil-based organic and hydroponic communities. The objective of the task force was to (1) describe the current state of technologies and practices used in hydroponics and aquaponics, and (2) examine how those practices align or do not align with the Organic Foods Production Act (OFPA) and USDA organic regulations.

The Hydroponic and Aquaponic Task Force completed its report in July 2016. The Task Force did not reach consensus on a path forward. Subsequently, NOP forwarded the Task Force's report to the NOSB, which continued to consider this topic. At the NOSB's Fall 2017 public meeting, the Board passed a proposal to prohibit aeroponics in organic production. However, the NOSB failed to pass a motion related to hydroponics, noting that "many in the organic community supported various types of hydroponic production."

NOP's analysis has concluded that a categorical prohibition to hydroponic production is not justified by the OFPA. Moreover, despite debates that spanned multiple meetings, the Board did not come to agreement or issue any recommendations on additional standards or specific criteria for the certification of hydroponic or aquaponic production systems. Given these circumstances, in January 2018, AMS posted a notice on its website, reiterating and clarifying that the certification of hydroponic, aquaponic, and aeroponic operations is allowed under the USDA organic regulations, and has been since the program began.

In addition to focusing on various NOSB input on this issue, the Petition also asserts that prohibition of hydroponic production systems is required by the OFPA and implementing regulations because certain statutory and regulatory provisions use the word "soil" and impose certain requirements to maintain or improve soil quality or engage in crop rotation and similar

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<sup>2</sup> The Petition cites a 2015 Cornucopia article suggesting that a certifier in Vermont "continues not to certify hydroponic operations" based on a resolution demanding "that the NOP accept the 2010 NOSB recommendation to prohibit soil-less hydroponic operations[.]" While NOP is unable to verify the account in the Cornucopia article at present, NOP notes that to the extent some certifiers are choosing to deny organic certification based solely on a producer's use of hydroponic methods, that denial would be inconsistent with NOP's position. If that is the case, the affected producer would be allowed to appeal such as a Denial of Certification in an administrative adjudicatory context.

practices. NOP disagrees that those statutory and regulatory provisions require that all organic production occur in a soil-based environment. Rather, those provisions are applicable to production systems that *do* use soil.

The Petition also asserts that regulations pertaining to “cycling of resources,” the “promot[ion] of ecological balance” and conservation of biodiversity require NOP to prohibit certification of hydroponic systems. Again, NOP disagrees. The Petition provides no evidence that organic hydroponic systems hinder cycling of resources, ecological balance, or conservation of biodiversity. NOP notes that organic hydroponic systems are biological systems with organic matter that support microbial diversity and nutrient cycling. These systems can also preserve natural resources, including water and natural environments. These systems can sustain and improve soil and water quality at the sites they occupy, and reduce runoff and soil erosion.

NOP’s analysis concludes that organic hydroponic systems cycle and conserve resources in a different way from soil-based systems, however, that does not make them incompatible with the vision for organic agriculture expressed in the OFPA. Hydroponic operations produce food in a way that can minimize damage to soil and water, and that can support diverse biological communities.

In sum, AMS has analyzed the need for regulations related to the organic certification of hydroponic agricultural production. Based on the foregoing analysis and the substantial deliberation and input on this topic between 1995 and 2017 from a variety of sources, including the NOSB, public stakeholders, and the Hydroponics Task Force, the NOP does not plan to implement the NOSB’s April 2010 recommendation on Production Standards for Terrestrial Plants in Containers and Enclosures. Accordingly, NOP is denying CFS’s requests to undertake a rulemaking to amend 7 C.F.R. 205.105 to prohibit hydroponic systems.

In response to CFS’ third requested action, the NOP reaffirms the need for all organic operations, including hydroponic operations, to demonstrate compliance with the USDA organic regulations. This includes requiring that production practices maintain or improve the natural resources of the operation. Certifiers are responsible for assessing individual operation compliance with the rules, based on site-specific conditions. On June 3, 2019, the National Organic Program published a letter to USDA-accredited certifiers, verifying that container systems must comply with the Organic Foods Production Act and the USDA organic regulations.

Finally, in response to CFS’ request that USDA revoke existing organic certifications previously issued to hydroponic operations, this action is unjustified and would violate the USDA organic regulations related to noncompliance procedures. NOP and its certifiers will continue to enforce the regulations as currently written. There is no basis to take away the certification status of operations who are meeting the requirements set forth by the USDA organic regulations and who are certified in good standing.

Thank you for your petition for rulemaking. If you wish to discuss this letter, please contact me at 202-720-3252 or at [Jennifer.Tucker@usda.gov](mailto:Jennifer.Tucker@usda.gov).

Sincerely,

Jennifer Tucker, Ph.D.  
Deputy Administrator  
National Organic Program