

February 17, 2016

Mr. Tom Vilsack
Secretary of Agriculture
U.S. Department of Agriculture
1400 Independence Ave SW
Washington, DC 20250

CC: Elanor Starmer, Acting Administrator, USDA Agricultural Marketing Service
Miles McEvoy, Deputy Administrator, USDA National Organic Program
Tracy Favre, Chair, National Organic Standards Board

Re: **Ending the Organic Certification of Hydroponics**

Dear Secretary Vilsack,

This letter serves as a formal request for the U.S. Department of Agriculture (USDA) to institute an immediate moratorium on the organic certification of all new hydroponic and aquaponic operations, until the agency enacts a final rule. We believe that it is incumbent upon USDA to accept the NOSB's 2010 recommendations to prohibit soilless hydroponic vegetable production as certified organic. The recommendation specifically states that hydroponic and aeroponic "cannot be certified as organic growing methods...." NOP's written response to the NOSB's recommendations acknowledges the completion of their work on greenhouse standards and that "the NOP will develop a proposed rule based on the NOSB final recommendations."¹

The NOP's decision to allow organic certification of hydroponic systems, in direct opposition to the 2010 NOSB recommendations, and without formal proposed standards, violates the program's legal responsibility to follow the established due process in setting organic standards. Moreover, the harsh reality of the extreme variations that exist in how such operations are being certified (or not) is creating consumer confusion and undermining the integrity of the organic label that is relied upon by the organic sector for its market success.

Unlawful and Extreme Variations in Certification Requirements Weaken Organic Markets

Due to the lack of formal organic greenhouse standards, organic certification agencies have been acting independently and creating and recreating their own rules to address public concerns, particularly with respect to the organic soil requirement. While some certifiers allow crops to be grown in an undefined "biodegradable substrate," others do not. Some certifying organizations such as Vermont Organic Farmers, OneCert, and New York NOFA do not permit any form of

¹ September 30, 2010,

hydroponic certification. They require crops to be grown in the soil, in keeping with the European standards. Other organizations have certified hydroponic crops for many years.

One of the central tenants of the Organic Foods Production Act of 1990 (OFPA) is to “assure consumers that organically produced products meet a consistent standard” (7 U.S.C. § 6501(2)). This lack of a consistent standard with respect to hydroponic systems is exactly the type of problem that OFPA and the NOP were specifically designed to avoid.

Consumers Have a Right to Know How Their Organic Food is Grown

All produce sold under these disparate organic hydroponics certification standards use the same USDA seal without differentiation. Therefore, there is no way for customers to identify which food is grown hydroponically and which is not. Indeed, most consumers have no idea that hydroponic growing is permitted under existing USDA organic standards.

Public Notice and Comment on Hydroponics Regulations is Required by Law

The NOP hydroponics rule must be subjected to public notice, review, and comment and specifically address the January 23, 2010 formal National Organic Standards Board (NOSB) Recommendations on the “Production Standard for Terrestrial Plants in Containers and Enclosures (Greenhouses).” NOSB passed this recommendation by a majority vote -- twelve to one -- after six years of hard work and public hearings. The recommendation unequivocally states that hydroponic production should not be permitted in organic certification and that organic production of terrestrial plants must be soil-based.²

U.S. Organic Rules Must be Consistent with International Hydroponic Rules

Strong international support for the 2010 NOSB Recommendations already exists. The recommendations are consistent with the vast majority of world organic standards, including twenty-four countries in the European Union (EU). It is also worth noting that Canada prohibits hydroponically grown produce to be certified organic, a situation that has forced the U.S. to create a specific hydroponics exception in its trade agreement with Canada.

The 2013 position papers of both the International Federation of Organic Agriculture Movements European Union (IFOAM EU) and the Expert Group for Technical Advice on Organic Production (EGTOP) offer well-researched recommendations on organic hydroponics that are in accord with the organic standards of twenty-four EU countries. IFOAM EU has also produced a position paper calling for USDA to regulate organic hydroponics based on the NOSB’s 2010 recommendations.

² 80 Fed Reg. 12,422, Mar. 9, 2015

As an influential participant in global organic trade, it is incumbent upon the U.S. to join the international community in maintaining strong and consistent organic standards.

“Soil is the Source of Life” and the Foundation of U.S. Organic Farming Systems

Soil fertility and soil management are prerequisites for organic certification of crop production. Hydroponics systems do not meet this mandate. Both the OFPA and the NOP final rule describe organic agricultural production as being much more than substituting approved inputs for non-approved ones.

The 2010 NOSB Recommendation strongly reinforces foundational principles and descriptions of “organic,” as practiced on U.S. organic farms. The 1980 *USDA Report and Recommendation on Organic Farming*,³ clearly states:

- “Soil is the Source of Life—Soil quality and balance (that is, soil with proper levels of organic matter, bacterial and biological activity, trace elements, and other nutrients) are essential to the long-term future of agriculture. Human and animal health are directly related to the health of the soil.
- Feed the Soil, Not the Plant—Healthy plants, animals, and humans result from balanced, biologically active soil.”

Hydroponic operations on the market do not enhance the biological diversity of plant/soil system or meet other essential requirements inherent in organic soil and ecosystem-based agricultural systems.

OFPA also makes clear that managing soil health is central to organic agriculture systems, as evidenced by the inclusion of details about what is expected by organic farmers as they design their annual crop and animal production system plans. In the discussion of what constitutes an Organic Plan (6513) it states:

(b) Crop Production Farm Plan.

(1) Soil Fertility. An organic plan shall contain provisions designed to foster soil fertility, primarily through the management of the organic content of the soil through proper tillage, crop rotation, and manuring.

The Rule also outlines a practice standard for soil fertility and crop management that is impossible to meet in a hydroponic system. In the *Soil fertility and crop nutrient management practice standard* (§ 205.203):

³ US Department of Agriculture Study Team on Organic Farming. (1980) *USDA Report and Recommendation on Organic Farming*, section 2.4, “Organic Agriculture, Some Basic Tenets,”

- (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.
- (c) The producer must manage plant and animal materials 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 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;

No language exists in either OFPA or the rule which outlines requirements for soilless hydroponic systems. In contrast, clear language exists to justify the prohibition of hydroponics in organic given the fact that they cannot meet the minimum standards described above. This conflict with OFPA makes it impossible to allow the universal organic certification of hydroponic production.

NOP Allowance of Hydroponic Certification is Unjustified

NOP's rationale for allowing hydroponic certification is based on a single sentence taken from the 1995 *NOSB Recommendation for Specialized Standards for Hydroponic Production in Soilless Media*. It states: "Hydroponic production in soilless media to be labeled organically produced shall be allowed if all provisions of the OFPA have been met." This recommendation was not included in the final rule and so it has no legal basis for current organic certification.

No provision in OFPA or the NOP regulations justifies the certification of hydroponics. In fact, in its written response to the NOSB recommendation in 2005 the NOP implies that standards need to be developed before hydroponic operations can be certified. It states that:

NOP concurs with the NOSB and agrees to proceed with additional rulemaking for mushrooms, apiculture and honey, and greenhouse operations and their products, and not to propose hydroponic standards until the NOSB has submitted a final recommendation.

Hydroponics Task Force Must Uphold and Clarify NOSB Recommendations

A stated primary objective of the USDA/NOP-created Hydroponics Task Force is to clarify the NOSB's 2010 Recommendation (80 Fed Reg. 12,422, Mar. 9, 2015). Yet, widespread concern exists regarding the actual purpose of this task force, which appears to be to rewrite rather than to clarify the recommendation. Justification for this concern is based upon the composition of this task force, the majority of which seem to have a vested interest in advancing organic certification of hydroponics rather than in clarifying the 2010 NOSB recommendations.

It is troubling that taskforce membership was initially limited to those with at least three years of experience in hydroponic or aquaponic production. This restriction was later amended to include those with experience in soil-based organic systems of production. Nonetheless, the initial Federal Register notice gave an accurate foreshadowing of the affiliation of those who would be chosen to join. Several highly qualified task force applicants known to support the exclusion of hydroponic from organic were not chosen. This unfortunate situation created an unfairly biased task force which, coupled with USDA's allowance of hydroponics certification in the absence of clear and consistent regulations, has sparked increasing discontentment with the NOP by the wider organic community. Opaque decision-making runs counter to the practices that the organic sector expects from USDA and the NOP.

Conclusion

We must not take trust in organic for granted, either from the organic community as a whole, or from organic agriculture producers. It took decades to build trust in the organic label, and we must not squander it by ignoring due process. Yet, disturbing signs of eroding public trust in organic are evident. In 2015, the Consumers Union (CU) downgraded the rating of USDA's Organic Seal from "highly meaningful" to "meaningful," based upon extensive survey research of organic consumers. While we have heard from the NOP that it is not overly concerned about the study's results, we view CU's research (which did not specifically ask about hydroponics) as a first alarm. To us, it sends a powerful warning signal of the urgent need for course corrections to be taken by the USDA/NOP. Stopping the organic certification of hydroponic operations is a correction that is urgently and sorely needed.

To allow the entire organic industry to suffer public mistrust due to unnecessary confusion regarding basic greenhouse standards is short-sighted public policy. We must not compromise the organic standards in an effort to increase sales and open new markets at the expense of the public confidence.

For the reasons outlined above, the undersigned urge USDA to uphold the integrity of the organic label for farmers, handlers, and consumers by instituting an immediate moratorium on the organic certification of all new hydroponic and aquaponic operations until the agency enacts a final rule. We believe that it is incumbent upon USDA to accept the NOSB's 2010 recommendations to prohibit soilless hydroponic vegetable production as certified organic and have the details of that recommendation flushed out and reflected in the final rule.

This is the only way to ensure that *all* products carrying the organic label and USDA organic seal have met rigorous organic standards, and that organic farmers are protected from harm arising from inconsistent certification practices.

Respectfully yours,

Dave Chapman, Long Wind Farm, Vermont

David Miskell, Miskell's Premium Organics, Vermont

Anaïs Beddard, Lady Moon Farms, Pennsylvania, Georgia, and Florida

Dru Rivers, Full Belly Farm, California

Eliot Coleman, Four Season Farm, Maine

Pete Johnson, Pete's Greens, Vermont

Margit Kaltenekker Hall, Prairie Star Farm, Kansas

(On behalf of the diverse organic stakeholders who have signed the attached position statement calling for an immediate moratorium on new certified organic hydroponic operations)