



October 7, 2014

Ms. Michelle Arsenault  
National Organic Standards Board  
USDA-AMS-NOP  
1400 Independence Avenue, SW  
Room 2648-So., Ag Stop 0268  
Washington, DC 20250-0268

**Docket:** AMS-NOP-14-0063

**RE: Crops Subcommittee – Contamination in Farm Inputs Discussion Document**

Dear Ms. Arsenault:

Thank you for this opportunity to provide comment on the Crops Subcommittee's (CS) discussion document regarding the contamination of farm inputs used on organic operations. In this document, CS provides examples of commonly used farm inputs and their potential to contaminate organic crops. CS further requests feedback about additional inputs and contaminants of concern, and requests experts on this subject to step forward for possible future consult with the subcommittee.

The Organic Trade Association (OTA)<sup>1</sup> applauds CS for its efforts to ensure that organic crops are not inadvertently contaminated with substances that are not allowed in organic production and may cause toxicological effects on consumers and the environment. OTA's *2014 U.S. Families' Organic Attitudes and Beliefs Study* indicates that consumers are choosing organic products to avoid synthetic fertilizers and pesticides (30%), antibiotics and hormones (27%), and GMOs (22%). Clearly, contamination prevention of organic crops from farm inputs is critical to maintain consumer confidence in the organic label, and producers should have adequate resources available to avoid the inadvertent contamination of their crops.

We see value in developing a best practices guide for organic producers to bolster their contamination prevention systems to achieve this end. However, we urge caution in unwarranted scrutiny of farm inputs, as it would add unnecessary burden to organic certification for producers. A punitive approach to organic farmers who currently operate their farms in compliance with the USDA organic regulations despite reliance on an outdated infrastructure supporting agriculture as a whole does not incentivize transition or growth in the organic sector. We offer the following comments and information relating to the various sections of this document in order to inform NOSB and refine the approach in developing best practices guidance to avoid contamination of organic crops from farm inputs.

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<sup>1</sup> OTA is the membership-based business association for organic agriculture and products in North America. OTA is the leading voice for the organic trade in the United States, representing organic businesses across 49 states. Its members include growers, shippers, processors, certifiers, farmers' associations, distributors, importers, exporters, consultants, retailers and others. OTA's Board of Directors is democratically elected by its members. OTA's mission is to promote and protect the growth of organic trade to benefit the environment, farmers, the public and the economy.

## Contamination Incidents

The discussion document brings forth two specific incidents of contaminated farm inputs: Bifenthrin residues in compost used on organic farms and Arsenic in poultry litter.

**Compost Contaminates** - The issue related to Bifenthrin in compost used on organic farms resulted in NOP's issuance of guidance document NOP 5016 (Allowance of Green Waste in Organic Production Systems). The memo acknowledges that pesticide residues may be present in compost, and clarifies that "Compost that is produced from approved feed-stocks is acceptable for use in organic production, provided that any residual pesticide levels do not contribute to the contamination of crops, soil or water." In the investigation of this particular compost contamination incident, residue samples from the fields having received applications of the contaminated compost showed no detectable results in either the crops or the soil. It is on this basis that adverse action was not pursued for the operations affected by the use of contaminated green waste compost. NOP's guidance does not provide for a categorical allowance of contaminated compost.

**Arsenic in Poultry Litter** – Arsenic used as an animal drug in poultry feed has been a source of heavy metal contamination in poultry manure-based fertilizers. However, as stated in the discussion document, arsenic in poultry litter generally will not pose environmental or human health risks when good agricultural practices are followed. Still, the issue still warrants prudence on the part of organic producers. Recently, three of the four FDA approvals for livestock drugs containing arsenic (roxarsone, carbarsone, and arsanilic acid) were voluntarily withdrawn by manufacturers. The one remaining allowed arsenic drug (nitarosone) is used to treat "blackhead" in turkeys and chickens. FDA officially announced the discontinuation of these approvals in 2013. As the poultry industry has moved away from the use of arsenic in poultry feeds, one can assume that the risk from arsenic contamination from poultry litter has decreased as well. Additionally, state fertilizer laws govern the maximum allowable limits of heavy metals in fertilizer, including poultry waste-derived products (In Washington State, the limit for arsenic is set at 0.297 lbs./acre/year). Current collaboration between The Organic Center (TOC) and USDA's Agricultural Research Service targets the factors affecting the presence of arsenic in organically grown rice. Preliminary results from this research do not seem to show a correlation between type of fertilizer used on an operation and the concentration of arsenic in the final product.

## Fertilizers/Soil Amendments

**Metals in Compost, Manure, and Micronutrient Fertilizers** – As stated above, state fertilizer laws govern acceptable limits of heavy metals in commercial fertilizers. Some states set these limits on an application rate per year basis and some set the limits based on maximum allowable parts per million (ppm) in the fertilizing product itself. The discussion document cites information from Washington State Department of Agriculture's fertilizer database showing a range of arsenic levels in copper sulfate products and cadmium levels in rock phosphate. Both rock phosphate and copper sulfate are allowed fertilizers in organic production, and the potential for high levels of toxic heavy metals applied to organic fields should raise concerns. However, within the guidelines of Washington State's metals in fertilizer rules (WAC 16-200-7064), no fertilizing material can be applied to any land (organic or conventional) at rates that would exceed the annual limits set by that part (Arsenic – 0.297 lbs./acre/year; Cadmium – 0.079 lbs./acre/year). Heavy metal contamination in composts also raises concerns, and, as is cited in the discussion document, the U.S. Composting Council (USCC) provides a screen for heavy metals in its Test Methods for the Examination of Composting and Compost (TMECC). Organic producers should be able to request tests from compost manufacturers to compare with EPA set limits on the allowable levels of these metals in compost.

**Pesticides and Herbicides in Compost** – Compost contaminated with persistent herbicide and pesticide residues have caused production issues in a number of locations. The discussion document describes contamination of compost with Bifenthrin, aminopyralid, and clopyralid, which have been found in composts from many states and can cause damage to crops at levels as low as 1 ppb. Aminopyralid and clopyralid are now only labeled for use on pastures, some hay crops, and right-of-ways. However, compost made from manure collected from farms where the animals consumed hay or pasture treated with these substances can still damage crops. This is a troubling reality for all producers of susceptible crops, as there are limited testing resources, and conducting a bioassay prior to application is not always feasible. Recently, USCC submitted comments to EPA encouraging the agency to consider the fate of herbicides in compost when evaluating the registration of persistent herbicides. USCC asked EPA to incorporate a “compostibility” aspect to pesticide registration reviews and label approvals in order to prevent future compost contamination from occurring.

### **Irrigation**

The discussion document goes into detail on the source and ramifications of alkaline and saline irrigation water. These effects are felt most by producers farming in the arid regions of the West who rely on irrigation water to grow their crops. Unfortunately, organic producers are limited in their ability to remedy the alkalization of soils from irrigation water, as most rely on delivery of water from large irrigation projects, and quality of irrigation water is usually out of their control. As noted in the discussion document, sulfurous acid is currently allowed in organic crop production to acidify irrigation water and counteract the deleterious effects of alkalization. With regards to contamination of irrigation water with human pathogens, the recently re-released FDA proposed rules on produce safety require testing of all agricultural water used on covered produce and set limits for bacteriological levels.

### **Seeds**

Seeds are a significant farm input not covered in the discussion document. Bringing seeds onto a farming operation raises the risk for seed-borne plant diseases and adventitious presence of GMO material. We encourage NOSB to include these topics in its efforts to provide organic growers with the best information on avoiding contamination from farm inputs. OTA provided detailed feedback on avoiding GMO contamination from non-organic seeds by establishing a seed purity standard in our comments to the Materials/GMO and CACS Subcommittees entitled “GMO Contamination Prevention.” We detail how a seed purity standard on non-organic seeds used on organic farms could work to prevent GMO contamination of organic crops, and shift the burden of testing and verification from organic producers to suppliers of non-organic seed.

### **Current Controls Under USDA Organic Regulations**

Current USDA organic regulations establish practice standards by which all organic producers must adhere. Included in these standards is the requirement that organic producers manage their farms “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” (7 CFR 205.203(c)). It is through this lens that certifiers assess each organic producer’s compliance with the standards, and certifiers utilize soil tests, observations of plant health, and residue sampling to verify that this standard has been met. Periodic residue sampling under USDA organic regulations allows certifiers to test for pesticide residues, pathogens, heavy metals, and GMOs, and residue sampling of a minimum of 5% of all certificate holders must occur on an annual basis. Should residue tests exceed 5% of EPA tolerance or the FDA action level for a specific compound, the crop must be excluded from the organic marketplace, and the producer must take corrective actions to avoid future contamination.

### **Contamination Prevention**

Organic producers need guidance on best practices to avoid contamination of organic crops, rather than additional unwarranted regulatory burden. We urge NOSB to build upon the work in this discussion document to develop recommendations for organic producers on the potential risks of some farm inputs and resources for

organic producers to avoid the contamination of their soil and crops. When organic producers become educated on the contamination risks associated with particular inputs and how to best avoid these risks, their contamination prevention strategies can become more refined and effective at meeting the letter of USDA organic regulations and the expectation of organic consumers.

### **Getting It Right**

Gathering the information relating to possible sources of contamination from farm inputs and determining which vectors have the greatest potential to affect organic integrity are monumental tasks. We recognize NOSB's call to solicit input from experts in this area to assist in the process, and we expect NOSB to take this information seriously. Advising the Secretary on implementation of the practice-based standard promulgated by Organic Foods Production Act is NOSB's first duty. This discussion document shows NOSB's commitment to the responsibility of providing timely and relevant advice on the issues facing organic producers. We hope NOSB continues to embrace this responsibility, and lays the ground-work for a comprehensive guide on best practices to avoid contamination of organic crops from farm inputs.

On behalf of our members across the supply chain and the country, OTA applauds NOSB in its efforts to support organic farmers' ability to adequately prevent the potential for contamination of organic crops from inadvertent contact with farm input contaminants.

OTA thanks NOSB for the opportunity to comment and for your commitment to furthering organic agriculture.

Respectfully submitted,



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