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National Organic Standards Board  
USDA-AMS-NOP

Submitted via [Regulations.gov](https://www.regulations.gov)

RE: Docket # AMS-NOP-23-0075

**NOSB CACS Subcommittee [Discussion Document: Residue Testing for a Global Supply Chain](#)**

Dear NOSB Members:

Thank you for the opportunity to comment on the Discussion Document on Residue Testing for a Global Supply Chain. MOSA certifies over 1,820 organic operations throughout the United States, including approximately 630 livestock operations, 1,540 crop operations, and 330 handling operations. MOSA has successfully completed our pesticide residue testing program for many years, and we find the current pesticide residue test procedures to be clear. We look forward to the discussion on how improvements can be made, and about how to include non-pesticide related areas of contamination as well.

Residue testing is an important part of the organic supply chain. While we are confident our review and inspection of MOSA-certified operations exposes potential fraud, it is reassuring to know when our clients consistently test negative for pesticide residues. The level of positive residue detects at MOSA are very low overall, and we are confident in the compliance of our operations.

Residue testing of multi-ingredient processed products makes it very challenging to pinpoint the source of contamination. Still, through full supply chain audits, perhaps we can use the element of certifier cooperation to track down the issue if residue testing of a finished multi-ingredient product detects above 5% of the EPA tolerance level. Levels below can still be investigated, but the focus would be on products that may not be sold as organic. That said, MOSA protocol generally is to test single-ingredient products.

**[NOP 2610: Instruction Sampling Procedures for Residue Testing](#)**

**[1. Does this document instruction provide adequate information for certifiers and inspectors to collect samples in the field?](#)**

This document is clear regarding the sampling procedures for pesticide residue testing.

Sunset review of Fenbendazole and Moxidectin and the Discussion Document for Compost, which are also being discussed at this meeting, ask about using residue testing for inputs and to verify compliance with livestock requirements. We do not think these examples are clearly covered in the current regulation and guidance.

NOP 2610 Section 3. Policy

*Section § 205.670 of the NOP regulations specify the conditions under which responsible parties should conduct testing of agricultural products that will be sold, labeled, or represented as “100 percent organic,” “organic,” or “made with organic (specified ingredients or food group(s)).”*

*NOS 205.670 (a) “All agricultural products that are to be sold, labeled, or represented as “100 percent organic,” “organic,” or “made with organic (specified ingredients or food group(s))” must be made accessible by certified organic production or handling operations for examination ...”*

- Both indicate that ag products sold as organic are the target of our sample collection; however, (b) allows for the inclusion of “inputs” but only when there is suspicion of contact with a prohibited substance.

*NOS 205.670 (b) “...the certifying agent may require preharvest or postharvest testing of any **agricultural input used** or agricultural product to be sold, labeled, or represented as “100 percent organic,” “organic,” or “made with organic (specified ingredients or food group(s))” **when there is reason to believe that the agricultural input or product has come into contact with a prohibited substance** or has been produced using excluded methods. Samples may include the collection and **testing of soil; water; waste; seeds; plant tissue; and plant, animal, and processed products samples.**”*

- This section further expands the sample collection beyond the organic agricultural products to soil, water, waste, seeds, plant tissue, and processed products. This does not seem to include collecting samples from fertility inputs or livestock waste. We interpret the waste referred to in the regulation as plant waste, not animal manure.

NOS 205.670 draws in the periodic residue testing of organic agricultural products and has the same example list of samples.

- The lab MOSA uses tests plant tissues. Another lab can be used if the occasion to test more than plant tissue arises. We have not included testing of noncertified agricultural products such as soil or water in our residue testing program. Soil testing could yield unintended results, such as persistent residues from ages past. We have conducted minimal testing for GMOs; however, this has not been successful in determining the source of contamination, and is especially difficult when there are no actions prescribed by the NOP to address it. Guidance for testing GMOs would be needed before a viable testing program could be implemented. The organic standard is process-based and GMOs may still be present when even the most compliant processes are followed; for example, GMO corn is widely used, and corn can be cross-pollinated by GMO crops hundreds of feet away, which may affect both the seed used to grow the crop and the harvested crop itself.
- We have considered testing for glyphosate, however, residues are not present for long, and the screening is a separate screen requiring a separate sample. We have not developed a protocol to include glyphosate as part of our pesticide residue testing program.

## NOP 2610 Section 4.1 When to Collect Samples:

*Samples should be collected under the following conditions:*

- *When it is suspected that a prohibited substance has been applied.*
  - *When it is suspected that contamination from genetically modified organisms, antibiotics, or prohibited substances may have occurred.*
  - *When pesticide drift may have occurred.*
  - *To gather evidence as part of an investigation.*
  - *As part of a surveillance sampling program*
- This indicates that residue sampling may be conducted when there is suspicion that a prohibited substance may have been applied, or if there is contamination from GMOs or antibiotics, but it does not seem to fully open the door to testing inputs such as compost *during the production of the input* to ensure that there is no contamination. Nor does this give clear authorization to collect samples of manure to determine compliance with parasite control plans should the emergency use of a parasiticide be necessary.
  - Self-reported drift is not tested, and we use other mechanisms to document the overspray event and land voluntarily withdrawn from organic production. The spray event is known, and testing is unnecessary.

## 2. Are there areas pertaining to sample collection (sample size, when to collect samples, sample selection, etc.) that need to be developed or improved? Please provide suggestions.

- No suggestions. We train inspectors who conduct residue sampling on the proper procedures based on our lab's requirements (our lab requires that samples must be at least 1/2 pound). Our training for inspectors is thorough and clear, and our inspectors do not seem to have trouble following protocol.

## 3. How can additional instruction or guidance on sample collection support the voracity of testing results so that adverse actions are more defensible?

- We find that samples are typically viable for testing. Occasionally, samples will arrive at the lab with mold because transport was not speedy enough or not cooled enough. We only had one mold issue in 2023, and zero in 2022, so this is a rare occurrence. Sometimes paperwork is incomplete, but it doesn't have an impact on the sample viability or the impact of the lab's ability to complete the screening. Incomplete paperwork rarely happens, as well. We consider our program to be effective and clear. We occasionally receive results that are unverifiable but detected, so a retest at MOSA's added expense is necessary.

## **NOP 2611: Instruction Laboratory Selection Criteria for Pesticide Residue Testing**

### 1. Section 4.1 describes one type of residue screen that can be used for testing. What additional tests should be included in this section (e.g., heavy metals, synthetic solvents, fumigants, herbicides, etc.)? What should be the threshold for validating additional testing methodologies in this section to ensure results are actionable?

- As mentioned above, our pesticide residue testing program does not generally yield many detects. As such, we are considering which additional residues we might test for.

We'd like to see NOSB outline specific guidelines for categories of materials and for which types of organic products or inputs. Additionally, some materials are tested for as general protocol in the product supply chain, and we'd like to include such tests as part of our residue test program. For example, testing for antibiotics in milk is standard protocol for milk buyers, and as such, we always hear of any loads that are positive. Since the milk supply chain is well documented, it is easy to trace it back to the source of contamination and take enforcement action for antibiotics in milk. It would be practical for NOSB to focus on areas where product tracking is not as evident.

2. Sections 4.2 and 4.3 describe laboratory selection criteria and suggested laboratory practices. Do either of these sections need to be updated to align with current best practices?

3. How can additional instruction or guidance on laboratory selection criteria and testing methodology support the voracity of testing results so that adverse actions are more defensible?

- In our experience, if the lab returns a non-verified detect, we order a second test for verification as our standard protocol, which in effect doubles our fee for testing one operation. We would appreciate full results with the first test. Since each operation is only one operation in our residue test program, having to conduct retesting is an unpredictable fee. While the expense to retest isn't prohibitive, full information with one test would enable a more predictable budget for residue testing.

#### **NOP 2611-1: Prohibited Pesticides for NOP Residue Testing**

1. Does this list of prohibited substances provide value to certifiers in evaluating organic compliance?

- We run the lab's panel for all residues listed.

2. How can this document be improved?

- What are other substances that we should/could test for, such as glyphosate, and what are the protocols to do so?

3. Would certifiers find value in developing a decision tree to determine which tests should be conducted depending on the commodity, geographical location, and position within the supply chain? Please describe how a decision tree could assist certifiers with testing and compliance verification.

- So many factors play into decision making that a specific decision tree seems out of grasp, but we definitely appreciate resources for decision making and we're happy to give feedback on documents in development.

#### **NOP 2613: Instruction Responding to Results from Pesticide Residue Testing**

1. Section 5.3.3 describes how to respond to positive results when there is no EPA tolerance or FDA action level. Please describe experiences attempting to respond to results in this type of situation. How can this section be improved to facilitate and support sampling and testing for prohibited substances that do not have EPA tolerances or FDA action levels (e.g., synthetic solvents)?

- It is not common to get positive results where there is no EPA tolerance or FDA action level. However, when a chemical with no EPA tolerance or action level is detected on a crop, it is typically difficult to impossible to determine where the chemical residue came from. This level requires removal of the organic status of a product, which is hard for our

clients to accept when the source of contamination is not discovered. As with any other detection, we request the client to fully evaluate their management, buffers, equipment and any other potential sources for contamination, and we do an investigation as well. A residue test is conducted the following year from the same field or source if possible. That said, as stated above, it is usually difficult to pin down how the contamination occurred.

**2. Are additional sections within this instruction needing updating or improvement? Please provide suggestions.**

- Section 5.3.5 outlines the commodities where EPA has established tolerances, which do not include tolerances for parasite load in manure or non-pesticide contaminants in compost. More guidance would be necessary to draw in testing of inputs and animal waste. The discussion to test inputs for contaminants would need to include any and all inputs where contamination could be a factor, not just compost. We also question where we can require testing for inputs *while they are in production* if that input is not produced on the organic operation we certify. The only area where testing of inputs *pre-use* is authorized as a standard protocol is with Liquid Nitrogen Fertilizers, and we require listing with either OMRI, WSDA, or CDFA to be allowed for use. It is important that there are defined action levels for all materials tested.

We look forward to hearing more of the discussion. In general, we would greatly appreciate more time to consider NOSB documents. Thank you for your work to ensure integrity is maintained in the organic supply chain.

Respectfully submitted,

The MOSA Certification Team