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Sept 28, 2023

Ms. Michelle Arsenault, Advisory Committee Specialist
National Organic Standards Board
USDA-AMS-NOP 1400 Independence Ave. SW
Room 2642-S, Mail Stop 0268
Washington, DC 20250-0268

Re: Docket #: AMS-NOP-23-0026

Re: Residue Testing in a Global Supply Chain

Dear Ms. Arsenault:

IOIA is the leading worldwide training and networking organization for organic inspectors. Though a United-States based nonprofit 501(c)(3), IOIA operates globally with nearly 250 inspector members in over a dozen countries. Our members are the "boots on the ground" at the annual inspections of certified operators. The inspector is often the first representative in-person at the operation and sometimes the only one. We see first-hand successes and failures of the many administrative and technical innovations which are implemented in the name of ensuring organic integrity.

IOIA appreciates the efforts the NOSB has made in bringing this topic forward for discussion.

IOIA appreciates the diligent work of the NOSB in the exploration of methodologies that can prevent contaminated and fraudulent products from entering the supply chain. As IOIA members discussed the comment, several themes were reoccurring while answering the questions presented by the NOSB.

Keeping at the forefront of guidance that the NOP organic certification is a practice and process-based certification, IOIA suggests that a working group consisting of certifiers and inspectors come together to create a best practice for material sampling and testing at individual operations and throughput supply chains end to end.

Sampling Policy

The following are our comments and suggestions for an industry wide best practice policy:

Risk Based

Testing is an important tool in detecting both accidental contamination and fraud. Employing testing as a tool adds to the cost of the certification process overall.

Allocating the use of these tools based on risk will mitigate the price increase of certification which will inevitably be passed on to the consumer. In addition to the reasons listed in NOP 2610, IOIA suggests creating a risk matrix based on the following.

- **High value crops** with a significant difference between organic and non-organic prices.
- **Large shipments** of bulk organic materials. For example, any risk-based residue testing program MUST include sampling of products arriving in bulk vessels, particularly grain, extruded oilseed meals, and similar materials used as feedstocks. Since a full bulk vessel can carry upwards of 30,000 MT of organic product at one time, testing at the time these ships dock or transload in the US is a very time and resource effective methodology. IOIA strongly supports following industry standard methods for taking a statistically valid composited sample from every vessel arriving at a port of entry with bulk organic shipments.
- **Country of origin** that has a history of significant quantities of non-organic and/or contaminated products that have been shipped into the US as organic. The USDA / AMS Pesticide Data Program can be used to identify countries of origin responsible for a high level of contamination. IOIA suggests that targeted testing also be focused on high value goods, particularly of materials known to be previous targets for fraudulent marketing.
- **Companies with a larger market footprint** inherently have a higher risk of contaminated product entering the marketplace. Instead of testing schemes only based on the frequency of testing per operation, testing should also be recommended based on the quantity of product sold as organic per operation.
- **Split operations and parallel production** also inherently increases risk due to more opportunities for fraud and a greater probability of avoidable contamination occurring in this business model. IOIA recommends that split operations—those operations that produce or handle both organic and non-organic products—and parallel production—operations that produce or handle the same products in both organic and non-organic form—require additional oversight. Sampling as a focus at these locations may be an effective way to reduce risk.
- **Adverse Actions** commensurate with how readily operations cooperate when asked to provide samples, with swift escalation to proposed suspension being critical. While such refusal can be considered a major non-compliance, perishable products can be harvested and sold before the inspection report is completed, and completely gone from the market

by the time the operator is notified of the non-compliance. Considering such behavior as high risk and increasing sampling events has the potential to deter or detect nefarious activity.

- **Observation based** testing based on what inspectors observe or when they uncover issues that were not apparent during a pre-inspection review or evident in an OSP. When inspectors observe records, activities, practices, and operational procedures that are likely to result in contamination, the inspector typically attempts to contact the certifier to confirm if a sample is authorized. In cases where the certifier is not available to authorize sampling, the inspector has no latitude to pull samples. Clearer guidance regarding under what circumstances samples may be required, strongly advised, or allowed would be of great value to the inspector. The best practices from IOIA, as well as a number of certifiers, currently recommends that inspectors carry a sampling kit with them at all times so as to be ready to take samples if the need arises. Even if a certifier later decides that an inspector need not submit the sample to a lab, this at least allows the inspector to be ready to respond should they observe something that suggests a breach of organic integrity has occurred.

Oversight

Ideally, one entity would have the task of reviewing a whole-supply-chain for contamination and traceability. IOIA suggests that the NOP or other regulatory department be responsible. Alternatively, especially where there is high risk or concern of fraud, a protocol designed to identify a lead supply chain investigative certifier may facilitate the investigative process thereby increasing the likelihood of valid evidence-based decision making. Necessarily, issues of compensation and cost must be addressed so as not to rise to the level of disincentivizing throughput supply chain tracing or the financial burden of testing be unfairly relegated to a disproportionate number of certifiers.

Methodology

Inspectors are most often the field representatives assigned the task of sampling or sample gathering. Recent experience shows that the guidelines and methodologies set out in NOP2610 have not effectively detected or deterred fraud. Inspectors and investigators discovered fraud through other means. Using industry standard field sampling patterns for crops and soils, grain sampling procedures based upon container/vessel, specific bulk or bagged material type, and location of sampling of bulk materials, may better serve than the instruction, '...selected from a single location…' to provide samples that are more

representative of the operation. Based upon industry standards across different disciplines a single point sample does not provide a statistically valid sample.

IOIA strongly agrees with the NOSB regarding their desire to focus on both effective testing methods and the materials for which testing has the potential to most effectively detect materials that indicate contamination, commingling, or fraud.

Logistics

In general, sampling is a difficult task for an inspector. Properly handling the sample once taken after the on-site portion of the inspection often involves timely access to: shipping points, cold chain resources such as dry ice, cooler packaging, and usually includes travel distances that may render delivering properly handled samples difficult, at best. To the same degree, scheduling an inspection to coincide with production in many processing operations is often problematic. Insight into these challenges may influence how sampling is assigned, such as using more local inspectors, coupling a sample request with a short focused inspection, or batching sampling requests.

Questions for Stakeholders

1. ***Certifiers: Describe your experience with prohibited residue testing in extended supply chains and describe challenges that you have encountered***

   IOIA strongly supports testing throughout extended supply chains though currently, full supply chain testing is not common. Testing is typically based on an individual operation. The exception to this is processors for whom purchased ingredients from unopened containers are typically selected for sampling. Some logic can be justified in the decision to focus on ingredients. Multi-ingredient products have multiple potential points of contamination, especially in complex supply chains. The inspector/reviewer/certifier is unable to verify most of the organic control points that may have caused positive residue test results based on a finished product sample containing multiple ingredients supplied by diverse suppliers operating under different certifiers. In addition, when finished products are highly processed under certain conditions or contain only small amounts of certain ingredients, the chance of detection may shrink considerably. However, testing all aspects of the supply chain is critical. Finished product sampling is particularly effective at detecting contamination from field, post-harvest handling, and processing incidents. Multiple testing points of the same product and/or ingredients has the potential to provide valuable information. Where there is early evidence of the possibility of fraud, contemporaneous sampling may prove of great value in documenting actual conditions.

As different entities throughout a supply chain are often certified by different agencies, IOIA would again like to emphasize the need for a uniform policy or best practice to maintain consistency throughout the sampling/testing process.

Retail products are not usually sampled for compliance even though this is more representative of what customers eat. Retailers appear to be responsible for causing contamination incidents with accidents using structural pesticides for roaches and ants, and by commingling organic and non-organic products. While the AMS Pesticide Data Program and third-party studies, such as those carried out by Consumers Union detect these incidents, it is not clear how the data is used for enforcement. Incorporating some retail testing into full supply chain audits will provide a more accurate lens into how, where, and why organic integrity is compromised.

2. ***Certifiers: How do you evaluate the risk of your certified clients, and how do you determine which operations to target for periodic residue sampling?***

   As inspectors, IOIA members rarely engage in creating the matrixes used in assessing risk. IOIA reiterates the desire that inspectors have to collaborate with certifiers and the wider organic industry to develop a risk matrix. Not only is this critical to effective resource management in testing, a solid risk matrix can help prepare and implement better OSPs and inspection strategies to deter fraud and detect contamination. In addition, consensus and transparency regarding risk allows for organizations like IOIA to provide even more effective industry wide training.

3. ***Inspectors: Describe challenges with residue sampling on farms and handling facilities when sampling imported, processed, or aggregated products.***

   Full supply chain audits: As noted earlier, the experience of many of the inspectors contributing to this comment was that finished products are rarely tested. IOIA reiterates the importance of full supply chain audits in ensuring organic integrity at every point of the supply chain in a way that more easily pinpoints the root cause of contamination. Focusing on effective testing methods and complex supply chain audits with high risk is a powerful tool in uncovering both accidental contamination as well as deterring and detecting fraud.

   Inspection burden: With the increased regulatory requirements of SOE and the growing expectations of conducting thorough, quality inspections, it can be difficult to find the time to add one more task. Not only does it take time to collect the sample, many operations are loath to cooperate or provide the material. These situations drive tense encounters and render inspections very difficult, often taking significant time to “convince” the operation of the requirement. In the case of handlers not owning the material, authorization from the owner of the

goods is needed. IOIA strongly recommends that certifiers consider requesting samples as part of focused announced or unannounced inspections. Focused inspections are typically significantly shorter, which affords the time needed during business hours to gather supplies and ship samples. It also helps to provide adequate time for annual inspections that are already often difficult to conduct fully within current expectations of timeframes.

4. ***Testing Labs: What tests are available for synthetic solvents and fumigants, and what issues do you encounter when conducting residue tests submitted by organic certifiers, organic inspectors, and other organic stakeholders?***
    - NA

5. ***Substances for NOSB focus: NOSB intends to evaluate testing options for organic solvents and fumigants. Are there additional substances NOSB should evaluate that are not currently encompassed by periodic residue sampling guidance and practices?***
    - NA

6. ***Comments on proposed evaluation framework: Do stakeholders have recommendations for refining the proposed framework within which we will evaluate prohibited substance residue testing?***

    Many potential changes have been articulated in the Sampling Policy recommendation above. However, the NOSB is in a unique position to provide recommendations for regulatory change in which to base best practices and individual certifier policy.

    - IOIA requests that the NOSB recommend stronger testing protocols and regulatory language to support certification professionals in carrying out their duties.
    - IOIA requests that the NOSB recommend increasing the breadth of matrices tested as a way to provide necessary tools for the industry. Some examples are provided below.
        i. Properly trained and qualified inspectors should be empowered to sample soil or plant tissues during the course of a routine or unannounced inspection if they observe suspected pesticide application.

ii. IOIA also appreciates the example of ‘solvents used’ to illustrate a product that presents a significant footprint in the marketplace. The proposal to include a wider breadth of materials to be tested for, specifically prohibited organic solvents, is an excellent approach to detecting fraud in organic feedstocks. This is one example of a residual material that may be present or detectable in a finished good as an indicator of prohibited practices having been used in the production of the finished goods. Using benchmark indicators such as organic solvents in oilseed meals should be incorporated in risk analyses.
iii. IOIA encourages NOSB to identify alternative labs and testing requirements for pesticides such as glyphosate (round-up) which cannot be tested for using the prescribed QuEChERs method for periodic pesticide residue testing.
iv. IOIA encourages NOSB to identify labs and testing and sampling requirements for GMO.

- IOIA requests that the NOSB recommend that language in NOP 2610 surrounding the ‘one point’ sampling procedure be reviewed. While this approach may be adequate or even optimal for low risk periodic pesticide sampling situations, it is inconsistent with all industry standards for gathering statistically valid samples especially in high risk situations. In spite of what experience and observations inform an inspectors’ decision in selecting a ‘most likely’ sample site, the results from a single sample point may not adequately validate all situations. This procedure may also unjustly implicate an operation; for example when a small area of a field has been contaminated by drift and the remaining area is not affected, results could jeopardize the entire harvest's organic status. Alternatively, a single site test for importers of large quantities of materials does not accurately assess the organic integrity of the entire shipment. Statistically valid industry standard sampling procedures should be used as opposed to single sample points.
- IOIA requests that the NOSB recommend that ***all*** bulk ships are met at the port of entry for testing prior to off-loading. One composite of multiple samples taken from various depths of each hold should be collected for testing. The sheer volume of product makes this type of testing efficient. There are currently very few ports of entry certified to handle off-loading of these vessels, and with the coming requirement of an import certificate for each load, this level of oversight is logistically feasible.

7. ***What else should the NOSB consider to strengthen periodic residue sampling as an organic compliance verification tool?***

   IOIA makes two additional recommendations. Though cost is not a direct regulatory request, it is necessary to consider. Though the NOSB is not the platform to distribute monies, the NOSB does have the ability to request funding be allocated for these purposes.

   - **Training** - Certification professionals would benefit greatly from in depth training pertaining to sampling, testing and laboratory analysis requirements. Certification agencies would then be better equipped to create and implement effective policy. With better training, inspectors could make more informed decisions on where, how and the number of samples to collect and provide a better explanation of the testing to the certified organic operation. Reviewers would have a better foundation for understanding testing results and the potential legitimacy of the root cause in cases of positive tests.
   - **Cost of Testing** - Testing can be a costly endeavor. In addition to the lab fees, there is a cost of collecting and shipping the sample. However, in an effort to reduce the impact of the sampling process on the bottom line of the certifier and/or consumer, the myriad of potential benefits have been short changed. IOIA reiterates the efficient use of resources to target high risk operations and products. When testing full supply chains, ideally, the NOP would carry this out. Alternatively, IOIA proposes that a single certifier is selected and compensated by the NOP to manage the process and cover the costs of testing.

In conclusion, IOIA reiterates that organic certification is a process-based standard. Though a valuable tool, testing has the potential to rub against process based. Creating regulations and guidance pertaining to residue testing that directs certifiers to investigate the cause is critical to maintaining focus on a holistic, systems approach.

Thank you again for your vision and your work on this issue.

Sincerely,

Margaret Scoles, on behalf of the IOIA Board of Directors
Executive Director