

TO: National Organic Program Accredited Certifying Agents

FROM: Miles McEvoy, Deputy Administrator



RE: Periodic Residue Testing of Organic Products

Originally Issued November 8, 2012 – Updated to reflect NOP 2613 on February 28, 2013

Links Updated March 20, 2024

On November 8, 2012, the National Organic Program (NOP) published a final rule requiring that organic certifying agents (you) periodically test organic samples for residues of prohibited substances and/or methods. Beginning January 2013, you will be required to test samples from at least 5 percent of your certified operations. If you certify less than 30 operations, you must test at least one operation annually.

You must maintain records of all residue testing and provide these results to the public upon request. These records will be reviewed as part of your compliance audit.

How should I select which products to test?

All four scopes of certification (crops, wild crops, livestock, and handling) are included in this mandatory periodic residue testing program. As long as you test at least 5 percent of the operations you certify to the USDA organic regulations, you may establish your own criteria to determine which operations are subjected to testing. Possible selection criteria include:

- Selecting operations at random.
- Focusing on operations that produce more organic products.
- Testing operations more likely to have residues of prohibited substances or methods.
- Conducting testing as part of an investigation.
- Combining these or other selection criteria.

In general, NOP recommends that samples of the actual USDA organic, 100 percent organic, or “made with (specified ingredients or food groups(s))” products be tested for prohibited substances. However, there may be instances when testing surrounding material (soil, groundwater, leaves, stems, etc.) is necessary.

What types of tests will count towards the 5 percent of operations annual requirement?

You may subject an operation’s product(s) to any type of residue testing for prohibited substances or methods; at the end of the year, you must have tested products from at least 5 percent of the operations you certify to the USDA organic regulations.

Prohibited substances and methods include, but are not limited to:

- Prohibited pesticides – possible target list at [NOP 2611-1](#)
- Arsenic or other contaminant metals
- Genetic engineering – review policy in [Policy Memo 11-13](#)
- Synthetic hormones
- Antibiotics, except in organic apple and pear production per USDA organic regulations

You may use the list of prohibited pesticides in organic products ([NOP 2611-1](#)) when testing samples for residues of prohibited pesticides. Most prohibited pesticides have established parameters for allowance in organic products (typically 5 percent of the U.S. Environmental Protection Agency (EPA) tolerance for that specific product).

Testing for the presence of other prohibited substances and methods—such as arsenic or other contaminant metals, genetically modified organisms, hormones, antibiotics, or sanitizers—would also contribute towards meeting the 5 percent of operations testing requirement.

How do I select a laboratory to conduct my residue testing?

Laboratories must hold current accreditation to either:

- ISO/IEC 17025:2005, *General Requirements for the Competence of Testing and Calibration Laboratories*. If you would like to use a government laboratory, the National Science Laboratory in Gastonia, North Carolina meets this accreditation requirement.
- An alternate standard approved by the NOP on a case-by-case basis. Certifying agents should contact their NOP Accreditation Manager for additional information.

Full instructions on selecting a laboratory are available in [NOP 2611](#).

After I receive the residue testing results, what's next?

Follow the instructions for responding to pesticide residue results ([NOP 2613](#))—including how to report violations to EPA, FDA, state food safety programs or foreign health agency (if outside U.S.).

When testing for prohibited substances and methods other than pesticides:

A positive residue for a prohibited substance or method doesn't necessarily constitute a violation. You should further investigate the operation and surrounding areas to determine the source of the residue, referencing any previous tests conducted at the operation. Also review the NOP policy on genetically modified organisms: [Policy Memo 11-13](#).

If an investigation reveals that the detected residue is a result of the application of the prohibited substance or method, consider suspending or revoking the operation's organic

certificate. If suspensions, revocations, or civil penalties are appropriate, coordinate adverse actions with the NOP or State Organic Program.

If the detected residue is not a result of an application of the prohibited substance or method, work with the operation to determine why the residues are present. You should also require that the operation develop a corrective action plan to minimize exposure to this agent in the future.

How will NOP use the reported residue testing results?

At future audits, we will use the results to confirm that you are:

- Testing samples from at least 5 percent of the operations you certify per year.
- Responding and following up on positive samples (especially those that violate the USDA organic, EPA, and/or FDA regulations).

There will be wide variety in each of your selection criteria and which tests you conduct. As such, it will not be possible to draw conclusions across a specific commodity or category of products.

What was the scope of the pilot pesticide residue study and how should I use the information included in the report?

Scope. Before implementing these requirements, USDA conducted a pilot study to validate a method for evaluating approximately 200 pesticide residues on domestic and foreign organic produce samples. You are encouraged to use the methods described in this report when conducting required periodic residue testing of organic products. While you may test for residues of other prohibited substances, USDA focused on pesticide residues since they have established tolerance levels provided in the USDA organic regulations.

Findings. Over 96 percent of 571 tested samples had either no detected pesticide residues (57 percent) or low residue levels in compliance with the USDA organic regulations (39 percent). Four percent of the tested samples contained residues above allowable thresholds and were in violation of the USDA organic regulations. If you certified any of the operations responsible for these violative products, we have already contacted you about these results.

Limitations. This pilot study was intended to provide you with a validated method for you to evaluate residues of prohibited substances in organic products. It did not measure pesticide levels in all types of USDA organic products; it only analyzed 571 samples across six select commodities. Any data from this study—or from the mandatory residue testing program—cannot be generalized or grouped to quantify residues across a specific commodity or category of products. Review full report at <https://www.ams.usda.gov/reports/2010-2011-pilot-study-pesticide-residue-testing-organic-produce>.

Where can I learn more?

Resource	Purpose
Final Rule (11 FR 67239)	Requires that you conduct periodic residue testing beginning January 1, 2013 and provides background information.
Pilot Pesticide Residue Report	Serve as a model for future pesticide residue testing projects of organic produce.
NOP 2613: Responding to Results from Pesticide Residue Testing	Clarifies how to respond to pesticide residue testing data (finalizes NOP 5028: Responding to Results from Pesticide Residue Testing (Draft Guidance)).
NOP 2610: Sampling Procedures for Residue Testing (updated)	Describes how samples should be collected and shipped to accredited laboratory.
NOP 2611: Laboratory Selection Criteria for Pesticide Residue Testing (updated)	Identifies the requirements the laboratory that tests your clients' samples must meet.
NOP 2611-1: Prohibited Pesticides for NOP Residue Testing	Provides possible target list of prohibited pesticides in organic production.

Where should I direct my questions?

Your NOP accreditation manager should continue to be your main point of contact. Additionally, NOP will announce a webinar to review the requirements and answer your questions.

Conclusion

The new periodic residue testing program will discourage mislabeling and facilitate our oversight of USDA organic products around the world. This will allow us to prevent residues of a wide variety of prohibited substances, thus meeting consumer expectations. Periodic residue testing is an important tool to protect the integrity of USDA organic products around the world. Thank you for your work and support in achieving this shared goal.