June 27, 2011

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I appreciate the opportunity to comment on the National Organic Program's proposed rule on Periodic Residue Testing [Document Number AMS–NOP–10–0102; NOP–10–10, 76 *Federal Register* 23914-23920 dated April 29, 2011; Regulatory Information Number (RIN) 0581–AD11]. I am the Chief Scientist of The Organic Center. In May 2010, at the NOP's request and jointly with Craig Weakley, I submitted a detailed memorandum to the NOP Director regarding pesticides in organic and conventional foods. This memorandum was accompanied by detailed tables covering residues found in organic samples since 1993 by the PDP, assessing the impacts of current NOP pesticide residue policy, and pointing out issues not adequately addressed regarding trends in the frequency and levels of pesticides in organic food samples.

The Center has updated and refined our detailed statistical analysis of residues found in organic food, and feel that the current proposal can be substantially improved in light of the substantial knowledge in hand regarding the type of synthetic pesticides typically found in organic food. In the near future, the Center will forward to the NOP our updated analysis and set of tables. The data in these tables fully supports the policy recommendations made below.

Discussions within the organic industry, the OTA's deliberations on this proposal, and the comments and reactions from several industry leaders with years of experience tracking and trying to minimize pesticides in organic food make it very clear that the NOP cannot address and resolve all the important issues involving pesticides and GM contamination in organic food in this current rulemaking. However, the Center hopes that the comments submitted will collectively convince the NOP to move forward on two tracks – one designed to begin implementation of the OFPA-mandated residue testing program, and a second developed to address and resolve the many other critical issues and challenges the NOP and organic community are facing relative to sustaining consumer confidence in the safety of organic food. These issues include:

- Clear evidence of a much more serious problem with illegal residues in imported organic foods compared to conventionally grown foods,
- Significant variation in the frequency and levels of residues in imported organic foods based on the crop, whether the grower-shipper is U.S.-based, and country of origin,
- The need for new policies and procedures to address and communicate about residues of NOP-approved pesticides in organic samples, as well as residues of long-banned organochlorines, and

- Challenges inherent in dealing with low-level, unavoidable environmental contaminants including pesticides, heavy metals, animal drugs, and GM crop residues and proteins in compost, soils, water, growing medium, and organic materials.

In terms of how the NOP should move forward with a certifier-driven residue-testing program, we offer the following comments.

1. Certifiers should be given clear guidance regarding the random process to be used in selecting the minimum 5% subset of their certified entities that will be included in the residue-testing program in any given year.

For each certifier, we support including 5% of the entities certified by them in the residue-testing program on an annual basis. However, this 5% of entities should include both new entities brought into the program in a given year, and entities that must remain in the program because of issues identified in the first year of testing (see number 2 below).

2. Performance should drive how frequently, and how long a certified entity remains in the testing program.

Routinely, a certified entity brought into the program in a given year should cycle out of the program if no residues were found above the "inadvertent residue" level over one year of testing.

In our analysis last year for the NOP, The Organic Center defined an "inadvertent residue" of pesticide X in a certified organic sample as a residue level at or below 5% of the applicable EPA tolerance, and equal to, or below 10% of the mean level of all positive samples found by the PDP (or other publicly accessible residue dataset) on all conventional samples tested for the presence of pesticide X within the last one to five years. The Center's detailed analysis of PDP results from 1993 through 2009 covers all residues found in any organic sample, the relationship between the residue level and the "action level" of 5% of the EPA tolerance, and the "inadvertent residue" level. Inadvertent residues almost certainly arise in a way *other than* a direct application of the pesticide on the crop field, whereas a significant portion of residues above the inadvertent residue level likely reflect a prohibited application of a pesticide on a certified organic field. The primary exception to this rule is residues of fungicides in organic samples that can arise from fungicide movement within storage facilities.

In cases where residues are found in samples from an entity in the program above the inadvertent residue level, the entity would remain in the program for a second year, and until either: (a) the certifier and the entity agree, and can document that the source(s) of the inadvertent residues have been identified and eliminated, or (b) no inadvertent residues have been found in any food or plant samples tested from the entity for two consecutive years.

3. The sampling density for the crops and foods selected by the certifier for testing by a given entity must reflect the scale, diversity, and geographic scope of the entity's operations.

The proposed rule requires each certifier to conduct at least one sample per year of a food produced or sold by 5% of its certified entities. This selection criterion does not differentiate between a grower with a 1.5-acre market garden producing four crops, and a 3,000-acre operation producing 30 crops in three regions. Clearly, the number of samples required per entity tested in a given year should be a function of the likelihood that the crops grown by the entity may contain possibly actionable, the number of acres grown of each crop by the entity, the number of distinct and different growing locations (e.g., Posser, WA; Fresno, CA; and coastal Mexico), and the number of crops grown.

In general for a given entity selected by a certifier for testing, certifiers should review the variety of crops grown by the entity, and identify those crops that must be included in the program in a given annual testing cycle. The basis for this selection is addressed in number 4 below. One approach to determining the appropriate number of samples and targeting samples to the crops/foods most likely to contain illegal residues is outlined below. Other thresholds and criteria could be adopted and designed to accomplish essentially the same goals.

For each selected crop, the certifier could require at least one sample per 50 acres of each "very high-value" fruit, vegetable, herb and specialty crop produced by the entity in a given year. A "very high-value crop" is defined as one with an expected average gross value per acre of $30,000.00, based on typical yields and crop values as outlined in organic farm system plans or other relevant data.

In addition, one sample could be required from a field in each of the geographically distinct growing regions in which the entity produces 10 or more acres of the crop. A "distinct growing region" could be defined as one at least 200 miles way from the next closest growing region producing the same crop for the certified entity.

One sample could be required per 100 acres of moderate to high value crops, defined as crops producing expected average gross value per acre between $4,000.00 and $30,000.00. One sample could be required of the crop for each distinct growing region in which 10 or more acres of the crop are produced.

At least one sample should be tested per 200 acres of lesser value, annually harvested crops producing food for direct human consumption.

A similar scale and product diversity-driven sampling protocol should be established for the animal products produced by a certified entity chosen for inclusion in the program. (See also the provision below regarding the relative frequency of selecting different types of foods).

4. The certifier shall select the crop or crops, or food or foods that each certified entity in the program must test in a given annual program cycle. The selection of crops shall be risk-based, as outlined below.

Of the crops or foods produced or sold by a certified entity, certifiers shall require at least –

- One-half of the "high-frequency of actionable residue" crops and foods to be included in the program each year, up to five crops per certified entity;
- One-quarter, and up to three "moderate frequency" crops or foods; and
- One crop or food if no high- or moderate-frequency crops are grown or sold by the entity.

The NOP shall publish and update each year lists of crops and foods according to high-, moderate-, and low-frequency of actionable residues. An "actionable residue" is a residue above the 5% of EPA tolerance level and/or above the inadvertent residue level. These lists would guide certifiers in the implementation of the above selection criterion. The basis of the lists should be the average number – and hence frequency -- of actionable residues per organic sample tested for a given crop in the last five years by the program and/or by the PDP.

The list of crops and foods shall be ranked from the highest to lowest average number of actionable residues per sample. The "high frequency" segment of the list should be defined by a clear, empirical benchmark within the ranking. For example, "high frequency" crops and foods could include all those that are 50-times or more likely to contain an actionable residue, compared to the average number of actionable residues per sample tested across all crops/foods in the bottom one-half of the list of crops/foods. "Moderate" frequency crops/foods would fall between the "low-frequency" and the "high-frequency" category.

5. The NOP should encourage certifiers to contract with testing laboratories with the capability to adhere to PDP-required testing protocols.

The benefits of the investment made by the organic community in this residue-testing program will be greatly enhanced if the residue testing is conducted in essentially the same way that samples of conventional foods are tested by the USDA's PDP. By using the same protocols, the NOP and certifiers, and the public can place into sharper perspective the relative dietary risks posed by residues found in organic samples, in contrast to samples marketed in association with another market claim (like "IPM grown" or "pesticide free") or no market claim.

Ideally, the NOP will work with the AMS to negotiate master contracts open to certifiers with the labs contracted in any given year to do testing for the PDP. The contracts would specify the sampling, handling, shipping protocols, as well as the methods to be used, LODs, reporting requirements, etc. By increasing the volume of testing done by each contract lab working for the AMS as part of the PDP, the addition of organic samples submitted by certifiers under the same master contract will have the potential of further reducing the per sample testing costs both for certifiers and the PDP.

The Center has communicated with private labs and been told that most significant players in the industry are now conducting most of their testing in compliance with PDP protocols, because such a high percentage of customers are now asking labs to adhere to PDP protocols. For these labs, it can actually be ***more*** expensive to commission less sensitive testing, since it is costly for labs to alter their sampling and testing methods.

If the NOP feels it cannot take on this task, it should encourage a private entity or organization, such as The Organic Center, Organic Trade Association, and/or organizations representing certifiers, to work with the AMS and the PDP to develop such master contracts with labs currently conducting PDP testing, or capable and willing to follow the same protocols at a competitive cost per sample.

6. The NOP should make it clear that pesticides approved for use by certified organic farmers are not subject to the action threshold of 5% of EPA tolerances nor the inadvertent residue threshold.

Pesticide products approved for use by organic farmers typically have application instructions and restrictions identical to, or very similar to those on products marketed to conventional farmers. For this reason, there is no reason to expect substantial differences in either the frequency of residues or the mean level of positive residues in organic samples versus conventional samples from fields treated with such a pesticide.

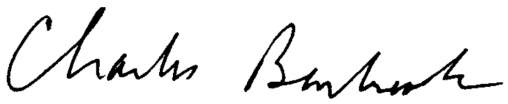
7. The NOP should put in place a mechanism for certifiers to report the results of all residue tests carried out under the program to the NOP, for compilation into a residue testing dataset for use by government agencies, scientists, companies, or individuals studying the frequency and levels of residues in certified organic foods.

The return on investment in this residue-testing program will be greatly enhanced if the results are compiled and shared openly with people wanting to better understand where and how actionable residues are getting into or onto organic food. A simple, very low-cost process can be developed for certifiers to arrange for results to be simultaneously provided to them and to the NOP electronically by testing laboratories.

The NOP, or an organization working on behalf of the NOP, can then integrate the results into annual updates of an organic sector-wide pesticide residue dataset, in a way that assures that the results from any certifier, or certified entity are not disclosed. Ideally, the samples carried out and paid for by certifiers will be done under PDP protocols, and can hence be merged with samples tested by the PDP into a larger, more robust dataset allowing more refined statistical analyses.

Thank you for the opportunity to share these comments.

Sincerely,



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