

Crop Production Recommendations -- 1994

NATIONAL ORGANIC STANDARDS BOARD FINAL RECOMMENDATIONS ORGANIC CROP PRODUCTION STANDARDS

Adopted June 1-4, 1994
Location: Santa Fe, New Mexico

C. RESIDUE TESTING

COMMENTARY

A. Summary of Existing Law Related to Pesticide Residues Pesticide residues on food and feed are regulated by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)(7 USC 138) and the Federal Food, Drug, and Cosmetic Act (FFDCA)(21 USC 321). A pesticide tolerance (established by EPA under the FFDCA) is the amount of a pesticide residue that legally may be present in or on a raw agricultural commodity or a processed food (40 CFR Chapter 1, § 177.3). Under the FFDCA, food or feed containing a pesticide residue in excess of the EPA tolerance or containing a pesticide residue for which no tolerance exists for that food or feed is adulterated and cannot be sold. Under the FFDCA, the FDA is responsible for enforcing pesticide tolerances.

Some pesticides (e.g., DDT, aldrin, dieldrin) have had their registrations canceled and tolerances revoked by the EPA but continue to persist in the environment and may occur as unavoidable residues in food or feed. Because their EPA tolerances have been revoked, FDA established "action levels" for these pesticides to be used for enforcement. In establishing the FDA action level for each pesticide, the agency: 1) used its pesticide residue monitoring data to determine residue levels that could not be avoided by farmers and food processors using good growing or manufacturing practices; and 2) took into account its analytical ability to detect and measure the amount of the unavoidable pesticide residue in a food or feed. The FDA action levels are substantially lower than the original EPA tolerances for these pesticides. (Reference: Federal Register, Vol. 55, No. 74, 4/17/90)

B. Summary of the OFPA and Legislative Intent

There are six specific references to residue testing in the OFPA. § 2112(a) requires the Secretary, State official, and certifying agent to utilize a "system of residue testing" to assist in enforcement. § 2107(a)(6) requires "periodic residue testing" by certifying agents to determine if organic food contains pesticide residues, other non-organic residues, or natural toxicants. § 2112(b) states that the Secretary, State official, or certifying agent may require pre-harvest residue testing of any crop grown on soil suspected of harboring contaminants. § 2112(c)(1) requires an investigation to be conducted by the Secretary, State official, or the certifying agent if it is determined that an organic crop or product contains any "detectable" (emphasis added) pesticide residue, non-organic residue, or prohibited natural substance residue. § 2112 (c)(2) states that food may not be sold as organic if it contains residues at levels that are greater than "unavoidable residual environmental contamination." § 2119(k)(5) requires the NOSB to advise the Secretary concerning testing of organically produced products for residues caused by "unavoidable residual environmental contamination."

The Report of the Committee on Agriculture, Nutrition, and Forestry, US Senate, to Accompany S. 2830 (Report 101-357) provides assistance in understanding the legislative intent of the OFPA.

The report has an entire section devoted to residue testing (pp. 299-301) which contains considerable discussion of the subject.

C. Maximum Allowable Pesticide Residue for Organic Food

Because residue testing is mandated by the OFPA, a maximum pesticide residue level must be established as a standard for organic food. But the OFPA does not establish such a residue level. The NOSB has devoted considerable time in its attempt to develop a pesticide residue standard that is reasonable, practical, affordable, consistent with consumer interests, and consistent with the OFPA. Three options have been considered and debated: 1) a zero residue standard which may be implied by the term "unavoidable residual environmental contamination" in § 2112(c)(2) of the OFPA; 2) a 100% of EPA pesticide tolerance standard which is the same standard applied to conventional food; and 3) a percentage (5% or 10%) of EPA pesticide tolerance standard which is used by some State organic laws, some certification agents, and specifically recommended in the Senate Committee Report.

The NOSB believes that a zero residue standard for organic food would be impractical, expensive, and difficult to achieve (it is impossible to prove a negative - particularly when residue testing levels of detection are lowered each time the analytical technology improves). A zero residue standard would force organic farmers to bear the expense and consequences of pesticide use by conventional farmers. While § 2112(c)(3) of the OFPA may appear to set a zero residue standard, careful study of the Senate Committee Report reveals that the legislative intent was not to set a zero residue standard. The Senate Committee Report states: 1) "Historically, "organic" has been a production claim and not a residue-free content claim." 2) "On occasion, organic farmers, although following the strict standards in this bill, may produce products with minimum residues due to inadvertent environmental contamination such as drift from a neighboring farm." 3) "Second, residue testing bridges the concept that organically produced food is defined by the manner in which such food was produced and the widely held concept that organically produced food has fewer (emphasis added) residues." 4) "The Committee has been asked to provide guidance regarding the meaning of 'unavoidable residual environmental contamination.' The Committee does not intend to prohibit minimal residue (emphasis added) contamination that does not result from practices used by the organic farming operation." 5) "The Committee does not intend, however, that a level greater than 10% of the EPA level or that zero percent of tolerance be approved by the Secretary. The desire is to leave the Secretary the discretion to set residue levels somewhere between 1% and 10% of the EPA levels." and 6) "Finally, as a result of the Committee's debate as to the merits of various levels of acceptable residues of prohibited materials for organic food, the Committee decided that the NOSB () would be the most knowledgeable on this subject and thus the Committee intends that the NOSB shall advise the Secretary concerning appropriate residue levels and testing methods for organic products." Furthermore, § 2119(k)(5) requires the NOSB to advise the Secretary concerning the testing of organic food for residues caused by "unavoidable residual environmental contamination." This implies that the meaning of "unavoidable residual environmental contamination" must be determined by the Secretary and, therefore, is not predetermined to mean zero residue.