

National Organic Standards Board
COMPLIANCE, ACCREDITATION, AND CERTIFICATION SUBCOMMITTEE

Assessing Soil Conservation Practices Discussion Document

August 27, 2014

I. INTRODUCTION:

The Organic Foods Production Act of 1990 (OFPA) and the National Organic Program (NOP) standards emphasize the importance of maintaining and improving soil quality in numerous places. Over the years of National Organic Standards Board (NOSB) deliberations and public discourse, we find a clear and consistent commitment to these tenets; in fact, keeping soil in good tilth is both a founding principle and expectation of the entire organic community. Because soil conservation is critical to maintaining soil health, and soil health is critical to the future of farming, the NOP has tasked the NOSB Certification, Accreditation, and Compliance Subcommittee (CACS) with generating a discussion document to assess the state of soil conservation practices on organic farm and livestock operations. It is our intention to bring soil conservation *per se* permanently and deliberately into the public discourse when we talk about soil management and the practices employed on organic farms.

With the help of the certification community and public, we hope to provide clarity about which aspects of soil conservation found within the regulation are working well and which need further attention or warrant guidance as to their implementation. This assessment of practices will then be used to develop specific training and tools to further soil conservation objectives.

II. BACKGROUND:

The NOP is aware of concerns regarding use of appropriate soil conservation practices on organic farms, for instance prevention of soil erosion, tillage, fencing of livestock from streams, application of manure on frozen soil, and overgrazing of pasture. The Board would like to determine if and how grower and livestock operations are complying with the portions of the regulation stating that operators must maintain or improve the natural resources, including soil and water quality. Since the Natural Resources Conservation Services (NRCS) has been critical to improving our soil resources for decades, CACS looked to the NRCS for technical expertise and to assist in aligning as closely as possible organic practices and regulatory guidance with their longstanding valuable work toward a sustainable soil culture.

The following paragraph is taken from the NRCS webpage.

“The NRCS mission is to improve the health of our Nation’s natural resources while sustaining and enhancing the productivity of American agriculture. The NRCS achieves this by providing voluntary assistance through strong partnerships with private landowners, managers, and communities to protect, restore, and enhance the lands and waters upon which people and the environment depend. The NRCS Vision is to create productive working lands in harmony with a healthy

environment. Their conservation process entails the following three steps, including 1) resource inventory and assessment; 2) technical assistance and technology transfer; and 3) conservation and implementation. The 2011 – 2015 NRCS Strategic Plan has three priorities including: 1) getting more conservation on the ground; 2) increasing organizational effectiveness and efficiency; and 3) creating a climate where private lands conservation will thrive.”

The intersection between NOP and NRCS goals is evident and the opportunity to share best practices is welcomed.

III. **RELEVANT AREAS IN THE RULE:**

205.2 Terms Defined:

Crop rotation. The practice of alternating the annual crops grown on a specific field in a planned pattern or sequence in successive crop years so that crops of the same species or family are not grown repeatedly without interruption on the same field. Perennial cropping systems employ means such as alley cropping, intercropping, and hedgerows to introduce biological diversity in lieu of crop rotation.

Natural resources of the operation. The physical, hydrological, and biological features of a production operation, including soil, water, wetlands, woodlands, and wildlife.

Organic production. A production system that is managed in accordance with the Act and regulations in this part to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.

Pasture. Land used for livestock grazing that is managed to provide feed value and maintain or improve soil, water, and vegetative resources.

Soil and water quality. Observable indicators of the physical, chemical, or biological condition of soil and water, including the presence of environmental contaminants.

205.200 General

The producer or handler of a production or handling operation intending to sell, label, or represent agricultural products as “100 percent organic,” “organic,” or “made with organic (specified ingredients or food group(s))” must comply with the applicable provisions of this subpart. Production practices implemented in accordance with this subpart must maintain or improve the natural resources of the operation, including soil and water quality.

205.203(a) The producer must select and implement tillage and cultivation practices that maintain or improve the physical, chemical, and biological condition of soil and minimize soil erosion.

205.203(b) The producer must manage crop nutrients and soil fertility through rotations, cover crops, and the application of plant and animal materials.

205.203(c) The producer must manage plant and animal materials to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances.

205.203(d) A producer may manage crop nutrients and soil fertility to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances by applying: (see numbers 1 – 5).

205.205(d) The producer must implement a crop rotation including but not limited to sod, cover crops, green manure crops, and catch crops that provide the following functions that are applicable to the operation: (see letters a – d).

205.240(c) A pasture plan must be included in the producer's organic system plan, and be updated annually in accordance with §205.406(a). The producer may resubmit the previous year's pasture plan when no change has occurred in the plan. The pasture plan may consist of a pasture/rangeland plan developed in cooperation with a Federal, State, or local conservation office: *Provided*, that, the submitted plan addresses all of the requirements of §205.240(c)(1) through (8).

IV. DISCUSSION:

As mentioned above, maintaining and improving soil quality is a founding principle of organic production whose roots are deep within the non-governmental standards across the country long before OFPA and the NOP were born. OFPA and the NOP merely but significantly codified these principles into law and regulation. While both emphasize the importance of soil quality and conscientious soil management and the practices that impact and influence both, *soil conservation* has often been given short shrift in recent public discourse, albeit unintentionally. The days of the Dust Bowl and the acute attention to programmatic soil conservation that came with it are far behind us, the legacy of those days' remains, of course, and our responsibility for that legacy remains robust.

The following paragraph is also taken from a NRCS webpage.

“The NRCS draws on a long history of helping people help the land. For more than 75 years, NRCS and its predecessor agencies have worked in close partnerships with farmers and ranchers, local and state governments, and other federal agencies to maintain healthy and productive working landscapes. It is the NRCS role to provide national leadership and technical assistance for the conservation of our natural resources to ensure the continued production of food and fiber.”

The passage of the Food Security Act of 1985 (P.L. 99-198), (with its Sodbuster, Swampbuster, and Highly Erodible Lands provisions) made conservation a prerequisite for participation in USDA

programs. In order for organic operators to participate in, and benefit from conservation program investments, they are required to submit conservation plans if they have erosion problems. Because the NOP and the NRCS have common goals, this discussion document presents an ideal opportunity to solicit feedback regarding the similarities and differences in their implementation requirements for soil and water conservation practices. The NOSB values the opportunity to collaborate with partners such as the NRCS.

In closing, our hope is to generate meaningful dialogue within the organic community to identify and evaluate opportunities for improving soil and water practices in organic farming and livestock operations. We offer this platform as a means for thoughtful discourse and responsible discussion to propose solutions where applicable and to strive for continual process improvement. We welcome your answers to the questions below in preparation for the fall, 2014 NOSB meeting.

V. QUESTIONS:

- 1) How do certifiers assess whether production practices, identified in an organic system plan and/or observed on-site, maintain or improve soil quality? Is visual assessment sufficient?
- 2) What tools, other than visual inspection, could aid certifiers in evaluating soil management practices, e.g., Revised Universal Soil Loss Equation 2 (RUSLE2) or soil organic matter levels?
- 3) What benchmarks do certifiers have for issuing noncompliance's related to soil conservation: for instance, visible erosion, overgrazing, and evidence of manure application on frozen ground, manure or compost stored in flooded areas? Are quantitative benchmarks used?
- 4) What qualifications do certifiers seek among inspectors for evaluating soil management practices on-site?
- 5) What tools do inspectors use (other than soil testing) to evaluate/measure the adequacy of soil management during on-site inspections? Is one on-site inspection enough to assess erosion if it is done during a single visit?
- 6) How do certifiers respond if a review/on-site inspection indicates that there is a soil management problem? Do certifiers issue notices of noncompliance or note as a finding to be reassessed at a later time?
- 7) How do certifiers respond when complaints are filed about a producer's soil management?
- 8) Some USDA benefits require producers to be in compliance with Highly Erodible Land (HEL) provisions. Are certifiers aware of USDA Natural Resource and Conservation Service (NRCS) classification and HEL provisions? Should certifiers verify whether production acreage is classified as "highly erodible land" (HEL) and ensure appropriate soil management practices for HEL?
- 9) Are certifiers aware of USDA NRCS's tolerable soil loss standards? Should certifiers verify whether production acreage has been assessed to meet tolerable and sustainable soil loss levels?
- 10) When NRCS personnel who provide technical assistance on organic operations observe soil management risks and problems should the producer be required to communicate this information to their certifier?