



THE CENTER FOR
FOOD SAFETY



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National Organic Standards Board Meeting

25-28 October

Madison, WI

**Comments to the National Organic Standards Board
Materials Committee Guidance Document on Nanotechnology**

Good afternoon.

My name is Lisa Bunin and I am the Organic Policy Coordinator at the Center for Food Safety (CFS). CFS is a non-profit, membership organization that works to protect human health and the environment by curbing the proliferation of harmful food production technologies and by promoting organic and other forms of sustainable agriculture.

Today, I am also representing CFS's sister organization, the International Center for Technology Assessment (ICTA), a non-profit organization dedicated to providing the public with full assessments and analyses of the impacts of food-related technologies on society.

My remarks today will focus on nanotechnology, but first I would like to briefly comment on corn steep liquor in light of the Board's discussions yesterday. Although we believe that corn steep liquor meets the definition of synthetic because it is manufactured by a chemical process, we strongly urge the Board to postpone making a decision on the material due to the confusion surrounding its fundamental chemistry. Clearly, more investigation and research is needed to resolve the outstanding scientific questions. What is at stake is far-reaching and, therefore, the decision should not be made without clear Board agreement and consensus on such a core definition.

Now, on to nano.

CFS and ICTA are pleased to see the recognition by the Materials Committee that "there is overwhelming agreement within the organic industry to

prohibit nanotechnology in organic production and processing, at this time.” We wholeheartedly support the prohibition of nanotechnology and nano materials in organic and so do 8,320 of our individual supporters who wrote to this NOSB urging it to take immediate action to protect the integrity of organic by keeping nano out.

Support the Definition of Engineered Nanomaterials

CFS & ICTA support the Materials Committee’s proposed definition of *engineered nanomaterials* and its acknowledgement that the unique functions and properties of materials at the nanoscale could harm animals, humans and the environment. We also support excluding traditional food processing techniques, as outlined in the Guidance Document, and naturally occurring nanoparticles, which clearly differ from deliberately engineered nanoparticles.

Deliberately Engineered Nanomaterials are Synthetic

We agree with the Committee’s conclusion that deliberately engineered nanomaterials are synthetic in that bulk material from which they are derived is manipulated at the molecular and atomic level. It does not matter whether the original bulk material comes from a “natural” source

because once materials are manipulated at the nanoscale, the chemical and physical changes that result render it a non-agricultural, synthetic material.

Nanomaterials Must Not be Allowed on the National List

We do not support allowing individual nanomaterials to be petitioned for placement on the NL on a case-by-case basis. We believe that *now*, is the time for the NOSB to recommend a complete and clear prohibition of nanomaterials, as a class, in organic food production and processing. This is consistent with the ethos of the organic law and standard. Moreover, delaying a decision contradicts the Committee's own observation that the organic industry overwhelmingly opposes the use of nano in organic at this time.

Nanotechnology, like genetic engineering, irradiation, and sewage sludge is antithetical to the letter, and intent of the OFPA, which prohibits the use of synthetics in the production and handling of organic products. (Sec. 2105 (1)). Synthetics in organic are intended to be the exception rather than the rule. To reinforce this intent, OFPA and the organic rule state that if a substance is allowed on the National List it must not be harmful to human health or the environment. Nanomaterials cannot meet this standard due

to the many documented risks of harm that we have presented in our current and previous written comments to the Board. We strongly urge the Board, at this meeting, to recommend a complete prohibition of nanotechnology in organic production and handling, without any exceptions or caveats, by adding it to section 205.105 of the rule in a new letter “h.”

Nanomaterials in Packaging are Prohibited in OFPA and the Organic Rule

The use of nano substances in primary food packaging and in food contact substances represents a major and growing source of concern for organic consumers. Packaging is a predominant product category where food-related nanotechnologies are being deployed to extend a product’s shelf-life, particularly through the use of anti-microbials like nano-silver. This type of nano packaging is designed as delivery system whereby the nanoparticles embedded in the packaging act as a preservative, anti-microbial or anti-fungal, among other things. As such, we believe that the authority already exists within the organic rule to prohibit nano antimicrobials in packaging in section 205.272 (b) (1). The rule specifically states that packaging materials and storage containers or bins that contain a

synthetic fungicide, preservative or fumigant are prohibited for use in the handling of any organically produced agricultural product and ingredient.

Nanotechnology Symposium is an Unnecessary and Dangerous Delay in Protecting Organic Integrity

CFS and ICTA disagrees with the Material's Committee recommendation to delay making a permanent decision to prohibit nanotechnologies and nanomaterials in organic and, instead, to hold a symposium to collect more information. There is sufficient evidence, today, about the environmental and health risks of nano to conclude that it contravenes the principles of organic and that it needs to be prohibited. Failure to take immediate action in the face of a growing and unregulated industry threatens to undermine both the integrity of organic products and consumer confidence in the USDA organic seal.

Nanotechnology Puts International and Consumer Markets at Risk

Failure to expressly prohibit nanotechnology could also undermine the credibility and authenticity of US organic products in the international marketplace. The UK and Canada already prohibit nanotechnology from being used in organic and the European Parliament recently voted to

recommend that the European Commission prohibit nanomaterials in *all* food, not just organic. As the world's leader in organic, we would be foolhearted to resist taking immediate precautionary action to keep nanomaterials out of organic and risk not only contamination of organic food but also consumer and world market rejection.

In conclusion, when it comes to nano in organic, we believe that a firewall should be built without a door.

Thank you.