



BEYOND PESTICIDES

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October 12, 2016

Ms. Michelle Arsenault
National Organic Standards Board
USDA-AMS-NOP
1400 Independence Ave., SW
Room 2648-S, Mail Stop 0268
Washington, DC 20250-0268

Re. HS: Silicon dioxide

These comments to the National Organic Standards Board (NOSB) on its Fall 2016 agenda are submitted on behalf of Beyond Pesticides. Founded in 1981 as a national, grassroots, membership organization that represents community-based organizations and a range of people seeking to bridge the interests of consumers, farmers and farmworkers, Beyond Pesticides advances improved protections from pesticides and alternative pest management strategies that reduce or eliminate a reliance on pesticides. Our membership and network span the 50 states and the world.

In reviewing this substance, the NOSB must apply the criteria in the Organic Foods Production Act (OFPA), that its use—

- (i) would not be harmful to human health or the environment;
- (ii) is necessary to the production or handling of the agricultural product because of the unavailability of wholly natural substitute products; and
- (iii) is consistent with organic farming and handling.¹

The regulations also require:²

In addition to the criteria set forth in the Act, any synthetic substance used as a processing aid or adjuvant will be evaluated against the following criteria:

- (1) The substance cannot be produced from a natural source and there are no organic substitutes;
- (2) The substance's manufacture, use, and disposal do not have adverse effects on the environment and are done in a manner compatible with organic handling;
- (3) The nutritional quality of the food is maintained when the substance is used, and the substance, itself, or its breakdown products do not have an adverse effect on human health as defined by applicable Federal regulations;

¹ OFPA §6517(c)(1)(A). Further details at OFPA §6518(m).

² §205.600(b).

- (4) The substance's primary use is not as a preservative or to recreate or improve flavors, colors, textures, or nutritive value lost during processing, except where the replacement of nutrients is required by law;
- (5) The substance is listed as generally recognized as safe (GRAS) by Food and Drug Administration (FDA) when used in accordance with FDA's good manufacturing practices (GMP) and contains no residues of heavy metals or other contaminants in excess of tolerances set by FDA; and
- (6) The substance is essential for the handling of organically produced agricultural products.

Silicon dioxide is listed as:

205.605(b) Silicon dioxide—Permitted as a defoamer. Allowed for other uses when organic rice hulls are not commercially available.

In 2011, the NOSB voted to annotate the listing to recognize and encourage the use of organic rice hulls as an alternative for most uses of silicon dioxide. The NOSB recommended the following annotation: "Allowed for use as a defoamer. May be used in other applications when non-synthetic alternatives are not commercially available." The NOP proposed and put into regulation instead this annotation: "Permitted as a defoamer. Allowed for other uses when organic rice hulls are not commercially available." NOP justified this change as follows, "AMS understands that the intent of the NOSB's recommendation is to allow the continued use of silicon dioxide as a defoamer and to require the use of a nonsynthetic substance instead of silicon dioxide when possible. To ensure clarity and consistency within the USDA organic regulations, AMS is proposing a modification to the NOSB's recommendation." The annotation in the final rule is less restrictive than the NOSB recommendation, and therefore allows the use of the synthetic silicon dioxide in cases where there is a nonsynthetic alternative other than organic rice hulls," which is contrary to OFPA §6517(d)(2).³ According to the 2010 Technical Review (TR), other plant materials may be the basis for biogenic silica products.⁴

Therefore, the NOSB should revisit the annotation to determine whether it should be changed to the language as originally passed by the NOSB or to a slightly less restrictive version (but still more restrictive than the version adopted into the regulations), "Permitted as a defoamer. Allowed for other uses when an organic substitute is not commercially available."

Thank you for your consideration of these comments.

Sincerely,



Terry Shistar, Ph.D.
Board of Directors

³ "The Secretary may not include exemptions for the use of specific synthetic substances in the National List other than those exemptions contained in the Proposed National List or Proposed Amendments to the National List."

⁴ Lines 438-448.