



June 26, 2017

Ms. Michelle Arsenault  
Advisory Committee Specialist  
National Organic Standards Board, USDA-AMS-NOP  
1400 Independence Ave. SW.  
Room 2642-S, Mail Stop 0268  
Washington, DC 20250-0268

Re: AMS-NOP-17-0024

Dear: Ms. Michelle Arsenault:

I am writing in response to the solicitation for public comment before the upcoming NOSB meeting in Jacksonville, FL. My comments are in favor to continue approval for humic acid use in organic crop production. Some misinformation was presented in the April 2017 NOSB meeting minutes that need to be clarified. The Humic Products Trade Association (HPTA), consists of international experts on humic acid manufacturing and I think the comments from our association will be useful for public review and NOSB consideration.

Humic acids are a component of soil organic matter and are in every natural soil and body of water in some form. Humic acids are extremely beneficial to both organic and conventional farmers for improving soils and crops. To restrict humic acid use would be a poor decision by the NOSB as humic acids are used on various soil types including many marginal soils that are very deficient in stable organic matter. Some of these marginal soils have eroded and stripped away the sequestered carbons that took hundreds, if not thousands, of years to form.

The critical issue is humic acids are operationally defined and are only soluble in alkaline solution. Refining humic acids from a raw material into a usable form suitable for agricultural use requires a small amount of alkaline solution. Many organizations have demonstrated that extraction with a mild alkaline

solution can be done with humic acids without fortification of the final product with synthetic nutrients. Only a slight pH adjustment is needed to refine a humic acid product and does not present an environmental concern.

In past years, fortification of the final product has been the heart of the humic acid discussion, and we agree with the current NOSB rule. We have reviewed the Organic Foods Production Act (OFPA) criteria as applied to humic acids, and see no basis for removing the substance from the list of organic products, so long as the synthetic hydroxide used to raise the pH is not used to fortify the product. Aside from normal mining processes which apply to all mined minerals like limestone, gypsum, and many other minerals, humic acid poses no concern for human harm relative to all other mined minerals.

We are troubled by a few comments made on April 21, 2017, at the NOSB meeting in Denver, CO which asserted a differentiation between coal and naturally-derived humic acids<sup>1</sup> as well as an assertion that use of coal for humic acid extraction diminishes the amount of fossil fuel available for energy<sup>2</sup>. Presently, humic acids are extracted from the following ancient plant deposits: Leonardite, oxidized lignite, oxidized sub-bituminous coals, humalite, carbonaceous shales, peat, and sapropel. All these naturally occurring deposits are ancient plant deposits that have no commercial fuel value. Conversely, humic acids are not present in fuel type coals, and cannot be extracted from fuel type coals unless the coal is subjected to chemical oxidative processes which are not allowed by NOP. This fact was confirmed during a rigorous lab method validation by the American Association of Plant Food Control Officials (AAPFCO). Understanding this difference is critical to understanding the true nature of humic acid products as well as the environmental impact of their production. Because oxidative processes for humic acid are not allowed by NOP rule, making an annotation for coal-derived humic acid is redundant.

Another issue raised at the April 21<sup>st</sup> hearing was the need for the NOSB to be able to “quantify, verify total ... humic.”<sup>3</sup> One of the primary missions of the Humic Products Trade Association (HPTA) has been to address this very issue as it relates to all humic acid products. A single, accurate test method for humic acids was developed by the HPTA and proposed to AAPFCO, a body of state control officials charged

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<sup>1</sup> U.S. Department of Agriculture, National Organic Standards Board Public Hearing, Thursday, April 13, 2017, p. 446 and U.S. Department of Agriculture, National Organic Standards Board Public Hearing, Friday, April 21, 2017, p. 32.

<sup>2</sup> U.S. Department of Agriculture, National Organic Standards Board Public Hearing, Friday, April 21, 2017, p. 33.

<sup>3</sup> U.S. Department of Agriculture, National Organic Standards Board Public Hearing, Friday, April 21, 2017, p. 85.

with regulating fertilizers, soil amendments, and other beneficial substances. The HPTA test method is now the standard for AAPFCO and is presently under review by American National Standards Institute (ANSI) and the ISO community as an international standard. We suggest that the NOSB look closely at the measures put in place by this test method which helps identify adulterants like molasses and coal.

The NOSB minutes also asserts that humic acids can be derived from other “plant-based” sources<sup>4</sup> rather than “coal-related.” Using the words “coal-related” is a rhetorical comment that has more emotional value than a scientific basis. Humic sources indicated above are weathered natural deposits, not fuel type coals as presented in the minutes. The suggestion that more “natural-based” materials should be used overlooks the fact that humic acids need to be synthetically extracted regardless of their source. The bulk of liquefied humic acid available to growers is made from immature (brown), and weathered coals as indicated previously, removing them from the allowed sources in the humic extraction process would virtually eliminate liquefied humic acid as an available ingredient to organic farmers. The current rule describing alkali extracted humic acid derived from naturally occurring deposits is correct and requires no revision or annotation.

Humic acids are an integral part of improving soil, and that benefit should be weighed heavily against the small amount of synthetic hydroxides used to produce them. The NOSB should continue to allow humic acids as a necessary allowed synthetic under 7 CFR §205.601 *Synthetic substances allowed for use in organic crop production*.

Thank you,



Russell D. Taylor, MBA  
President  
Humic Products Trade Association

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<sup>4</sup> U.S. Department of Agriculture, National Organic Standards Board Public Hearing, Friday, April 21, 2017, p. 34.