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

April 3, 2020

Re: Docket #AMS-NOP-19-0095
Handling Subcommittee Discussion Document: L-Malic Acid
2022 Handling Sunset Review: Sodium Bicarbonate

Dear Ms. Arsenault,

Thank you for the opportunity to provide comments to the National Organic Standards Board (NOSB) Handling Subcommittee (CS) regarding the discussion document on L-Malic Acid and the 2022 handling sunset material Sodium Bicarbonate. The Accredited Certifiers Association (ACA) is a 501(c)(3) nonprofit educational organization created to benefit the organic certifier community and the organic industry. The ACA strives for consistency in organic certification to uphold organic integrity, maintain stakeholder trust, and grow the organic industry. Our membership includes 60 certification agencies that are accredited by the USDA or in the process of becoming accredited; this includes all USDA accredited certifiers based in the USA.

The NOSB is considering reclassifying L-malic acid from a non-synthetic allowed at §205.605(a) to a synthetic allowed at §205.605(b). The subcommittee discussion document summarizes the predominant manufacturing process fused to make L-malic acid on a commercial scale:

> Fumaric acid is the precursor to L-malic acid, and it is obtained either through the fermentation of carbohydrates or as a product of maleic acid of petroleum origin. The fumaric acid is then enzymatically converted to L-malic acid by immobilized microbes that produce the enzyme fumarase.

The ACA offers two perspectives for consideration as to whether the final resulting L-malic acid is synthetic or non-synthetic:

1. If the L-malic acid is considered to be produced from fumaric acid obtained from petroleum, a non-natural source, then it would be classified as synthetic according to the Decision Tree for Classification of Materials as Synthetic or Nonsynthetic (hereafter Decision Tree, www.ams.usda.gov/sites/default/files/media/NOP-Synthetic-

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NonSynthetic-DecisionTree.pdf), because the substance is not manufactured, produced, or extracted from a natural source (step 1).

2. If the L-malic acid acid is considered to be produced from the immobilized microbes, a natural source (step 1), then it has undergone a chemical change (step 2) as a result of a naturally occurring biological process (enzymatic digestion, step 3), which results in a non-synthetic (natural) classification of L-malic acid on the Decision Tree, regardless of the source of the fumaric acid or any growth media/ substrate. In this perspective, the L-malic acid growth media or substrate is not considered to be the "source" in step 1. This is comparable to the classification of milk or meat products as non-synthetic; the source of these products is livestock, and the classification of the milk or meat products is not affected by the consumption of synthetic vitamins by those livestock, for example.

   NOP guidance on materials produced through fermentation has not placed restrictions on the use of synthetic growth media in the production of nonsynthetic inputs. Synthetic growth media or substrate is assumed to be consumed by the microbial product. This interpretation is consistent with NOP 5034-1, which clarifies that gibberellic acid is an allowed non-synthetic crop input "if made from a fermentation product." It does not call out the substrate as a verification required for the classification of this substance, and the 2011 technical report for the substance identifies common substrates, including multiple synthetic forms of ammonia nitrogen. Regardless, gibberellic acid is still considered non-synthetic. Enzymes, fermentation products, lactic acid, microbial products, and yeast are also listed as non-synthetic, and the substrate is not mentioned as something that must be verified. The listing for microbial biopesticides does mention growth media: "Must not contain synthetic growth media unless provided for on the National List at §205.601." This is consistent with this interpretation that substrate or growth media does not factor into the classification of allowance of a microbial product or byproduct when it is consumed by the microbe.

The ACA did not agree on the approach for the classification of L-malic acid but agrees that the former approach would have review implications for other currently allowed microbial by-products. The ACA recommends that the NOSB consider the lack of clarity on the classification of this substance in the context of the decision tree and offer a clarification on the use of the decision tree to classify microbial products and byproducts.

Sodium bicarbonate is listed at §205.605 as a nonagricultural (nonorganic) substance allowed as an ingredient in or on processed products labeled as "organic" or "made with organic (specified ingredients or food group(s))." It is included in subsection (a) Nonsynthetics allowed. When sodium bicarbonate was reviewed for inclusion on the National List in 1995, the reviewers considered the two processes for manufacturing sodium bicarbonate: the Trona process and the

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Solvay process. The review documentation (www.ams.usda.gov/sites/default/files/media/Sodium%20Bicarbonate%20TR.pdf) indicates that the reviewers considered the Solvay process to yield a synthetic sodium bicarbonate and the Trona process to yield a non-synthetic sodium bicarbonate. Since the initial listing of this material, NOP has published handbook document 5033-1, Decision Tree for Classification of Materials as Synthetic or Non-Synthetic. Using this resource, both the Solvay and Trona processes yield synthetic sodium bicarbonate. Certifiers are continuing to allow sodium bicarbonate generated with the Trona process, acknowledging that it is synthetic because it was the intent of the reviewers to allow sodium bicarbonate generated via this process. As such, the ACA requests consideration of these methods for creating sodium bicarbonate and clarification or reclassification of sodium bicarbonate for use in “organic” or “made with organic...” products to 205.605(b) as a synthetic. It is understood that reclassification of a National List material cannot happen during the sunset review process, but this could be taken up as a separate work item by the board, similar to L-malic acid.

We appreciate the NOSB’s work on these topics and look forward to future dialog.

Sincerely,

Jen Berkebile
ACA Materials Working Group Co-Facilitator