National Organic Standards Board Handling Committee Sunset 2013 Proposal Agar- Agar on 205.605(a) February 21, 2012

List: 205.605 Nonagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as "organic" or "made with organic (specified ingredients or food group(s))."

(a) Non-synthetics allowed

Committee Summary:

Federal register notice of the sunset of this material elicited several public comments in favor of its re-listing. There were no comments against re-listing of it.

Review of the original TAP, the original recommendation to list, historical documents and public comments does not reveal any unacceptable risks to the environment, human, or animal health as a result of the use or manufacture of this material, at this time.

Upon review of the Technical Evaluation Report submitted on October 3, 2011, there does appear to be a question as to whether two forms of agar-agar being used exists. While there are extraction processes that are natural, without chemical modifications or non-synthetic, there are others that can be considered synthetic. An example of the synthetic method would be when the Graciliara species of algae are subjected to an alkaline pretreatment (heated in sodium hydroxide solution) to modify the polysaccharides in the algae. This process brings about a chemical change in the polysaccharides (L-galactose-6-sulfate groups are converted to 3,6-anhydro-L-galactose), increasing the gel strength of the agar-agar. Data would indicate that without this treatment the gel extracted would be too weak for most food applications.

While the Technical Review does list several methods of extraction, it does state that only 1 -2 % of the Agar- Agar supply is from the natural form of extraction. Furthermore, the product from the natural extraction method does not appear to be readily available in the U.S. market, or at least on a very limited basis.

The Technical Evaluation Report submitted on October3, 2011, under Evaluation Question #9: (which pertains to possible harmful effects on the environment or biodiversity) states that the current world demand for agar-agar is increasing and has the potential for over harvesting of these natural resources, which would affect

biodiversity of nearby beaches and the algae beds themselves. There were no studies found to indicate whether or not the harvesting of agarophytes, in particular, is harmful to the biodiversity on nearby beaches or in the algae beds at this time. There are alkaline waste waters that result from the manufacture of agar-agar, but there were no documents found that show this to be a problem to the environment, at this time. Based off of the information provided in the Technical Evaluation Report we are making the following recommendations, but we do think that continued review of this material and these areas of possible concerns should be duly noted in this recommendation.

Recommendation:

At this time we would recommend the relisting of Agar- Agar as it is currently listed on the National List: 205.605 Nonagricultural (nonorganic)substances allowed as ingredients in or on processed products labeled as "organic" or "made with organic (specified ingredients or food group(s))."

(a) Nonsynthetics allowed

We would also recommend an additional listing of Agar- Agar under:

(b) Synthetics allowed

This recommendation would be based from information presented in the October 3, 2011 Technical Evaluation Report. The NOSB Classification Guidance of 11/05/2009 was also considered for making this recommendation.

We would propose to list both with the following Annotations:

- (a) Non-synthetic allowed
- (b) Synthetics allowed

We would also recommend that this listing be revisited once the NOP has finalized the Draft Guidance for Materials Classifications (agricultural, nonagricultural substances). This would help to ensure that the materials have been properly classified and thus remove any further confusion from their status and help during future reviews.

Agar continues to be an important material used by the organic community.

Committee Vote

5 - yes 0 - no 1 - absent 0 - recused 0 - abstain