



Policy Memorandum

To: Stakeholders and Interested Parties
From: Miles V. McEvoy, Deputy Administrator
Subject: Humic Acid Extraction
Date: Approved on December 16, 2013

This memorandum clarifies which materials are allowed for humic acid extraction under the USDA organic regulations.

Humic acids are allowed for use in organic crop production under the following allowance on the National List of Allowed and Prohibited Substances (National List) at [7 CFR § 205.601](#):

§ 205.601 Synthetic substances allowed for use in organic crop production.

...

(j) As plant or soil amendments.

...

(3) Humic acids—naturally occurring deposits, water and alkali extracts only.

Issue:

The National Organic Program (NOP) has received requests to clarify which materials are allowed for alkali extraction of humic acid. The National Organic Standards Board (NOSB) has previously reviewed this substance. The technical reports reviewed by the NOSB described several alkali substances, including potassium hydroxide, sodium hydroxide, and ammonia.

The NOP is aware that some certifying agents and material evaluation programs have approved the use of ammonium hydroxide (the aqueous form of ammonia) and other alkali materials, including natural materials, for extraction. The use of certain extractants, such as ammonium hydroxide and potassium hydroxide, however, are potential issues of concern due to the risk for fortification of humic acid products with prohibited synthetic fertilizers. In particular, ammonium hydroxide is used in conventional farming as a nitrogen fertilizer and is not permitted as a fertilizer under the USDA organic regulations.

Policy:

The annotation for humic acid at 7 CFR § 205.601(j)(3) does not specify which alkali materials are allowed for extraction of humic acids. There is therefore no restriction regarding which alkali



materials may be used for extraction. Allowed extractants for humic acid include, but are not limited to:

- Potassium hydroxide;
- Sodium hydroxide;
- Ammonium hydroxide (aqueous ammonia); and
- Nonsynthetic (natural) substances.

However, extraction of humic acid with more than the necessary amount of synthetic alkali material (i.e., for the purpose of inflating the nutrient analysis of the product) does not comply with the annotation for humic acid at 7 CFR § 205.601(j)(3) and is prohibited in organic crop production.

Certifying agents and material evaluation programs must review humic acid products for indications that the product may be fortified, such as product label claims that indicate low concentrations of humic acid relative to the nutrient claims on the label. Humic acid products that are fortified with ammonium hydroxide or potassium hydroxide are not allowed in organic crop production.

References:

The Organic Foods Production Act of 1990, as amended

[7 U.S.C. 6508](#) Prohibited crop production practices and materials

USDA Organic Regulations ([7 CFR PART 205](#))

7 CFR § 205.2 Terms defined.

Fertilizer. A single or blended substance containing one or more recognized plant nutrient(s) which is used primarily for its plant nutrient content and which is designed for use or claimed to have value in promoting plant growth.

7 CFR § 205.203 Soil fertility and crop nutrient management practice standard.

7 CFR § 205.601 Synthetic substances allowed for use in organic crop production.

NOSB Technical Reports

[Technical Evaluation Report for Humic Acids, January 27, 2006](#)

[Technical Advisory Panel Report for Humic Acid Derivatives, September 1996](#)