122 W. Jefferson Street | P.O. Box 821 | Viroqua, WI 54665 PH 844-637-2526 | FAX 608-492-0470 | mosaorganic.org

April 5, 2023

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

Submitted via Regulations.gov.

RE: Agency/Docket Number: Doc. No. AMS-NOP-22-0071
Document Number: 2023-03084

NOSB Crops, Livestock, and Handling Subcommittee 2025 Sunset Reviews

Dear NOSB Members:

Thank you for the opportunity to provide comments on the materials due for sunset review. MOSA certifies almost 1,900 organic operations throughout the United States, including over 700 crop/livestock operations, 875 crop operations, and 325 handling operations. Almost all MOSA certified operations use some National List materials.

MOSA's italicized comments for each individual material listed below include information taken from our database, as well as comments from staff regarding their experiences during file review. We've provided answers to NOSB questions where we have information to offer. Our compiled information below does not include any totals for Material Review Organizations (MRO) such as OMRI, WSDA, CDFA, or EPA listed materials, nor certified organic inputs or ingredients in use on MOSA certified operations, because we do not record ingredients for those materials in our database. MOSA clients may be, and likely are, using additional inputs under the review and oversight of another organic organization that contain materials under review. Many comments below represent the instances materials are listed on an input inventory which is not necessarily how many different clients use the material. The same client could use multiple inputs containing the same ingredient.

2025 Livestock Sunset Reviews §205.603 (pdf)

- **Alcohols: Ethanol** *- A few clients use ethanol or isopropanol as inputs.*
- **Alcohols: Isopropanol**
- **Aspirin** **-** *Aspirin is listed more than 300 times on inventories.*
- **Biologics -** ***Vaccines -*** *We have more than 50 different "vaccine" inputs in our database which are listed on almost 450 inventories. Vaccines are very commonly used.*
  Are certifiers interpreting the provisions at § 205.603(a)(4) and § 205.105(e) consistently, even though the 2019 NOSB recommendation has not been officially adopted? *Vaccines*

are categorically allowed on the National List. MOSA does not verify GMO status of vaccines. We do verify vaccines are listed by APHIS. We understand that vaccines are the only synthetic biologics on the National List and that any other biological products allowed must be verified as nonsynthetic. We do not require a commercial availability search for vaccines at this time.

Is the yellow highlighted wording an acceptable interpretation of §205.105(e)?

This sunset review encompasses the entire class of synthetic livestock vaccines, including those made with excluded methods. The NOSB encourages the NOP to adopt the 2019 recommendation. In the meantime, our interpretation is that this listing fulfills the requirement at § 206.105 (e) for all livestock vaccines.

We agree with this interpretation. Our understanding is that 205.105(e) prohibits excluded methods, except for vaccines that are approved by NOSB per 205.600(a), and since vaccines are, and have been, categorically listed with no restrictions or annotations, we interpret that all vaccines are allowed.

- **Electrolytes -** *We have approximately 40 electrolyte products in use by clients. Electrolytes are a very common input.*
- **Glycerin(e) -** *Approximately 175 livestock inputs contain glycerin, primarily teat dips.*
  What protocol is followed to determine if the glycerin used is produced through the hydrolysis of fats or oils instead of synthetically from propylene?
  We verify the hydrolysis process.
- **Phosphoric acid -** *Very commonly used by clients as part of sanitation measures.*
  Would an annotation be beneficial to clarify when a rinse or purge is or is not required?
  Phosphoric acid is allowed as an equipment cleaner, provided that no direct contact with organically managed livestock or land occurs. We verify that phosphoric acid is not used in such a way that it will contact organic livestock or land.
- **Lime, hydrated**
  Is hydrated lime regularly used currently for parasitic control in animal herds?
  We have one client using hydrated lime for external parasite control and a couple more use it for controlling bacteria on livestock hooves.
- **Mineral oil -** *We commonly see mineral oil used as part of the topical parasite control management. While we have many different inputs in our database, almost 75 clients use one brand of mineral oil in combination with an allowed parasite control product.*
  Are there products used for artificial insemination and parasite control that are not 100% mineral oil? How are they checked for compliance with the Organic Regulations by farmers, technicians, vets, or certifiers?
  Any products reviewed must have active ingredients on the national list and only contain either inerts or excipients that are allowed.

2025 Crops Sunset Reviews: §205.601 & §205.602 (pdf)

§205.601 Sunsets: Synthetic substances allowed for use in organic crop production:

- **Alcohols: Ethanol -** *No use among clients.*
- **Alcohols: Isopropanol -** *No use among clients.*
- **Sodium carbonate peroxyhydrate -** *No use among clients.*
- **Newspaper or other recycled paper, without glossy or colored inks -** *In respect to this listing, inputs with "paper" as an ingredient are in use by approximately 30 clients.*

There may be other inputs clients use that identify paper ingredients with other terms on the ingredients listing. Additionally, MOSA does not add ingredients to our database for on-farm produced compost, which could also contain newspaper or other recycled paper. More than 100 clients produce compost for use on-farm.

Should there be an annotation for this listing that attempts to further clarify what uses are acceptable within organic production? *It is clear to us that this material is approved on the National List as a mulch and compost feedstock only. Are there any specific uses the NOSB has a question about? The discussion on paper pots clarified to us that the use of paper needs to line up with the National List specifically.*

How widely used are these materials in organic production?

While there is not an overwhelming number of MOSA clients that use newspaper or other recycled paper as a mulch or compost feedstock, the material is a part of their farming operations that could not be easily replaced with another similar material.

- **Plastic mulch and covers -** *Almost 200 input inventories list the use of plastic mulches and covers.*

  Please describe in detail how this listing for plastic mulches is being applied in conjunction with the § 205.206(c)(6) requirement for removal, and specifically, how is the provision being applied in all areas of organic cropping systems? *Mulch must be removed from the field at the end of the growing or harvest season. For crops grown as annuals, removal must occur annually. For perennial crops, mulch must be removed at the end of the crop's production and before breakdown or decomposition. Inspectors verify that plastic is removed appropriately.*
- **Aqueous potassium silicate -** *We have not reviewed any inputs containing this ingredient at MOSA, but we know of at least nine clients using an OMRI listed product.*
- **Elemental sulfur -** *This is a common input listed on hundreds of inventories.*

  How often are wettable formulations used for the application of sulfur?

  We do not have a good way to report on this, but in a search on the term "wettable sulfur" as the input name only shows three different products entered, and one is listed for multiple uses. More than 20 clients use these few products.
- **Lime sulfur -** *We have four products in our database listed for use on 15 input inventories.*
- **Hydrated lime -** *Four clients use two different hydrated lime inputs.*
- **Liquid fish products -** *Liquid fish is a fairly common input used on MOSA certified organic operations. We have 20 different products in our database listed on hundreds of input inventories. Additionally, liquid fish products are frequently found in blended liquid fertility inputs which further increases the number of operations that rely on liquid fish products.*

  Is the liquid fish products annotation "- can be pH adjusted with sulfuric, citric, or phosphoric acid. The amount of acid used shall not exceed the minimum needed to lower the pH to 3.5." clear and able to be enforced?

  When evaluating liquid fish fertilizers to see if they meet the NOS -- (7) Liquid fish products—can be pH adjusted with sulfuric, citric or phosphoric acid. The amount of acid used shall not exceed the minimum needed to lower the pH to 3.5 -- we require a full manufacturing process description, including acid used, and verify the pH of the final product. This process is simple and able to be enforced.

- **Sulfurous acid -** *We have no clients using inputs containing "sulfurous acid."*
- **Ethylene gas -** *We have no clients using inputs containing "ethylene gas."*
- **Microcrystalline cheesewax -** *We have only a few growers who rely on cheesewax as an important part of their mushroom production.*
  We note that the sunset review for cheesewax does not cover all of the ingredients potentially found in cheesewax. There are other minor ingredients, including BHT (which is identified in the petitioner response to the NOSB). We do verify that the annotation has been met " must be made without either ethylene-propylene co-polymer or synthetic colors," but are not prohibiting cheesewax with other minor ingredients. Additionally, in our review of the materials in use by our farmers (which are named by brand on the technical report), spec sheets submitted identified different CAS numbers from those used on the National List.

§205.602 Sunsets: Nonsynthetic substances prohibited for use in organic crop production:

- **Potassium chloride -** *Approximately 10 inputs are listed on almost 400 input inventories.*
  Is potassium chloride widely used by producers of organic crops? *While there aren't that many total inputs in use by our clients, potassium chloride containing inputs appear hundreds of times on our clients' input inventories. That said, it is a much less popular potassium option than potassium sulfate which we see used more frequently by our clients.*

2025 Handling Sunset Reviews: §205.605 & §205.606 (pdf)

§205.605(a): Nonsynthetic substances allowed in organic handling:

- **Calcium carbonate**
  What are the predominate uses for calcium carbonate? *Two clients use it to adjust pH. It is also used as a purge material by one feed manufacturer to clean their mixing equipment.*
- **Flavors**
  Do you produce or certify organic flavors that include ingredients listed on § 205.605? If so, what ingredients? *Yes, MOSA certifies several organic flavor companies. Additionally, there are many MOSA certified clients that USE natural flavors in the manufacture of their products.*
- **Gellan gum (high-acyl form only) -** *We have one client using high-acyl gellan gum.*
  Are there any ancillary substances used with this product? *We did not find ancillaries included in the one product we reviewed.*
- **Oxygen** - *We have a couple of clients using oxygen.*
- **Potassium chloride** - *There are five clients using potassium chloride.*

§205.605(b): Synthetic substances allowed in organic handling:

- **Alginates -** *There are no MOSA clients using alginates of any type.*
- **Calcium hydroxide -** *One client uses calcium hydroxide.*
- **Ethylene**
  What types of organic tropical fruits are currently being ripened using ethylene? *We have one client using ethylene to ripen bananas.*
- **Glycerides (mono and di) -** *No clients use any "glyceride" ingredient.*

- **Magnesium stearate -** *We have no clients using ingredients including "magnesium stearate"*
- **Phosphoric acid -** *There are hundreds of instances of phosphoric acid use listed on client inventories.*
  Is phosphoric acid used as an equipment sanitizer in a particular sector of the organic industry? *Based on reviews that we have done, phosphoric acid is seen more frequently in cleaners and is used by both farmers and handlers. Phosphoric acid is very commonly used in the dairy industry, especially in CIP cleaning protocols following a caustic CIP detergent.*
- **Potassium carbonate -** *One MOSA client uses a potassium carbonate material.*
- **Sulfur dioxide -** *No clients use sulfur dioxide.*
- **Xanthan gum -** *Thirteen inventories list xanthan gum for use.*
  Are there any ancillary substances used with this product? *No ancillaries were listed for the xanthan gum products we reviewed.*

§205.606: Nonorganic agricultural substances allowed in organic handling:

- **Fructooligosaccharides (FOS) -** *No processing clients list this material. We do see this ingredient in livestock health inputs.*
- **Gums - water extracted only (Arabic; Guar; Locust bean; and Carob bean) -** *Arabic gum is an ingredient in seven natural flavors.*
- **Lecithin - de-oiled -** *We have one client using a lecithin ingredient.*
  Are other organic oil seed commodities (e.g., canola) used to produce de-oiled lecithin? *The only one we've reviewed is soy.*
- **Tamarind seed gum -** *No use among MOSA clients.*
- **Tragacanth gum -** *No use among MOSA clients.*

Please let us know if you have any questions on the information submitted.

Thank you for your review of 2025 sunset materials and for your maintenance of the National List.

Respectfully submitted,

The MOSA Certification Team