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

April 3, 2024

Ms. Michelle Arsenault, Advisory Committee Specialist
National Organic Standards Board
USDA–AMS–NOP

Submitted via Regulations.gov

RE: Docket #: AMS-NOP-23-0075
NOSB Crops, Livestock, and Handling Subcommittee 2026 Sunset Reviews

Dear NOSB Members:

Thank you for the opportunity to provide comments on the materials due for sunset review. MOSA certifies over 1,820 organic operations throughout the United States, including approximately 630 livestock operations, 1,540 crop operations, and 330 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 have provided answers to NOSB questions where we have information to offer. Our compiled information below does not generally 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 MRO that contain materials under review. Many comments below represent the instances materials are listed on an input inventory and this does not necessarily reflect how many different clients use the material. The same client could use multiple inputs containing the same ingredient.

2026 Livestock Sunset Reviews §205.603

- **Atropine-** *No comment.*
- **Hydrogen Peroxide-** *We have approximately 26 Hydrogen Peroxide products in use by 83 clients. Hydrogen Peroxide is a fairly common input.*
- **Iodine (a)(16) and Iodine (b)(4)-** *We have four Internal Health Aid products in use by 54 clients; 115 Teat/Udder Products are in use by 637 clients. Iodine products are common in livestock health care.*

1. Based on the feedback received at previous reviews of iodine and the recently conducted limited scope TR of iodine, it appears that there is a significant supply of NPE-free iodine formulas for numerous types of iodine products, and a prohibition on NPE containing formulas would not have significant impact on the industry. Is this analysis correct? Are there specific types of iodine products where NPE-free formulas are not available?

   Of the 115 iodine-based teat/udder products in use by MOSA clients we found that 19 also contain NPEs. These 19 products are found on 92 input inventories. Therefore, 17%

of iodine based teat/udder products contain NPEs, and these comprise 14% of the iodine based teat/udder products listed on our client's input inventories.

2. For certifiers and MROs: Would an annotation restricting iodine formulas to those that are free of NPEs pose significant challenges to the review of iodine products in organic system plans? How are NPEs going to be identified? CAS#s, chemical names?
   If formulas containing NPEs are prohibited, MOSA would want it to be clear how we should identify these prohibited ingredients.
   According to the ACA Materials Working Group current best practice iodine complexing agents are allowed without further review. Therefore, we have not necessarily documented all of the complexing agents in the iodine based products that we have reviewed. If NPEs were to be prohibited, we would also need clarity with regard to whether or not they would be prohibited as complexing agents or whether they would only be prohibited when added as excipient ingredients in a livestock health product.
3. What specific language should NOSB consider for a proposed annotation in order to fully restrict NPEs from iodine products used on organic livestock operations?
   We don't have a recommendation for an annotation, but note that we need clarity on how to identify prohibited ingredients. Would the annotation list prohibited chemical names or provide CAS #s? Would NPEs be specifically defined at 205.2?

● **Magnesium Sulfate -** *We have approximately 38 inputs that list magnesium sulfate as an ingredient in use by hundreds of clients*

1. Are there effective non-synthetic alternatives to magnesium sulfate for this purpose?
   No comment.

● **Fenbendazole -** *We have four fenbendazole products in use by six clients.*

1. How do certifiers mitigate consistent repeat use of parasiticides?
   All restricted inputs must be given explicit approval prior to a client's initial use. All emergency parasiticide use is discussed and approved. Given that we only have ten total clients using restricted parasiticides and given our policy for individual approval prior to emergency use we do not see abuse of these inputs. Additionally, our client's OSP provides information on how health records such as the use of parasiticides are maintained. Therefore, we have documentation of our client's plan for use of these materials should we have a reason to investigate any particular situation in more detail. All current plans as described on clients input lists and/or OSPs regarding restricted parasiticide use allow us to identify specific animals that have been treated. Most clients note specific animals receiving parasiticide treatment on their MOSA input inventory or OSP and all of them make notes in their own records.
2. Are there suggestions to improve the annotation?
   We note that if a parasiticide affects the slaughter status of the dam and her calf if used in the last third of gestation or during nursing, it also would affect the slaughter status of calves fed her milk. Therefore milk from animals treated with a parasiticide would not be allowed to be fed to organic livestock during the withdrawal period cited in the regulations. The effect of the parasiticide use on the organic status and use of milk for organic livestock is now made explicit at 205.238(c)(1). The annotation at 205.603(a)(23)(i) and (ii) states that "milk…cannot be labeled," but it seems that this could perhaps be brought into line with the more complete wording at 205.238(c)(1) by

replacing "labeled as provided in subpart D" with an explicit prohibition on the selling, labeling and representation of the milk as organic as well as the prohibition on it being fed to organic livestock.

3. Which age/class of animal do certifiers see their clients requesting approval for emergency parasiticide use?
   Fenbendazole is used most frequently in calves. All of the plans which our client's have detailed in the Organic System Plans indicate that the exact dates and animals treated are maintained in their operation's health records.
4. How often do certifiers request copies of fecal sample test results to confirm the parasite load in a herd prior to allowing an emergency treatment with parasiticides?
   We do not require test results. 205.670(b) requires that certifiers conduct and pay for the tests if we require them for compliance determination. If a client indicated that fecal testing was part of their protocol, which is encouraged as per 205.238(d) parasite control plans under "fecal monitoring," we should be verifying their test results. 205.670 also does not seem to open the door to require testing of live animal manure to verify the necessity for parasiticide use, however in a stretch it could potentially crack the door. 205.670(c) allows for periodic residue testing of products to be sold, labeled, or represented as organic and samples can include "waste." Animal manure isn't an example we think of for this reference of "waste" but perhaps it could be or could be added. No other part of this standard seems to allow for required testing of manure for fecal load to determine compliance with 205.238(d) or to draw in compliance verification with 205.238 requirements

● **Moxidectin -** *We currently have three inputs with Moxidectin as an ingredient in use by six clients.*

1. How do certifiers mitigate consistent repeat use of parasiticides?
   We are not seeing parasiticide use abuse. Please see comments above under Fenbendazole.
2. Are there suggestions to improve the annotation?
   We do not have any suggestions to improve the annotation.
3. Which age/class of animal do certifiers see their clients requesting approval for emergency parasiticide use?
   Moxidectin is used most frequently in calves. All of the plans which our client's have detailed in their Organic System Plans indicate that the exact dates and animals treated are maintained in their operation's health records. One client is proposing use on nonorganic brood sows when needed and is looking into the input's use further on swine.
4. How often do certifiers request copies of fecal sample test results to confirm the parasite load in a herd prior to allowing an emergency treatment with parasiticides?
   Please see comments above under Fenbendazole.

● **Peroxyacetic/Peracetic Acid-** *We currently have three Peroxyacetic/Peracetic Acid based inputs used for sanitation on livestock operations by 21 clients.*

● **Tolazoline-** *We have one Tolazoline input with two clients using this input.*

● **Xylazine-** *We have three inputs containing xylazine in use by 17 clients.*

● **Oxalic Acid Dihydrate-** *No comment.*

● **DL-methionine-** *We have at least ten DL- Methionine inputs with multiple clients using these inputs, however our search may not be that reliable due to special characters in DL-Methionine and database limitations.*

1. Given supply disruptions of soybeans and soy products experienced by the organic livestock sector since February 2022, what organic crops other than soy could be incorporated into poultry rations to supply methionine?
   No comment.
2. Is there a need for changes to the USDA organic regulations to align with either Canadian (unrestricted amino acid are allowed in organic feed) and/or EU (non-organic feeds containing methionine are allowed) organic regulations? If so, what changes to the USDA organic regulatory text should be made?
   Allowing DL-Methionine individually, due to known necessity and lack of abuse, makes the decision to allow this specific amino acid much simpler than a decision to just allow all amino acids. We encourage a robust discussion on all amino acids included before the addition of this whole category of materials.
3. What other nutritional barriers to organic poultry production do producers face when formulating well balanced rations for all poultry in the organic sector?
   No comment.
4. Is the current restriction on methionine in organic poultry diets necessary? What would the impact be on poultry nutrition and feed formulations if methionine was allowed without any restrictions?
   MOSA does not believe the current restriction is being abused. We do not see anyone exceeding the measures specified today, but cannot speak to whether or not there would be any significant increase in levels used if the rule was removed.
   In general, as long as the producer's records are in order, verifying compliance with the 205.603 annotation for DL-Methionine in poultry feed is easy. To determine lbs per ton as a lifetime average, simply divide the total lbs of methionine fed to a flock by the total tons of feed fed to get the answer. While the annotation is not especially burdensome to enforce, MOSA supports discussions on dropping the annotation as we have not observed any abuse of this material and there are many competing priorities when it comes to enforcing compliance on poultry operations. As an essential amino acid not readily obtained from natural sources in a vegetarian poultry diet, it is imperative that synthetic DL-Methionine remain on the National List, with or without the annotation.

● **Trace Minerals-** *Minerals are extremely common in the livestock diet. Almost all clients who raise livestock use trace minerals.*

● **Vitamins-** *Vitamins are also common in the livestock diet. Almost all clients who raise livestock use vitamins.*

1. What are common uses of vitamin B and K feed supplements? Are they necessary for good ruminant health?
   No comment.
2. How common are livestock vitamin products that are produced with excluded methods?
   No comment.
3. Are there methods to detect livestock vitamin products produced using excluded methods?

We allow AAFCO listed vitamins

2026 Crops Sunset Reviews: §205.601 & §205.602

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

- **Hydrogen Peroxide (a)(4) Hydrogen Peroxide (i)(5) -** *Hydrogen peroxide is listed as an ingredient in 17 inputs listed on approximately 30 client input inventories. A number of OMRI listed products (especially in solution with peracetic acid) are included in this search. We see a range of concentrations in use from 3% - 34%.*
    1. Is hydrogen peroxide an alternative to other more problematic sanitizers?
       No comment.
    2. How essential is hydrogen peroxide in the rotation of sanitizers and is it specifically used in one part of organic production or more broadly?
       No comment.
    3. Do certifiers allow it to be used in direct contact with products?
       Yes, allowed as a last step sanitizer and in direct contact with crops for disease control and as an algicide.
- **Soaps, Ammonium-**
    1. Is there still a need for ammonium soaps, considering the many alternatives for large animal deterrents?
       While we haven't reviewed any ammonium soaps for crop use, we do see OMRI reviewed products in use by our clients. These though are usually used for farmstead maintenance or insect control and not as large animal deterrents.
- **Oils, Horticultural (e)(7) -** *Horticultural oils is a difficult category to search since several types of oils may be used. We have 55 clients using neem oil as a crop pesticide.*
    1. Are plant or fish oils in use that can take the place of mineral oils in organic insect or mite management programs?
       No comment.
- **Oils, Horticultural (i)(7) -** *See above.*
    2. Are plant or fish oils in use that can take the place of mineral oils in organic disease management programs?
       Please see the comment above under Oils, Horticultural (e)(7).
- **Pheromones -** *We have ten pheromone inputs used in crop production by 16 clients.*
    1. Is there an interest in knowing more about the inert ingredients that are used in formulating pheromone products?
       No comment.
    2. How much information would be considered acceptable given proprietary information rights of pesticide manufacturers.
       Most pheromone products do not seem to be used in ways that contact organic crops. We would rely on EPA lists for inerts. The amount of information needed would depend on the future direction of inert review.
- **Ferric Phosphate -** *We have three iron phosphate products in use by 27 clients. All three are OMRI or EPA listed.*

1. Is there new information about the effects of EDTA or other chelating agents on the toxicity of ferric phosphate to non-target organisms, including earthworms and dogs?
   All Iron Phosphate products in the database are either OMRI or EPA listed. We therefore do not have any information regarding inerts present in these particular products.
2. Are there ferric phosphate products that don't include chelating agents?
   No comment.
3. Do sulfur-based slug management products provide an effective alternative to ferric phosphate? Do they also include chelating agents?
   No comment.
4. When used in ferric phosphate products, does EDTA chelate heavy metals in soils? Are there studies that show the combination of ferric phosphate + EDTA (chelator) cause toxic effects in soil microorganisms, including earthworms, or plants?
   No comment.

Additional Questions to our Stakeholders

1. Are ferric phosphate products widely used by organic farmers to control slugs and snails?
   No comment.
2. Are sulfur-based slug and snail products effective and can they be used in place of ferric phosphate products?
   We have approximately six sulfur based pesticide inputs in use by 32 clients. Some of these uses are likely as a fungicide.

● **Potassium Bicarbonate -** *We have approximately six potassium bicarbonate inputs in use by 38 clients.*

● **Magnesium Sulfate -** *We have approximately 44 magnesium sulfate inputs in use by hundreds of clients. This is a common input among clients.*

● **Hydrogen Chloride -** *No comment.*

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

● **Ash from Manure Burning -** *No comments.*

● **Sodium Fluoaluminate -** *No comments.*

205.606 Handling Sunset Reviews: §205.605 & §205.606 (pdf)
§205.605(a) Sunsets: Nonagricultural (Nonorganic) substances allowed as ingredients in or on processed products labeled as "organic" or "made with organic (specified ingredients or food group(s)).":

● **Acids-Citric-** *We have approximately nine citric acid ingredients in use by more than ten clients.*

1. There are now numerous suppliers of certified organic citric acid. Should NOSB consider recommending the addition of an annotation to citric acid requiring processors to use an organic version of citric acid when commercially available?
   We find that putting an organic commercial availability clause on 205.605 listed materials adds another layer of recordkeeping. If an organic version should be required then the material should not be listed on 205.605(a). If an organic search would be

required for processing ingredients in human consumption products, would there be an impact to how we review citric acid in LF or LH products? We assume not for LH, and for LF, it would need to be similar to yeast, which is not required to be organic in feeds and is explicitly stated as such in guidance. We would not expect an organic search would need to be conducted.

- **Acids-Lactic-** *We have eight lactic acid inputs listed on 12 input inventories*
- **Calcium Chloride-** *We have five calcium chloride containing ingredients in use.*
    1. Is the calcium chloride that is commercially used/available produced using non-synthetic processes?
       No comment.
    2. CERTIFIERS: What kinds of supporting documentation is obtained to verify the manufacturing process of calcium chloride is non-synthetic?
       We verify that natural calcium chloride is produced by chemical purification of brines; We understand synthetic forms are from the Solvay process.

- **Enzymes-** *Enzymes is a difficult category for our database to search on. For example, a search on "aspergillus" showed that we have seven ingredients in use by ten clients. A search on bacillus showed that we have 23 ingredients in use by 25 clients.*
    1. For manufacturers: describe how you ensure no excluded methods are used when including enzymes into your organic formulation.
       No comment.
    2. For certifiers: describe how you ensure organic processors' compliance with the prohibition on excluded methods in organic products when enzymes are used in the formulation.
       We collect an Excluded and Prohibited Methods form declaring this.
    3. Are there ancillary substances that should be prohibited for use, due to concerns about excluded methods?
       We have only come across maltodextrin and salt, both of which are on the list in the discussion, if we can assume that maltodextrin is included in the carriers and fillers section.

- **L-Malic Acid**- *We have one product in use by one client.*
    1. Do any organic products contain nonsynthetic forms of L-malic acid?
       We do verify natural status for 205.605(a) listed materials.
    2. Do stakeholders think L-malic acid should be reclassified as a synthetic substance and added to §205.605(b)?
       No comment.
    3. If L-malic acid is added to §205.605(b), should its nonsynthetic listing be removed from §205.605(a)?
       We prefer to see materials listed on one list or the other. If synthetic L-malic acid is allowed, then what benefit does asking for natural status have?

- **Magnesium Sulfate**- *We have two magnesium sulfate inputs in use by two clients.*
    1. What organic products currently include magnesium sulfate?
       This material has been used as a yeast nutrient and as a water adjustment.
    2. Are there adequate alternatives to magnesium sulfate?
       No comment.

- **Microorganisms**- *We have approximately 20 inputs in use by 20 clients.*

1. For manufacturers: describe how you ensure no excluded methods are used when including microorganisms in your organic formulation.
   No comment.
2. For certifiers: describe how you ensure organic processors' compliance with the prohibition on excluded methods in organic products when microorganisms are used in the formulation.
   MOSA collects an Excluded and Prohibited Methods form declaring this.
3. Are there any ancillary substances that should be prohibited due to the potential for excluded methods?
   No comment.

- **Perlite**- *We have one client that lists perlite as a filter aid.*
- **Potassium Iodide**- *No comment.*
- **Pullulan**- *We have four clients using Pullulan as an ingredient in "made with organic" products.*

1. Does pullulan have the potential to be produced organically, and if so, would a commercial availability requirement help drive commercialization of organic pullulan?
   We have approved one material listed on the Organic Integrity Database.

- **Yeast**- *Approximately 14 materials are in use by 23 clients.*

1. For manufacturers: describe how you ensure no excluded methods are used when including yeast into your organic formulation.
   No comment.
2. For certifiers: describe how you ensure organic processors' compliance with the prohibition on excluded methods in organic products when yeast is used in the formulation.
   MOSA collects an Excluded and Prohibited Methods form declaring this.
3. Are there ancillary substances that should be prohibited for use, due to concerns about excluded methods?
   No comment.

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

- **Activated Charcoal-** *We have two inputs in use by two clients.*
- **Ascorbic Acid -** *We have eight materials listed on 12 inventories.*
- **Calcium Citrate-** *We have two inputs in use by one client.*
- **Collagen Gel-** *No comment.*
- **Ferrous Sulfate-** *No comment.*

1. Should the individual listing for ferrous sulfate be removed from the National List, with continued use of ferrous sulfate allowed under the nutrient vitamins and minerals listing, to eliminate redundancy?
   Eliminating redundancy reduces the potential for confusion.

- **Hydrogen Peroxide-** *We have approximately 38 Inputs in use by numerous clients.*

1. Is hydrogen peroxide an alternative to other more problematic sanitizers?
   No comment.

2. Do certifiers allow it to be used in direct contact with products?
   Yes.

● **Nutrient Vitamins and Minerals-** *This category is difficult to search on, but we can see that we have at least 11 ingredients in use on 12 inventories.*

1. Are you aware of nutrient vitamins and minerals being used in organic products in ways that do not conform to 21 CFR 104.20?
   No comment.
2. Are there any remaining issues with fortification of infant formula that have not been resolved?
   We encourage finalization of NOSB recommendations regarding nutrient vitamins and minerals in infant formulas.
3. Do certifiers find the current annotation enforceable? Are there any particular substances in this category that are being allowed or prohibited inconsistently?
   No comment.
4. Are certifiers reviewing ancillary substances for nutrient vitamins and minerals in accordance with the Spring 2016 NOSB recommendation? Are they imposing limits on ancillary substances that may be present?
   We are not imposing limits on ancillary presence. We are still looking for ways to make adequately addressing ancillaries less burdensome on our review work. We continue to encourage a thorough NOSB material review process, which names reviewed ancillaries and identifies them as allowed or prohibited. A robust NOSB review would enable clarity for industry and for certifiers, and will decrease the amount of extra review work, which is mostly affected by review of "new" ancillaries.
5. Are there any specific substances included in this categorical listing that pose health or environmental concerns requiring closer review?
   No comment.

● **Peracetic Acid/Peroxyacetic Acid-** *We have 39 peracetic/peroxyacetic acid based cleaning/sanitizing products in use by 314 clients.*
● **Potassium Citrate-** *No comment.*
● **Potassium Phosphate -** *No comment.*
● **Sodium Acid Pyrophosphate-** *We have four inputs in use by four clients*
● **Sodium Citrate-** *We have four inputs in use by four clients.*
● **Tocopherols-** *We have eight tocopherol materials in use by ten clients.*

§205.606 Sunsets: Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as "organic.":

● **Celery Powder-** *We have two products in use by two clients.*
● **Fish Oil-** *No comment.*
● **Gelatin -** *No comment.*
● **Orange Pulp, Dried-** *No comment.*
● **Seaweed, Pacific kombu** *- No comment.*
● **Wakame seaweed (Undaria pinnatifida) -** *No comment.*

We would greatly appreciate more time to consider NOSB documents. Please let us know if you have any questions on the information submitted. Thank you for your review of 2026 sunset

materials and for your maintenance of the National List.

Respectfully submitted,

The MOSA Certification Team