

## Fall 2016 NOSB Meeting

### AT-A-GLANCE SUMMARY OF PROPOSALS AND DISCUSSION DOCUMENTS

#### [Meeting Materials \(All Proposals and Discussion Documents\) \(pdf\)](#)

*Note: 2018 Sunset Materials directly follow this section*

#### CROPS SUBCOMMITTEE

**Proposal: Petition to add [Soy Wax](#)** to the National List as an allowed synthetic in organic crop production.

- **Summary:** Soy Wax is a substance produced from hydrogenated oil extracted from soybeans. The petition was to add soy wax to the National List as an aid for use in log-grown organic mushroom production. The Crops Subcommittee determined that soy wax is a synthetic substance and voted to add soy wax to the National List with the following annotation: “Must be made from soybeans grown without the use of excluded methods if soy wax from organic soybeans is not commercially available.”
- **Subcommittee Vote: ADD** (7 in favor of adding; 0 against; 0 absent)

**Proposal: Petition to add [1-Methylcyclopropene \(1-MCP\)](#)** to the National List as an allowed synthetic in organic crop production.

- **Summary:** 1-MCP is used for slow ripening and to retard spoilage in post-harvest storage. It failed National List criteria for lack of compatibility with organic principles and availability of alternatives. Additionally, NOSB is of the opinion that having a seasonal crop available year-round is not a sufficient reason to add a synthetic material to the National List.
- **Subcommittee Vote: DO NOT ADD** (0 to add; 7 do not add; 0 absent)

**Proposal: Petition to add [Aluminum Sulfate](#)** to the National List as an allowed synthetic in organic crop production.

- **Summary:** Aluminum sulfate is used as an amendment to poultry litter to reduce volatilized ammonia in livestock facilities. It failed National List criteria based on the use of sulfuric acid in its manufacture, the potential for aluminum toxicity to plants, and the availability of alternative practices and natural materials to achieve the same function.
- **Subcommittee Vote: DO NOT ADD**- 0 to add; 6 to not add; 1 absent)

**Proposal: Petition to add [Ammonium Citrate](#)** to the National List as an allowed synthetic in organic crop production.

- **Summary:** Ammonium citrate is used as a chelating agent to provide readily available micronutrients to plants in deficient soils. It failed the National List criteria due to insufficient information to justify the necessity of the material in crop production. Currently allowed alternatives appear to be available and adequate.
- **Subcommittee Vote: DO NOT ADD** (0 to add; 7 do not add; 0 absent)

**Proposal: Petition to add [Ammonium Glycinate](#)** to the National List as an allowed synthetic in organic crop production.

- **Summary:** Ammonium glycinate is used as a chelating agent to provide readily available micronutrients to plants in deficient soils. It failed the National List criteria due to insufficient information to justify the necessity of the material in crop production. Allowed alternatives appear to be available and adequate.
- **Subcommittee Vote: DO NOT ADD** (0 to add; 7 do not add; 0 absent)

**Proposal: Petition to add [Potassium Cellulose Glycolate](#)** to the National List as an allowed synthetic in organic crop production.

- **Summary:** Potassium Cellulose Glycolate is a chemically modified polymer derived from natural cellulose used as a water filtration aid during irrigation and in combination with liquid fertilizers and nutrients. It failed the National List criteria of necessity to organic production, and the Subcommittee determined there was insufficient information justifying the need for this material in organic production systems.
- **Subcommittee Vote: DO NOT ADD** (0 to add; 6 do not add; 1 absent)

**Proposal: [Hydroponics \(Bioponics\)](#)**

- **Summary:** The Crops Subcommittee reviewed the extensive report from the Hydroponic/Aquaponic Task Force released July 2016 in developing its proposal on the allowance of bioponics. The Subcommittee determined that since NOSB had previously recommended to NOP that hydroponics be prohibited in organic production, a 2/3 majority vote to allow these types of production systems must occur to overturn decisions made by previous Boards. Therefore, the Subcommittee brought forward a motion to allow these types of growing systems in organic production for the full Board to consider. The Subcommittee also built upon information in the report to further define various types of systems under an overarching definition of bioponics to ground the recommendation in defined terms. The proposed definitions of these terms are as follows:
  - **Aquaponics** – A system in which plants are grown in waste water from aquatic organisms, which, in turn, purifies the water.
  - **Aeroponics** – A variation of hydroponics in which plant roots are suspended in air and misted with nutrient solution.
  - **Bioponics** – A contained and controlled growing system in which plants in growing media derive nutrients from natural animal, plant, and mineral substances that are released by the biological activity of microorganisms and delivered in water.
  - **Hydroponics** – The growing of normally terrestrial vascular plants in mineral nutrient solutions with or without an inert growing media to provide mechanical support.
- **Subcommittee Vote:** Motion to allow bioponics (including hydroponics, aeroponics, or aquaponics) as consistent with organic production under the provisions and recommendations to be developed by the NOSB in 2017 – **FAILED** (Yes: 2; No: 5; Absent 0; Abstain: 0)

**Discussion Document: [Container and greenhouse production: further clarifications](#)**

- **Summary:** Regardless of how the vote on allowing bioponic systems results, the Crops Subcommittee is committed to providing guidance to NOP on the development of standards for the growing of organic crops in greenhouses and in containers. To inform the recommendation, the Subcommittee is drawing from the Hydroponic/Aquaponic Task Force report of 2016 to fill the gaps in previous NOSB recommendation on this topic. The goal is to examine what is needed for growing plants to maturity in containers to be consistent with organic principles, to

create definitions and standards for terms that were not precisely spelled out in the 2010 recommendation, and to create a stage for further rulemaking efforts if needed. The Subcommittee brings forward a number of areas for discussion including: consistency with mushrooms, aquatic plants, and seedlings; land considerations and natural resources; crop rotation; containers and growing media; and plant nutrition and fertilization. The Subcommittee provides extensive background on each of these areas as well as an indication of its initial opinions. The discussion document was unanimously accepted 7-0. It requests input from stakeholders on which suggestions should be recommended as standards.

- **Discussion Questions:**
  - For container production of crop plants, which of the suggestions made in the discussion document should be recommended as standards? Why? For example, container size, amount of compost or soil in growing media, stipulation about liquid vs. solid nutrition sources, and varying requirements for different crop types.
  - Do you have other suggestions about certified organic container production?

**Discussion Document:** [Strengthen and clarify the requirements for use of organic seed](#)

- **Summary:** The organic sector has been exploring ways to keep seeds used in organic production from being inadvertently contaminated with GMO content. One key way, as suggested by OTA and several other organic stakeholders, is to strengthen the organic seed use provisions in the rule and the related NOP Guidance 5029 for the use of organic seed. Therefore, this discussion document will collect public input on the areas in which the seed guidance could be strengthened to speed up full adoption of organically grown seed in organic systems. The framework for the suggestions discussed were already solicited at the spring 2016 NOSB meeting in response to the discussion document on Next Steps for Seed Purity. The Subcommittee voted unanimously to adopt this discussion document.
- **Discussion Questions:**
  1. Please provide input on the key points in the discussion document.
  2. Are there additional areas of the Seed Guidance in NOP 5029 that could be strengthened?
  3. Are there ways to encourage increased organic seed use among larger producers?

**LIVESTOCK SUBCOMMITTEE**

**Proposal: Petition to ADD [Acid Activated Bentonite](#) to the National List as a poultry litter treatment. FAILED.**

- **Summary:** The primary use of acid-activated bentonite is to reduce the level of ammonia generated by certain urease-producing bacteria commonly found in poultry litter. The Livestock Subcommittee ultimately voted not to add Acid Activated Bentonite to the National List since natural alternatives are available. However, it did request input on the following questions:
  - Are there alternatives available to reduce ammonia in poultry barns?
  - Do the alternatives work in the area of reducing or eliminating *Salmonella* that could be present in barns?
- **Subcommittee Vote: FAILED - DO NOT ADD** (Yes 0, No 7 no, Absent 1, Abstain 0)

**Proposal: Petition to ADD [Aluminum Sulfate](#) to the National List as a poultry litter treatment.**

- **Summary:** Aluminum sulfate is used as a poultry and livestock bedding amendment to reduce volatilized ammonia levels in barns. The Livestock Subcommittee ultimately voted not to add Acid

Activated Bentonite to the National List since natural alternatives are available. The Subcommittee requests input from stakeholders on the same questions it posed regarding the other petitions on bedding treatments:

- Are there alternatives available to reduce ammonia in poultry barns?
- Do the alternatives work in the area of reducing or eliminating *Salmonella* that could be present in barns?
- **Subcommittee Vote: FAILED - DO NOT ADD** (Yes 0, No 7 no, Absent 1, Abstain 0)

**Proposal: Petition to ADD [Sodium Bisulfate](#)** to the National List as a poultry litter treatment.

- **Summary:** Sodium Bisulfate is used in poultry production as a bedding amendment to reduce volatilized ammonia levels in barns. The Livestock Subcommittee ultimately voted not to add Sodium Bisulfate to the National List since natural alternatives are available. The Subcommittee requests input from stakeholders on the same questions it posed regarding the other petitions on bedding treatments:
  - Are there alternatives available to reduce ammonia in poultry barns?
  - Do the alternatives work in the area of reducing or eliminating *Salmonella* that could be present in barns?
- **Subcommittee Vote: FAILED - DO NOT ADD** (Yes 0, No 7 no, Absent 1, Abstain 0)

**Proposal to REMOVE [Ivermectin](#)** from the National List as an allowed parasiticide for emergency use only.

- **Summary:** The Livestock Subcommittee proposes to remove ivermectin from the National List as an allowed parasiticide for emergency use only, citing Ivermectin's toxic impacts to the environment, especially its negative impact on dung beetles, and the availability of alternative parasiticides (Moxidectin and Fenbendazole). Due to these factors, the Subcommittee feels Ivermectin fails the National List criteria and should be removed from the National List.
- **Subcommittee Vote: PASSED – REMOVE** (8 in favor or removing; 0 against; 0 absent)

## HANDLING SUBCOMMITTEE

**Proposal: Petition to add [Sodium Chlorite for the generation of chlorine dioxide gas](#)** to 205.605(b) of the National List as an allowed synthetic chlorine material in organic handling/processing.

- **Summary:** This material is petitioned for use as an antimicrobial pesticide, sanitizer and/or disinfectant for fruits and vegetables. It is used for the direct treatment of fruits and vegetables during storage, transportation and food preparation applications with no requirement for post treatment rinse. ClO<sub>2</sub> gas is produced by impregnating zeolite with sodium chlorite and then activating the zeolite with a solid or liquid acid such as citric acid. An unspecified buffer is used. Acidified sodium chlorite is already listed at 205.605(b), and at the April 2016 NOSB meeting, the Board voted unanimously to add hypochlorous acid to 205.605(b). Like acidified sodium chlorite and hypochlorous acid, the Subcommittee determined that ClO<sub>2</sub> gas has the potential to offer handling operations a material that has strong antimicrobial properties and is compatible with the fundamental principles of organic production.
- **Subcommittee Vote: PASSED - ADD to the National List** (7 in favor of adding; 0 against; 1 absent)

**Proposal: Petition to *add* [Oat Protein Concentrate](#) to the National List at 205.606 (non-organic agricultural) for use as a protein alternative.**

- **Summary:** Petitioned by Tate & Lyle as a natural component of oats that can be consumed as a source of protein source and certain essential amino acids. Example products it's used in include vegan entrees, cereal bars, baked goods, breakfast cereals, pasta, and meal replacement shakes. The substance is isolated from oat bran through a simple process of grinding, heating, and water extraction. No synthetic chemical additions or solvents are used in the manufacturing process (pH adjustment and/or solvent extraction) being petitioned. The petition states that currently there is no source of organic oat protein concentrate, despite organic oats and organic oat bran being widely available in the U.S. and Canada. The Subcommittee sees no reason why oat protein concentrate could not be manufactured organically and therefore recommends that it not be added to the National List because it fails "essentiality & availability" criteria.
- **Subcommittee Vote:** **FAILED, DO NOT ADD** (0 in favor of adding; 6 against; 0 abstain; 2 absent)

**Proposal: Additional listing for [Tocopherols](#) on the National List as "non-synthetic."**

- **Summary:** Tocopherols are currently listed on the National List as an allowed **synthetic** substance with the following annotation: "Derived from vegetable oil when rosemary extracts are not a suitable alternative." Tocopherols function as antioxidants in foods, helping to preserve them and prevent rancidity. They are commonly extracted from distillates of vegetable oils. NOSB voted to retain tocopherols on the National List as part of the 2017 Sunset Review. However, some commenters asserted that non-synthetic tocopherols are available and should be used instead of the synthetic versions. The Handling Subcommittee strongly encourages industry to move to non-synthetic, organic versions of tocopherols but does recognize that at present, there is insufficient commercial availability of organic tocopherols. For that reason, we are proposing a duplicate listing at 205.605(a) so that those manufacturers who wish to move to non-synthetic tocopherols—while waiting on commercial availability of organic versions—are incentivized to do so.
- **Subcommittee Vote:** Motion to list Tocopherols at §205.605(a) of the National List. Tocopherols – derived from vegetable oil. **PASSED** – (Yes: 8, No: 0, Abstain: 0, Absent: 1)

**Proposal: Annotation change for the listing of [Tocopherols](#) at 205.605(b) (synthetic)**

- **Summary:** The Handling Subcommittee proposes to eliminate part of the annotation of the listing of Tocopherols at §205.605(b) (synthetic) of the National List as follows: Derived from vegetable oil. ~~when rosemary extracts are not a suitable alternative.~~ This proposal coordinates with the associated Handling Subcommittee proposal to include an additional "Non-synthetic" listing of tocopherols at 205.605(a). To ensure that the source of tocopherols is limited and not randomly open to "any" synthetic tocopherol, the Subcommittee is recommending to keep "Derived from vegetable oil" as part of both listings for consistency.
- **Subcommittee Vote:** Motion to amend the annotation for tocopherols listed at §205.605(b) of the National List to read as follows: Tocopherols – Derived from vegetable oil. **PASSED** (Yes: 8, No: 0, Abstain: 0, Absent: 1)

**Discussion Document:** [Cumulative impact of phosphates in organic processed foods](#)

- **Summary:** Recent research indicates that phosphate intake has increased dramatically in the general population due to widespread use of phosphate food additives in processed foods in the United States. This discussion document outlines the issues and seeks public comment to determine the range of use of phosphates in organic processed foods, the extent to which they are really necessary, and to seek additional new medical and nutrition research on the human health impacts of these additives and their cumulative impact. If public comment and associated research findings indicate need for further action, NOSB may recommend increased restrictions through annotations or removal of phosphate food additives from the National List.
- **Discussion questions:**
  1. If some brands of organic processed dairy products can be produced without use of phosphates, why not all of them? What are the alternatives?
  2. If European, Japanese, CODEX and IFOAM standards limit phosphates to only monocalcium phosphate and only as a leavening agent, why are all the other phosphates necessary in U.S. organic food processing?
  3. Should phosphate food additives in processed organic foods be phased out, and if so, should just some of them be phased out or should it be allowed in only some products?

**Discussion Document:** [Marine algae listings on National List](#)

- **Summary:** During its recent five-year Sunset Review of almost 200 materials, NOSB noted there are a number of materials listed that are either marine algae or extracts of marine algae. The National List includes overlap in species in the various material listings. Some of the materials listed lack a Technical Report (TR), which limited full review of all algal materials. Public comment during Sunset Review indicated serious concerns about various issues related to sustainability of production practices and/or clarification of harvesting and processing methods. As a result, a limited scope Technical Review was requested and received. The goal of this discussion document is to present a brief analysis of our present understanding of the nine marine algae on the National List and request public comment. Depending on public comment, NOSB may develop a proposal to annotate some the materials on the National List or clarify the naming conventions because some are duplicative/redundant. Alternatively, NOSB may recommend that NOP provide guidance on the use of seaweeds in organic production.
- **Marine Algae Listings:** Aquatic plant extracts, alginic acid, agar-agar, carrageenan, alginates, beta-carotene from algae, kelp, seaweed (Pacific Kombu) and Wakame.
- **Discussion Questions:**
  1. Should the naming conventions of the marine plant/algae listings on the National List be consolidated and/or clarified to avoid redundancies and duplication, using Latin binomials?
  2. Should annotations be written to clarify specific uses, or harvesting guidelines for any of the marine algae listings, such as “no machine harvesting of *Ascophyllum*,” and “Not harvested from a conservation area identified by State, Federal or International bodies?”
  3. Is there a need for further NOP Guidance on marine plants/algae?

**Update:** [Xanthan Gum Reclassification](#)

- **Statement on proposed reclassification of xanthan gum:** The Handling Subcommittee requested an updated technical report on xanthan gum, focusing on the manufacturing process, to determine if it is synthetic or non-synthetic. After reviewing the information provided, it appears that there is more

than one way to produce xanthan gum; some of the methods may be non-synthetic while others may lead to what the NOSB would classify as synthetic. Based on this determination, the Handling Subcommittee has concluded to take no further action on re-classification of xanthan gum at this time.

## MATERIALS/GMO AD HOC SUBCOMMITTEE

### Proposal: [Fall 2016 Research Priorities](#)

- **Summary:** Since adopting its Research Priorities Framework in 2012, the National Organic Standards Board (NOSB), a Federal Advisory Committee, has presented a list of research priorities for organic food and agriculture. The priorities are proposed by NOSB's Livestock, Crops, Handling, and Materials/GMO Subcommittees, and are published each year prior to the fall meeting. The final priorities include feedback from organic stakeholders, which is publicly available through the *Federal Register*. This document reflects an effort by each Subcommittee to review and prioritize all previous years' priorities from 2012-2015.
  - **Crops:** 1) Biodegradable Bio-based Mulch Film; 2) Organic No-Till; 3) Alternatives to Antibiotics for Fire Blight; 4) Alternatives to Copper for Disease and Algae Control; 5) Plant Disease Management; and 6) Mitigation Measures for Residues in Compost
  - **Livestock:** 1) Evaluation of methionine in the context of a systems approach in organic poultry; and 2) Prevention and Management of Parasites.
  - **Handling:** 1) Chlorine Materials and Alternatives; 2) Celery Powder; 3) Alternatives to Bisphenol A (BPA); 3) Consumer Demand
  - **Materials/GMO:** 1) Fate of genetically engineered plant material in compost; 2) Integrity of breeding lines and ways to mitigate small amounts of genetic presence; 3) Prevention of GMO Contamination.
- **Subcommittee Vote:** Motion to accept the 2016 Research Priorities. **PASSED** (Yes: 6, No: 0, Abstain: 0, Absent: 0)

### Proposal: [Excluded methods terminology](#)

- **Summary:** The Materials Subcommittee is seeking responses from organic stakeholders on issues related to NOP's regulatory definition of "excluded methods." In light of new methods that have emerged since the NOP definition of "excluded methods" was adopted in 1995, the Materials Subcommittee started a process in April 2013 to untangle and update/improve the current definition of "excluded methods." As a result of that process, the Subcommittee is moving ahead with a proposal that includes supplements to the definition in the rule based on internationally accepted language, criteria to use in the reviews based on that definition, and a chart of those techniques that are clearly "excluded methods" based on the definition and criteria. The section on "definitions" is to be used in Guidance to support and strengthen the existing definition of "excluded methods" in the regulation but not to change it. The Principles and Criteria section draws from NOSB's Principles of Organic Production and Handling (see PPM) as well as IFOAM principles. The third part of the proposal includes a terminology chart of methods, indicating whether each one is considered an excluded method or not. This chart would be updated over time. A separate discussion document contains the technologies, terms, and issues that the Subcommittee has not been able to complete due to the lack of agreement or because it has not yet taken them up.
- **Subcommittee Vote:** Motion to accept the three sections of this proposal. **PASSED** (4 in favor; 0 against; 1 abstain; 1 absent).

**Discussion Document:** [Excluded methods terminology](#)

- **Summary:** The Subcommittee discussion document is again seeking responses from organic stakeholders on issues related to NOP's regulatory definition of "excluded methods." This is the same document as the Feb. 2016 document except embryo transfer has been added to the chart. In conjunction with the proposal, the discussion document intends to update the current definition of "excluded methods" in light of new methods that have emerged since the NOP definition was adopted in 1995. The goal is to have concrete determinations for NOP, Accredited Certifying Agencies, and organic producers to use in keeping GMOs out of organic food and farms. The following questions are asked: 1. Are there any additional criteria for evaluating technologies that need to be considered? 2. Do you have any insights on how to detect those technologies that are excluded but may not provide detectable genetically engineered DNA? 3. Please offer any suggestions for enforcement of the excluded method provisions of the rule when they are not traceable or detectable. 4. Opinions are welcome on the terms in the chart above that may or may not be clearly prohibited as excluded methods.
- **Subcommittee Vote:** Motion to adopt the discussion document on excluded methods **PASSED** (5 in favor; 0 abstain; 0 against; 0 absent)

**Report:** [To the USDA Secretary on progress to prevent GMO incursion into organic](#)

- **Summary:** In March 2012, NOSB sent a letter to Secretary of Agriculture Tom Vilsack opening a dialogue with USDA on the shared responsibility and action needed to prevent GMO contamination of organic. NOSB has again submitted a letter to the Secretary outlining the work and progress accomplished by NOSB while urging the Administration to continue to show leadership by facilitating further discussion on GMO issues and prioritizing protections for the organic sector. Specifically, NOSB is urging USDA to champion organic integrity through concrete steps: 1) develop policies to address shared responsibilities for GMO contamination; 2) strengthen farming best practices guidance to prevent incursion of biotech seeds, pollen and products into conventionally organically managed acres; and 3) support funding for research and data collection on threshold testing of organic and non-GMO seeds. The subcommittee motion to accept the report to the Secretary was passed unanimously.

## **CERTIFICATION AND ACCREDITATION SUBCOMMITTEE (CACS)**

**Discussion Document:** [Personnel performance evaluations of inspectors \(NOP 2027\)](#)

- **Summary:** Over the past year and a half, certifiers have been working to meet the requirements of NOP 2027, Instruction: Personnel Performance Evaluations. This Instruction appears to require that every inspector be evaluated in the field every year. Many certifiers have expressed considerable concern for the logistics and expense of meeting this Instruction and the potential negative impact it will have on the organic community over time. This discussion document seeks to provide an opportunity for stakeholders to respond to NOSB's request for further public comment on this issue. A series of questions for certifiers, inspectors, organic operators and stakeholders are included. For organic operators, what are the concerns and benefits that you have observed or experienced during in-filed audits conducted on your operation?
- **Subcommittee Vote:** Motion to approve the discussion document for posting for the fall 2016 NOSB meeting – **PASSED** (Yes: 6, No: 0, Abstain: 0, Absent: 0)

## POLICY DEVELOPMENT SUBCOMMITTEE (PDS)

### Proposal: [Policy and procedure manual \(PPM\) revisions](#)

- **Summary:** The objective of this proposal to revise the PPM to reflect the current procedures for the collaborative and productive functioning of NOSB. This version takes into consideration most of the comments and requested changes submitted at the April 2016 NOSB meeting. Not all items raised by the Board or public have been addressed; outstanding items will be forwarded to the PDS going forward. The proposal includes a summary table of changes.
- **Subcommittee Vote:** Motion to accept the Policy and Procedures Manual (PPM) as edited - **PASSED** (Yes: 7, No: 0, Abstain: 0, Absent: 0).

### Proposal: [Sunset Review - Efficient work load reorganization](#)

- **Summary:** The Subcommittee is proposing a system for reorganizing the Sunset Review process to eliminate the current situation where there are 187 materials reviewed in one year and 27 materials over four years. The proposal describes the system that will be used for an early review of the large majority of materials scheduled to sunset in 2022. Materials scheduled to sunset in 2018 are excluded due to timing, as are materials voted for removal during the 2016 and 2017 Sunset Reviews. Only materials on the 2022 cycle are subject to early review (a list of these materials are provided). Materials reviewed early should be allowed to sunset on their original timeline in 2022. The workload should be roughly evenly distributed among the four years. Materials should be split by subcommittee to even the workload of each subcommittee. The process of reorganization should be as impartial and non-political as possible while also being efficient. The reorganization will be impartial and blind to bias by using sequential reordering. Similar items are grouped together. The ultimate goal is to redistribute the workload to reduce strain on NOSB, NOP and the public.
- **Subcommittee Vote – PASSED** (Yes: 6, No: 0, Abstain: 0, Absent: 1)

## 2018 CROP AND HANDLING SUNSET MATERIALS

Your feedback is needed! NOSB is in the process of reviewing several of the fertilizers, pest control products, processing aids, and ingredients currently allowed for use by certified organic operations. These production and handling inputs will be voted on at the Fall 2016 meeting by NOSB based on their 2018 Sunset timeline (renewal date), and may not be renewed for use if new information indicates these substances are incompatible with organic production.

It's critical that organic stakeholders weigh in **by the October 26, 2016, comment deadline** and explain whether these inputs are consistent with and necessary for organic production, or whether there are other effective natural or organic alternatives available.

To help facilitate the comment process, OTA has created a [survey system for collecting feedback](#) from certified farms and processors. The information collected will significantly help NOSB identify the inputs that should be renewed or removed from the National List. **Below are links to electronic surveys that can be used to submit feedback on each individual input currently under NOSB review.** Each survey is CONFIDENTIAL, and contains about 10 short questions that will take an estimated five minutes to complete. The information collected will be passed along to NOSB via OTA's comments.

## 2018 SUNSET MATERIALS

### Crops:

**Note:** The subcommittee voted to relist all of the Crops materials

### § 205.601

- **Copper Sulfate** – for use as algicide and tadpole shrimp control in aquatic rice production, is limited to one application per field during any 24-month period. Application rates are limited to levels that do not increase baseline soil test values for copper over a timeframe agreed upon by the producer and accredited certifying agent. *Sunset Date: 11/3/18*  
<https://www.surveymonkey.com/r/VGWZKXG>
  - *Request For Comments:*
    - Has there been any new information regarding the viability of alternatives to these uses of copper?
    - Have ACAs noticed any increase in baseline soil test values for copper and done anything about it?
  - **Subcommittee Vote:** Motion to remove **FAILED** (0 to remove, 7 to relist)
- **Ozone gas**—for use as an irrigation system cleaner only. *Sunset Date: 11/3/2018*  
<https://www.surveymonkey.com/r/VG6P2VM>
  - *Request For Comments:* The subcommittee would like to know whether this input is currently being used for irrigation system cleaning.
  - **Subcommittee Vote:** Motion to remove **FAILED** (0 to remove, 4 to relist, 1 abstain, 2 absent)
- **Peracetic acid**—for use in disinfecting equipment, seed, and asexually propagated planting material. Also permitted in hydrogen peroxide formulations as allowed in § 205.601(a) at concentration of no more than 6% as indicated on the pesticide product label. *Sunset Date: 5/29/2018*  
<https://www.surveymonkey.com/r/VB23QN2>
  - **Subcommittee Vote:** Motion to remove **FAILED** (0 to remove, 5 to relist, 2 absent, 0 abstain)
- **EPA List 3 – Inerts of Unknown Toxicity** - As synthetic inert ingredients as classified by the Environmental Protection Agency (EPA), for use with non-synthetic substances or synthetic substances listed in this section and used as an active pesticide ingredient in accordance with any limitations on the use of such substances. (2) EPA List 3—Inerts of unknown toxicity—for use only in passive pheromone dispensers. *Sunset Date: 11/3/2018*  
<https://www.surveymonkey.com/r/VBB7LH2>
  - *Request For Comments:* None. This listing will be superseded by the annotation change approved by the NOSB for EPA List 4 and List inerts (§205.601(m)(1)). The NOSB is continuing the Sunset Review process for these EPA List 3 inerts in case that change cannot be implemented through rulemaking before the 11/03/2018 sunset of EPA List 3 inerts.
  - **Subcommittee Vote:** Motion to remove **FAILED** (0 to remove, 7 to relist, 0 absent, 0 abstain)

- **Calcium chloride**, brine process is natural and prohibited for use except as a foliar spray to treat a physiological disorder associated with calcium uptake. *Sunset Date: 11/3/2018*

<https://www.surveymonkey.com/r/VHJVCNM>

- *Request For Comments:* None
- *Subcommittee Vote:* Motion to remove **FAILED** (0 to remove, 7 to relist, 0 absent, 0 abstain)

## **Handling**

**Note:** The subcommittee voted to relist all of the handling materials **except** for carrageenan

### **§ 205.605(a) - Allowed non-agricultural non-synthetics**

- **Agar-agar** - Also known as Japanese Isinglass. Used as a stabilizer and thickener and as a substitute for gelatin. Also used to clarify wines. *Sunset Date: 11/3/2018*

<https://www.surveymonkey.com/r/W6QD88C>

- *Request For Comments:*
  - Have there been any new developments with alternatives to agar-agar?
  - Why is agar-agar used instead of alternatives? What are the unique characteristics that make it essential to organic handling?
- *Subcommittee Vote:* Motion to remove **FAILED** (6 to keep on the list, 0 to remove, 2 absent)

- **Animal enzymes** - (Rennet—animals derived; Catalase—bovine liver; Animal lipase; Pancreatin; Pepsin; and Trypsin). Used to carry out naturally occurring biological processes. Rennet is used to curdle milk.

*Sunset Date: 11/3/2018*

<https://www.surveymonkey.com/r/WZ2GXM9>

- *NOSB questions:*
  - Are any animal derived enzymes currently being produced from organic livestock? If yes, on what scale?
  - In the 2011 TR on Animal Enzymes, manufacture of the substance is focused on rennet. Please submit information if the manufacture of other types of animal enzymes differ from rennet.
- *Subcommittee Vote:* Motion to remove **FAILED** (6 to keep on the list, 0 to remove, 2 absent)

- **Calcium sulfate—mined** - Used as a firming agent and yeast food and dough conditioner. Utilized in brewing and other fermentation industries, in Spanish-type sherry, as a jelling ingredient, in cereal flours, as a carrier for bleaching agent, in bread, rolls, and buns, and in blue cheese. Also used in creamed cottage cheese as an alkali. *Sunset Date: 11/3/2018*

<https://www.surveymonkey.com/r/WZ6FFGH>

- *NOSB questions:* None
- *Subcommittee Vote:* Motion to remove **FAILED** (7 to keep on the list, 0 to remove, 1 absent)

- **Carrageenan** – Also called Irish Moss. Used in a wide variety of processes and products. Functions as a bulking agent, carrier, emulsifier, gelling agent, stabilizer or thickener. Widely used in dairy products to improve function. *Sunset Date: 11/3/2018* <https://www.surveymonkey.com/r/SKC2PQY>

- **NOSB questions:**
  - After the last review in 2012 we know some companies pledged to remove carrageenan from their products. Has this been successful and what alternatives have been used? Are there any products for which it has not been successful, and why?
  - Are there any stakeholders who rely on this material? If so for what uses and why have alternatives not been successful?
- **Subcommittee Vote:** Motion to remove **PASSED** (2 to keep on the list, 5 to remove, 1 absent)
  
- **Glucono delta-lactone—production by the oxidation of D-glucose with bromine water is prohibited.** Used as a coagulant in the production of tofu. Introduced for this purpose in the 1980s. *Sunset Date: 11/3/2018*  
<https://www.surveymonkey.com/r/SY7RJFR>
  - **NOSB questions:**
    - Is GDL being used in applications other than tofu production for organic processed foods?
    - If GDL was removed from the National List, are alternative tofu coagulants such as calcium and sulfate salts sufficient to produce all forms of tofu?
    - Should GDL produced from enzymes be prohibited or further restricted due to concerns around GMOs?
  - **Subcommittee Vote:** Motion to remove **FAILED** (6 to keep on the list, 1 abstain, 1 absent)
  
- **Tartaric acid—made from grape wine.** Used as an acidulant (pH control), emulsifier and flavoring agent in a wide range of products such as baked goods, dairy products, juice and meat and poultry products. Also used in combination with baking soda to make baking powder. Used in winemaking to alter acidity. *Sunset Date: 11/3/2018*  
<https://www.surveymonkey.com/r/SY2HVPV>
  - **NOSB questions:**
    - The Handling Subcommittee requests public comment on the use of Tartaric Acid and its essentiality in organic processing.
  - **Subcommittee Vote:** Motion to remove **FAILED** (7 to keep on the list, 0 to remove, 1 absent)

## § 205.605(b) – Allowed non-agricultural synthetics

- **Cellulose—for use in regenerative casings, as an anti-caking agent (non-chlorine bleached) and filtering aid.** Used as a filter aid. Petitioned for use in combination with diatomaceous earth for more effective juice filtering. Anticaking agent in shredded cheese; adds bulk weight to product. Used as peelable casings for hot dogs (not in final product). *Sunset Date: 11/3/2018*  
<https://www.surveymonkey.com/r/SYQ8G8X>
  - **NOSB questions:**
    - Have there been any new sources for either a non-synthetic or an organic form of cellulose identified during this current Sunset Cycle? If so please provide the NOSB with information on this source.
    - Are there any new or potential uses not covered by the current annotation that should be brought to the NOSB's attention? If so please explain.

- Have there been any possible alternatives to any of the allowed uses for cellulose identified during this current Sunset Cycle, and if so please provide the NOSB with their names and how they compare to the use of cellulose for the specific use.
- What impact would the inclusion of the word “powdered” as part of the annotation have on your handling process? Should NOSB consider bringing forth a separate proposal to make this change to the cellulose annotation?
- Could you help us to identify any ancillary substances that might be used with cellulose in organic handling or processing? The new Technical Evaluation Report mentions several potential ones for both powdered and the inedible form used in regenerative casings. Are any of these currently being used in organic handling and processing?
- **Subcommittee Vote: Motion to remove FAILED** (6 to keep on the list, 1 abstain, 1 absent)
- **Potassium hydroxide—prohibited for use in lye peeling of fruits and vegetables except when used for peeling peaches.** An alkali used to extract color from annatto seed, a peeling agent for tubers and fruits, also in cacao products. Used as a pH adjuster, stabilizer, thickener and poultry scald agent. Main foods are chicken, cocoa, coloring agents, ice cream and black olives. Also used in the process of making soap. *Sunset Date: 5/29/2018*  
<https://www.surveymonkey.com/r/SYFFYJH>
  - *NOSB questions:*
    - The Handling Subcommittee requests public comment on the use of potassium hydroxide and its essentiality in organic processing.
  - **Subcommittee Vote: Motion to remove FAILED** (7 to keep on the list, 0 abstain, 1 absent)
- **Silicon dioxide—Permitted as a defoamer. Allowed for other uses when organic rice hulls are not commercially available.** Used as an anticaking agent or grinding agent and as a defoamer. Also used as an absorbent for some Vitamin E and B in tableted foods. *Sunset Date: 11/3/2018*  
<https://www.surveymonkey.com/r/SYM5DR7>
  - *NOSB questions:*
    - Are there instances where due to lack of availability of organic alternatives, you must use silicon dioxide? Are there any ancillary substances used?
  - **Subcommittee Vote: Motion to remove FAILED** (6 to keep on the list, 0 abstain, 2 absent)
    - Are there instances where the organic alternative does not perform the needed function and therefore you must use silicon dioxide? If so, what are those functions? And what has been the undesired result when silicon dioxide was tried?

#### § 205.606 – Allowed non-organic agricultural ingredients when organic is not available

- **Beta-carotene extract color—derived from carrots or algae (pigment CAS#7235-40-7).** Used as a natural coloring agent. *Sunset Date: 5/29/2018*  
<https://www.surveymonkey.com/r/SYBPFZF>
  - *NOSB questions:*
    - Has there been any change in the ability of manufacturers to produce beta-carotene color from carrots using NOP compliant extraction methods?

- Is this color necessary for organic processors?
- Which species of algae are used and from where are they harvested?
- If the typical species used are from the genus *Dunaliella* (as cited in the TR) is harvesting of these species of micro algae from the wild, certified wild-crafted, or cultivated?
- When used as a color, is this material also a source of Vitamin A?
- **Subcommittee Vote:** Motion to remove **FAILED** (5 to keep on the list, 2 remove, 0 abstain, 1 absent)

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## NOSB PUBLIC COMMENT OPPORTUNITIES

The NOSB meeting is open to the public and participants are invited to provide oral comments during one of two sessions—at the meeting or during a webinar.

Register online to provide oral public comments at the meeting. Public comments are scheduled in two (2) blocks:

- Thursday, November 3, 1:00 - 4:00 p.m. ET, via webinar; (3-minute comment slot)
- Wednesday/Thursday, November 16-17, at the face-to-face meeting; (3-minute comment slot)

Commenters may only sign up for one comment slot. [Reserve an Oral Comment Slot](#)

The final deadline to submit written comments and sign up for oral comments is **Wednesday, October 26, at midnight Eastern**. Comments should be submitted via [Regulations.gov](#).

## MISSION AND STRUCTURE OF NOSB

The National Organic Standards Board (NOSB) was created through the Organic Foods Production Act, a subsection of the 1990 Farm Bill. The Board is charged with the task of assisting the Secretary of Agriculture on which substances should be allowed or prohibited in organic farming and processing. This 15-person citizen advisory board brings together volunteers from around the United States. It is made up of four farmers/growers, two handlers/processors, one retailer, one scientist, three consumer/public interest advocates, three environmentalists, and one USDA accredited certifying agent.

## Contact OTA staff with questions or concerns

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