

## SPRING 2022 NOSB MEETING

### SUMMARY OF PROPOSALS, DISCUSSION DOCUMENTS & SUNSET REVIEWS

The [spring 2022 National Organic Standards Board \(NOSB\) Meeting](#) will be held April 26-28 via live online webinar. The [Meeting Agenda](#) and [Meeting Packet](#) (all proposals, discussion documents, and Sunset Reviews to be considered at the meeting) are posted, and the public comment period is open. The deadline to submit written comments and/or sign up for oral comments is **April 1<sup>st</sup>** at midnight Eastern. The full Board will vote on the proposals at the meeting. Check out [OTA's NOSB Meeting Webpage](#) for more information.

#### PUBLIC COMMENT OPPORTUNITIES

**WRITTEN COMMENTS** may be submitted via [Regulations.gov](#) (Docket # AMS-NOP-21-0087) **by April 1<sup>st</sup>**

**ORAL COMMENTS** (3-minute slot) may occur during one of two webinar sessions on April 19 & 21 between Noon – 5:00 p.m. Eastern. [Click here](#) to register **by April 1<sup>st</sup>**

#### AT-A-GLANCE LIST OF TOPICS [USE THE PDF BOOKMARKS TO NAVIGATE BETWEEN TOPICS]

##### PROPOSALS (vote)

- **Highly Soluble Nitrogen Fertilizers (Crops)** – *proposal to limit fertilizers with low C:N to < 20% of crop need*
- **Carbon Dioxide (Crops)** – *petitioned for use in irrigation water treatment*
- **Cetylpyridinium Chloride (Handling)** – *petitioned for use as an antimicrobial treatment of poultry carcasses*
- **Phosphoric Acid (Handling)** – *petitioned expanded use for extracting target molecules from seaweed*
- **Excluded Methods** – *proposal to formalize status of cell and protoplast fusion in plant breeding*
- **NOP Risk Mitigation Table** – *procedures for mitigating potential conflicts of interest in the NOP oversight and accreditation of certifiers*
- **Public Comment Process** – *proposal for minor updates to NOSB Policy and Procedure Manual*

##### DISCUSSION (no vote)

- **2024 Sunset Review (Crops, Livestock, Handling)** – *NOSB is will review ~30 inputs currently included on the National List of Allowed and Prohibited Substances to determine if the listing should expire by 2024*
- **Tall Oil (Crops, Livestock)** – *petitioned for use as an inert ingredient crop and livestock pest controls*
- **2022 Research Priorities** – *discussion on NOSB's annual list of research priorities for organic food and agriculture*
- **Human Capital: NOSB Technical Support Initiative** – *exploring opportunities to obtain outside assistance for NOSB, as appropriate, to help alleviate some of the workload*
- **Oversight improvements to deter fraud: Modernization of organic traceability infrastructure** – *exploring new requirements for reporting acreage on organic certifications and a universal bill of lading*

## COMPLIANCE, ACCREDITATION, & CERTIFICATION SUBCOMMITTEE

### **NOP Risk Mitigation Table (PROPOSAL)**

- **BACKGROUND:** The NOP Risk Mitigation Table was developed by NOP to document the ways it identifies and mitigates potential conflicts of interest to safeguard impartiality in the delivery of services and oversight over accredited certifiers. The Table lists 6 types of potential conflicts of interest as associated possible risks (e.g. NOP Accreditation staff person previously worked for a certifier). Each potential conflict is accompanied by control measure descriptions and monitoring methods. When a potential conflict of interest is “possible” or “likely” to raise a real or perceived threat to the integrity of the NOP accreditation program, NOP management reviews the specific circumstances and either establishes sufficient safeguards to place the employee’s contributions within the decision-making process in appropriate context; or removes the employee from the decision-making process. NOP sent a [memo](#) to NOSB on November 18, 2021, requesting it review and facilitate public comment on the Risk Mitigation Table.
- **PROPOSAL:** The Subcommittee has reviewed the table and determined that all potential conflicts are included and are clear, and recommends that NOP incorporate the Risk Mitigation Table into its procedures.

The Subcommittee is also seeking stakeholder comments in response to the following questions:

1. What potential conflicts of interest and mitigation strategies are missing from the table?
2. Could any potential conflicts of interest and mitigation strategies identified in the table need further clarification?

Read the full proposal in the [NOSB Meeting Packet](#) (p. 15)

- **SUBCOMMITTEE VOTE:** Motion to accept the NOP’s Risk Mitigation Table: **5 Yes, 0 No**

### **Human Capital: NOSB Technical Support Initiative (DISCUSSION)**

- **BACKGROUND:** Human capital refers to the skills, knowledge, and experience held by an individual or population, and is generally considered one of the most important intangible assets that contribute value to an organization or community. NOP sent a [memo](#) to NOSB on July 31, 2020, requesting that the Board facilitate a public discussion related to Human Capital Strategy for Organic Inspectors and Reviewers. Since then, NOSB has posted discussion documents at each meeting to solicit comments and develop recommendations on various aspects of human capital capacity building. NOSB already passed a [recommendation](#) on supporting organic inspectors and reviewers. NOSB initiated [discussion](#) in Spring 2021 on supporting the work of NOSB members.
- **DISCUSSION DOCUMENT:** NOSB members are unpaid volunteers with highly technical and time-consuming responsibilities. The Subcommittee is exploring opportunities to obtain outside assistance for Board work, as appropriate, to help alleviate some of the workload without compromising the integrity of the process or the independent nature of the production and deliberation of its proposals.

The Subcommittee seeks stakeholder comments in response to the following questions:

1. What are the advantages or disadvantages of having support come from within the government? From a non-profit or university?

2. What NOSB tasks, if any, are critical to keep completely independent from the support team?
3. Should the support team be privy to all Subcommittee meetings and discussions?
4. What should be the scope of NOP's relationship with the contemplated support group, i.e., should they be able to task the group directly?

Read the full discussion in the [NOSB Meeting Packet](#) (p. 17-18)

## **Oversight Improvements to Deter Fraud: Modernization of Supply Chain Traceability (DISCUSSION)**

- **BACKGROUND:** As NOP is working on the Strengthening Organic Enforcement (SOE) rulemaking, as well as Human Capital Capacity Building projects, the NOSB Compliance, Accreditation & Certification Subcommittee is exploring technology tools that can modernize organic verification and traceability systems to best match the size and scale of today's industry, standards, technology, and future needs. The Subcommittee initiated discussion in fall 2021 to explore aspects of modernizing supply chain traceability. Last fall, the concept of an "organic link system" was presented. At this meeting, two new elements are being presented to support more consistent data reporting across the supply chain.
- **DISCUSSION DOCUMENT:** The Subcommittee's discussion document highlights two key elements:
  - Reporting acres per crop on a certified operation's certificate - Most certifiers list the crops an operation is certified to grow in a given year, but not the number of acres. Reporting acres on the certificate will provide insight to inspectors, handlers, importers, and brokers to help identify red flags and potential fraud in the supply chain. Inspectors reviewing purchase records where this information is disclosed can identify any inconsistencies between sales levels and production capacity. Buyers of organic crops will be able to cross-check if the operations from whom they are buying have the ability to produce the volume of crops purchased. The Subcommittee calls on all certifiers to voluntarily start reporting crops by acreage on certificates, and implores NOP to make acreage reporting on organic certificates mandatory for all certifiers of all operations certified to NOP, both foreign and domestic.
  - Universal bill of lading for all agricultural commodities – Record-keeping systems vary across operations but there are there are core pieces of information that should be standardized to embrace consistent key data reporting on transaction documents. The Subcommittee calls on the organic community to require inspectors and reviewers to confirm that the following data points are identified on transaction documents from grower to buyer/aggregator: unique lot number, crop year grown, date of transaction, crop, buyer name, seller name.

The Subcommittee seeks stakeholder comments in response to the following questions:

1. Should acreage by crop be included on organic certificates?
2. In addition to total certified acres, should acres per crop also be included on the organic certificate and be public-facing in the Organic Integrity Database?
3. How can the community better educate inspectors and certified operators on what is sufficiently auditable record-keeping? (e.g., organic learning center, etc.)
4. What opportunities are there for stakeholders to collaborate in creating additional resources (e.g., forms, etc.) for use by organic operations that incorporate key data elements?

5. How can NOP assist certifiers in issuing non-compliances for insufficient record keeping?

Read the full discussion in the [NOSB Meeting Packet](#) (p. 19-22)

## CROPS SUBCOMMITTEE

### Highly Soluble Nitrogen Fertilizers (PROPOSAL)

- **BACKGROUND:** This proposal is a follow-on to the third motion presented within the Ammonia Extract proposal last fall (the first two motions were to prohibit stripped ammonia and concentrated ammonia, which both passed.). The focus of the proposal is Nitrogen fertilizers containing primarily ammonia or nitrates that provide immediately available Nitrogen to plants. The goal of the proposal is to establish a universal restriction on highly soluble nitrogen fertilizers based on similar issues to ammonia extract with regard to compatibility with organic systems. Stripped/concentrated ammonia would be implicated by the proposal's scope of impact, but these materials were fully prohibited by NOSB's past recommendation and are therefore not subject to this proposed restriction.

**PROPOSAL:** The Subcommittee proposes to add a new restriction on all highly soluble nitrogen fertilizers at o §205.105:

- "Nitrogen fertilizers with a C: N ratio of 3:1 or less, including those individual components of a blended fertilizer formulation, are limited unless use is restricted to a cumulative total use of 20% of crop needs."

This restriction would apply to any nitrogen fertilizer not otherwise prohibited by the National List, such as guano or other new, novel non-synthetic sources. There are specific examples of materials that are *not* intended to be implicated by the proposal, including feather, bone, and blood meal. The Subcommittee intends for this restriction to apply to all certified organic crop producers regardless of production system. The proposal also includes responses to some of the questions and concerns raised at the last NOSB public comment, regarding impacted products, calculation methods for blended products, and determination of total crop nitrogen needs.

Read the full proposal in the [NOSB Meeting Packet](#) (p. 93-116)

- **SUBCOMMITTEE VOTE:** Motion to adopt the proposal: **7 Yes**, 1 No.

### Carbon Dioxide (PROPOSAL)

- **BACKGROUND:** Carbon dioxide has been [petitioned](#) for addition to §205.601(a) algicide, disinfectants, and sanitizer, including irrigation system cleaning systems and §205.601 (j) as plant or soil amendments. Carbon dioxide is dissolved into irrigation water to lower the pH. In soils with high pH, applying water with a reduced pH can increase nutrient availability and increase plant health. Additionally, the activity of carbon dioxide in water can help prevent clogging of irrigation systems by algae and other plant contaminants.
- **PROPOSAL:** For the most part, the Subcommittee agrees with the petitioner and recommends

allowing Carbon Dioxide for the petitioned uses. It is determined to be a safer alternative to sulfur burners and citric acid for lowering pH of irrigation water. Carbon dioxide is understood to be a material with inherently low risk and is also already approved for use as an input in organic process/handling.

Read the full proposal in the [NOSB Meeting Packet](#) (p. 117-120)

- **SUBCOMMITTEE VOTE:**

- Motion add carbon dioxide at §205.601(a) algicide, disinfectants, and sanitizer, including irrigation system cleaning systems: **7 Yes**, 0 No, 1 Abstain.
- Motion add carbon at §205.601(j) As plant or soil amendments: **7 Yes**, 1 No.

## Crops 2024 Sunset Review (DISCUSSION)

- **BACKGROUND:** NOSB is reviewing whether to continue the allowance of several substances currently included on the National List of Allowed and Prohibited Substances to determine whether the substances should continue to be listed or should be relisted or removed from the list. These substances are undergoing Sunset Review this year in advance of their sunset date in 2024. These inputs may not be renewed if new information indicates they are harmful to human health or the environment, are not necessary because natural or organic alternatives are available, and/or are incompatible with organic production.

Please complete [OTA's Sunset Surveys](#) to provide information about the necessity of these inputs.

- **DISCUSSION SUMMARIES:** The Crops Subcommittee has provided discussion summaries for each substance undergoing Sunset Review and has indicated specific areas where additional information is requested from stakeholders. Read the full discussion in the [NOSB Meeting Packet](#) (p. 124-149)

### Herbicidal Soaps – §205.601(b)(1)

- Allowed for weed control only in farmstead maintenance (roadways, ditches, right of ways, building perimeters) and ornamental crops.

### Biodegradable biobased mulch film – §205.601(e)(9)

- Allowed for weed control.
- No products are available that meet the 100% biobased requirement in the current regulations. NOSB passed a [recommendation](#) in fall 2021 to revise the definition to allow the use of films that are 80% biobased. The timing of this Sunset Review predates the rulemaking process to implement the new definition.
- Additional information requested by Subcommittee:

- 1. Is there new information on the availability of 100% Biodegradable Biobased Mulch Film?**

### Boric acid – §205.601(e)(3)

- Allowed for structural pest control. Direct contact with organic food or crops is prohibited.

**Sticky Traps/Barriers – §205.601(e)**

- Allowed for pest control and monitoring.

**Elemental sulfur – §205.601(h)(2)**

- Allowed as a slug or snail bait. (Other uses of elemental sulfur are not included in this Sunset Review.)
- Added to the National List in 2019 as an alternative to ferric phosphate.
- Additional information requested by Subcommittee:
  1. **Are there cultural practices that can make slug and snail baits unnecessary?**
  2. **Is it necessary to have sulfur-based products for slug management in addition to ferric phosphate?**

**Copper, Fixed – §205.601(i)(2)**

- Includes copper hydroxide, copper oxide, copper oxychloride, includes products exempted from EPA tolerance.
- Allowed for disease control. Must be used in a manner that minimizes accumulation in the soil.
- The Subcommittee main considerations include:
  - Copper compounds disperse quickly in water and are toxic to aquatic organisms.
  - Copper compounds bind to soil and accumulate in clay soils and with increasing soil pH.
  - Copper compounds can damage the plants and impact appearance and taste of the crop.
  - Widespread use of copper has led to the evolution of copper-resistant disease varieties.
  - There is a link between dysfunctional copper metabolism and Alzheimer’s disease.
  - Foliar spray of copper mixtures can impact lung and liver function in agricultural workers.
- Additional information requested by Subcommittee:
  1. **Are there organic alternatives to copper products that are more suitable for use in disease control?**
  2. **Are there viable practices that can be used *in situ* to offset the toxic build-up of copper in soil and water?**

**Copper Sulfate – §205.601(i)(3)**

- Allowed for disease control. Must be used in a manner that minimizes accumulation in the soil.
- Mixed with calcium hydroxide to produce a “Bordeaux mixture” for disease control.
- The Subcommittee main considerations include:
  - Copper compounds disperse quickly in water and are toxic to aquatic organisms.
  - Copper compounds bind to soil and accumulate in clay soils and with increasing soil pH.
  - Copper compounds can damage the plants and impact appearance and taste of the crop.
  - Widespread use of copper has led to the evolution of copper-resistant disease varieties.
  - There is a link between dysfunctional copper metabolism and Alzheimer’s disease.
  - Foliar spray of copper mixtures can impact lung and liver function in agricultural workers.
- Additional information requested by Subcommittee:

1. **Are there organic alternatives to copper sulfate that are more suitable for use as a fungicide?**
2. **Are there viable practices that can be used *in situ* to offset the toxic build-up of copper in soil and water?**

**Polyoxin D zinc salt – §205.601(i)(11)**

- Allowed for disease control.
- Added to National List in 2019.
- Additional information requested by Subcommittee:
  1. **Is there a concern that cross-resistance to polyoxin D could negatively affect human health?**
  2. **Is Polyoxin D zinc salt an effective fungicide?**

**Humic Acid – §205.601(j)(3)**

- Allowed as a plant and soil amendment.
- Naturally occurring deposits, water and alkali extracts only.

**Micronutrients – §205.601(j)(7)**

- Includes: Soluble boron products. Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt.
- Allowed as plant and soil amendment. Micronutrient deficiency must be documented by soil or tissue testing or other documented and verifiable method as approved by the certifying agent.
- Not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed.

**Vitamin C and E – §205.601(j)(9)**

- Allowed as a plant and soil amendment.
- Additional information requested by Subcommittee:
  1. **Do vitamins C and E provide essential functions in organic crop production?**

**Squid Byproducts – §205.601(j)(10)**

- Allowed as a plant and soil amendment.
- From food waste processing only. 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.

**Lead salts – §205.602**

- Prohibited.

**Tobacco dust – §205.602**

- Prohibited.

## HANDLING SUBCOMMITTEE

### **Cetylpyridinium Chloride (PROPOSAL)**

- **BACKGROUND:** Cetylpyridinium chloride (CPC) has been [petitioned \(addendum\)](#) for addition to §205.605(b) as an antimicrobial processing aid specifically for application onto poultry or poultry parts at slaughter or processing plants. CPC is a quaternary ammonium compound and its formulation requires the use of an inert – propylene glycol (PG) – to complete its formulation. CPC is added to water used as a drench or dip for raw poultry carcasses or parts to reduce populations of foodborne pathogens such as Salmonella and Campylobacter. A [Technical Report](#) was recently published.
- **PROPOSAL:** The Subcommittee finds that CPC is not compatible with a system of sustainable agriculture and is not essential for organic processing. Existing alternative (e.g. citric acid, lactic acid, tartaric acid, peroxyacetic acid, acidified sodium chlorite) have supported a robust and growing organic poultry industry and comply with food safety standards. The Subcommittee is also concerned with pesticide residues on final food products. Despite FDA stipulations that use of CPC is followed by a chiller solution or a potable water wash, residual CPC has been detected on treated surfaces at the processing endpoint.

The Subcommittee seeks stakeholder comments in response to the following questions:

1. Do stakeholders agree that this review of CPC – without a deeper review of the inert propylene glycol – is appropriate?
2. Since the FDA requires that propylene glycol be in a CPC formulation, how should the committee evaluate future petitions that include inerts in the formulation given that there is no provision for such inerts within the handling section of the National List?
3. In the current food safety regulatory environment, do organic producers have effective tools for pathogens in poultry processing (specifically antimicrobials)?

Read the full discussion in the [NOSB Meeting Packet](#) (p. 23-30)

- **SUBCOMMITTEE VOTE:** Motion to accept the proposal on excluded methods determinations for cell and protoplast fusion: 0 Yes, **6 No**

### **Phosphoric Acid (PROPOSAL)**

- **BACKGROUND:** Phosphoric Acid is currently on National List at §205.605(b) with the annotation, “cleaning of food-contact surfaces and equipment only.” A [petition](#) has been received to expand the use of phosphoric acid “as an acidifier to adjust pH of an extraction solvent to extract antioxidants or other target molecules from *Lamiaceae* plants, provided the amount of acid used shall not exceed the minimum needed to lower pH to 2.5.”
- **PROPOSAL:** The Subcommittee concludes that the Phosphoric acid has low negative impact on environment and human health, and that that Phosphoric acid is already listed on the National List, and the presence of Phosphoric acid in final food is unlikely when used as petitioned.

The Subcommittee seeks stakeholder comments in response to the following questions:

1. If the use of phosphoric acid is expanded through this petitioned annotation change, will it perform an essential function that is different than other already listed acids?
2. What is the application of phosphoric acid in the finished food product (i.e., what does “The extracted target molecules may be subsequently blended with appropriate carriers for help in proper dispersal across the surface of finished food products” mean in an actual use case)?

Read the full discussion in the [NOSB Meeting Packet](#) (p. 31-41)

- **SUBCOMMITTEE VOTE:** Motion to amend the annotation of phosphoric acid: **5 Yes**, 0 No, 1 Absent.

## Handling 2024 Sunset Review

- **BACKGROUND:** NOSB is reviewing whether to continue the allowance of several substances currently included on the National List of Allowed and Prohibited Substances to determine whether the substances should continue to be listed or should be relisted or removed from the list. These substances are undergoing Sunset Review this year in advance of their sunset date in 2024. These inputs may not be renewed if new information indicates they are harmful to human health or the environment, are not necessary because natural or organic alternatives are available, and/or are incompatible with organic production.

Please complete [OTA's Sunset Surveys](#) to provide information about the necessity of these inputs.

- **DISCUSSION SUMMARIES:** The Handling Subcommittee has provided discussion summaries for each substance undergoing sunset review and has indicated specific areas where additional information is requested from stakeholders. Read the full discussion in the [NOSB Meeting Packet](#) (p. 46-63)

### Attapulgitite – §205.603(a)(6)

- Allowed only as a processing aid in the handling of plant and animal oils. Used as a natural bleaching clay to remove impurities.
- Additional information requested by Subcommittee:
  1. **Is attapulgitite used today in organic production?**
  2. **What industries are most impacted if removed from the National List?**
  3. **Do the health concerns from mining attapulgitite outweigh the need for organic use?**

### Bentonite – §205.605(a)

- Allowed as a processing aid. Used as a bleaching and clarifying aid to remove impurities.
- Additional information requested by Subcommittee:
  1. **The subcommittee seeks public comment to specifically address the ongoing need for bentonite, given other similar (although perhaps not identical) substances.**

**Diatomaceous earth – §205.605(a)**

- Allowed only as a filtering aid. Used in food production of syrups, juices, beer, beverages, and other products.
- Additional information requested by Subcommittee:
  1. **Are stakeholders continuing to use DE today in organic production?**
  2. **Have there been any changes to the environmental issues of DE production?**
  3. **Are there alternative filtration aids allowing the removal of DE from the National List?**

**Magnesium chloride – §205.605(a)**

- Allowed for various uses in food processing such as: coagulant/ firming agent in tofu production. Also used in making certified organic dietary supplements and infant formula.
- Additional information requested by Subcommittee:
  1. **Is the use of magnesium chloride as a color enhancement consistent with organic principles?**
  2. **There appear to be other materials on the National List (e.g., Glucono delta-lactone and calcium sulfate) that perform the same or similar functions most specifically in tofu production. The subcommittee is requesting information as to whether these alternatives offer the same or similar functionality and essentiality?**

**Nitrogen – §205.605(a)**

- Allowed for use in food processing. Used in modified atmosphere packaging to displace oxygen and as a propellant.

**Sodium carbonate – §205.605(a)**

- Allowed for various uses in food processing such as: a raising (leavening) agent, anti-caking agent, and acidity regulator. Used in making pretzels, olives, ramen noodles, cocoa products, and more.
- Additional information requested by Subcommittee:
  1. **Is this material still essential for organic handling and processing?**
  2. **Are there alternative materials that can replace sodium carbonate?**
  3. **What are the relative environmental impacts of trona mining or brine extraction during production of sodium carbonate?**
  4. **Is sodium carbonate produced from trona or brine extraction non-synthetic?**

**Acidified sodium chlorite – §205.605(b)**

- Allowed for secondary direct antimicrobial food treatment and indirect food contact surface sanitizing. Acidified with citric acid only. Permitted direct food contact includes: poultry carcass, organs and parts; red meat carcass, organs and parts, seafood (finfish and crustaceans), and fruits and vegetables (raw and further processed); processed, comminuted or formed meat products.
- Additional information requested by Subcommittee:
  1. **Is the substance essential for organic food production?**

2. **Since the material was last reviewed, have additional commercially available alternatives emerged?**
3. **The Handling Subcommittee encourages current users of acidified sodium chlorite to provide detailed comments describing the situations in which it is the most appropriate or effective antimicrobial for a given application.**

**Carbon dioxide – §205.605(b)**

- Allowed for various uses in food processing such as: modified atmosphere packaging and storage, beverage carbonation, extracting agent, and pest control.
- Additional information requested by Subcommittee:
  1. **Is carbon dioxide essential for organic food production?**
  2. **Since the material was last reviewed, have additional commercially available alternatives emerged?**

**Sodium phosphates – §205.605(b)**

- Allowed only for use in dairy foods for various uses such as: pH control agents and buffers, acidulants, sequestrants, texturizers, and nutrients.
- Additional information requested by Subcommittee:
  1. **How essential are sodium phosphates to your operations or the operations of your stakeholders? Are there other natural substances or synthetic substances on the National List that could perform the same essential functions as sodium phosphates?**
  2. **Do you have any new and compelling evidence that health impacts from sodium phosphates are significant?**

**Casings – §205.606**

- Casings from processed intestines of beef, lamb, and pork are allowed for make natural casings for sausage only when non-organic forms are commercially unavailable.
- Additional information requested by Subcommittee:
  1. **How much potential is there for a certified organic casings market?**
  2. **Is separation at the slaughterhouse still a barrier to the availability of certified organic supply?**

**Pectin – §205.606**

- Non-amidated forms only are allowed for use in food processing only when non-organic forms are commercially unavailable. Used as a gelling agent.
- Additional information requested by Subcommittee:
  1. **Has an organic source of pectin become commercially available?**

**Potassium acid tartrate – §205.606**

- Allowed for use in food processing only when non-organic forms are commercially unavailable. Also known as cream of tartar. Used in baked goods, a component of baking powder, for stabilizing egg whites or other food uses, pH control, and as an antimicrobial agent.
- Additional information requested by Subcommittee:
  1. **Is there adequate supply of organically produced potassium acid tartrate to meet commercial needs?**

## **LIVESTOCK SUBCOMMITTEE**

### **Livestock 2024 Sunset Review**

- **BACKGROUND:** NOSB is reviewing whether to continue the allowance of several substances currently included on the National List of Allowed and Prohibited Substances to determine whether the substances should continue to be listed or should be relisted or removed from the list. These substances are undergoing Sunset Review this year in advance of their sunset date in 2024. These inputs may not be renewed if new information indicates they are harmful to human health or the environment, are not necessary because natural or organic alternatives are available, and/or are incompatible with organic production.

Please complete [OTA's Sunset Surveys](#) to provide information about the necessity of these inputs.

- **DISCUSSION SUMMARIES:** The Livestock Subcommittee has provided discussion summaries for each substance undergoing Sunset Review and has indicated specific areas where additional information is requested from stakeholders. Read the full discussion in the [NOSB Meeting Packet](#) (p. 6-15)

#### **Chlorhexidine– §205.603(a)(9)**

- Allowed for medical procedures conducted under the supervision of a licensed veterinarian. Also allowed for use as a teat dip when alternative germicidal agents and/or physical barriers have lost their effectiveness.
- Additional information requested by Subcommittee:
  1. **How often is chlorhexidine used as an aid in controlling bacteria that causes mastitis?**
  2. **Are naturally derived substances, as well as other approved synthetic substances, sufficient to remove chlorhexidine as a disinfectant or sanitizer from this listing?**

#### **Glucose – §205.603(a)(13)**

- Allowed as a medical treatment. Used primarily as a ketosis treatment and for dehydration.
- Additional information requested by Subcommittee:
  1. **The National List does not currently place any use restriction on glucose other than the placement of the listing for use as a disinfectant, sanitizer, or medical treatment as applicable. Is further clarification or annotation needed for this substance on the National List?**

2. **The National List references multiple substances for the treatment of ketosis, including propylene glycol, calcium propionate, calcium borogluconate, and electrolytes. Is glucose equally necessary and effective as a tool for organic farmers for treatment of all stages of the development of this condition?**

**Tolazoline – §205.603(a)(29)**

- Allowed only to reverse the effects of sedation and analgesia caused by Xylazine. Use requires a meat withdrawal period of at least 8 days and a milk discard period of at least 4 days. Federal law restricts this drug to use by or on the lawful written or oral order of a licensed veterinarian.
- Additional information requested by Subcommittee:
  1. **Tolazoline is a synthetic substance that is limited to use only by prescription from a veterinarian to reverse the effects of the sedative xylazine. Are there any new non-synthetic substances that can be used to reverse the effect of the sedative xylazine as effectively as tolazoline?**

**Copper sulfate – §205.603(b)(1)**

- Allowed as a topical treatment. Used as a footbath to control hoof related diseases.
- Additional information requested by Subcommittee:
  1. **Can the consistent use of foot trimming allow for the elimination of copper sulfate on dairy farms?**
  2. **Have other foot bath treatments of similar efficacy come on to the market?**

**Elemental sulfur– §205.603(b)(2)**

- Allowed for topical treatment of livestock and livestock housing for pest control.
- Additional information requested by Subcommittee:
  1. **Are alternatives sufficient to control external livestock pests?**

**Lidocaine – §205.603(b)(5)**

- Allowed as a local anesthetic. Use requires a meat withdrawal period of 8 days and milk discard period of 6 days.
- Additional information requested by Subcommittee:
  1. **Since lidocaine was last reviewed, have alternative anesthetic substances emerged?**

## **MATERIALS SUBCOMMITTEE**

### **Excluded Methods: Cell Fusion and Protoplast Fusion (PROPOSAL)**

- **BACKGROUND:** The use of “excluded methods,” as defined in the NOP Regulations, are prohibited from being used to produce or handle organic products. NOSB has worked over many years to identify

specific technologies and whether they are prohibited under the existing regulatory definition of excluded methods. NOSB's [2016 recommendation](#) includes definitions, principles, criteria to help evaluate various technologies against the regulatory definition of excluded methods. This suite of recommendations for Excluded Methods Determination has continued to be updated throughout the past few years as NOSB makes new recommendation on individual technologies.

Currently the Board is evaluating two technologies used to produce seed varieties: cell fusion and protoplast fusion. These techniques are used widely for many years in traditional plant breeding productions, particularly in the Brassica family.

Cell Fusion is listed specifically in the definition as an excluded method. In 2013, [Policy Memo 13-1](#) further clarified the conditions when cell fusion and protoplast fusion are prohibited and made an exception to allow their use only when employed *within taxonomic plant families*. Last fall NOSB collected public comments via a [discussion document](#) specifically on cell fusion and protoplast fusion and the sufficiency of Policy Memo 13-1.

- **PROPOSAL:** The Subcommittee's proposal will formalize the status of cell and protoplast fusion within its Excluded Methods Determination suite of recommendations in accordance with the NOP Policy Memo 13-1. Past public comment expressed overwhelming support for the forward motion of this proposal as a validation of long-standing NOP Policy and the will of previous NOSB decision making on excluded methods. The proposal specifically states:
  - The NOSB recommends the NOP add Cell Fusion and Protoplast Fusion to the table of Excluded Methods when the donor and the recipient cells are outside taxonomic plant families and/or when either is derived using techniques of recombinant DNA technology; with notes on the exception for use when donor and recipient cells are within the same taxonomic plant families.
  - The NOSB recommends that Cell Fusion and Protoplast Fusion be added to the table of Allowed Methods with notes limiting the use to when the donor and recipient cells are within taxonomic plant families, and neither are derived from techniques of recombinant DNA technology.

Read the proposal in the [NOSB Meeting Packet](#) (p. 67-74)

- **SUBCOMMITTEE VOTE:** Motion to accept the proposal on excluded methods determinations for cell and protoplast fusion: **5 Yes**, 0 No, 1 Absent.

## Tall Oil, Distilled (DISCUSSION)

- **BACKGROUND:** Distilled tall oil (DTO) has been [petitioned](#) for use in organic crop and livestock production as an inert or adjuvant ingredient for use as a solvent, sticker, anti-leaching agent, and time-release agent in formulations with approved active pesticide ingredients. DTO is derived from Kraft pulping of coniferous trees. DTO is made when tall oil soap is isolated from the black liquor that results from pulping. A [Technical Report](#) was recently published.

The current regulations permit only EPA List 4 inerts to be used. DTO is on List 3, not List 4. This petition asks that DTO be reviewed independently from its listing on List 3 and be specifically placed on the National List as an allowed synthetic for organic production.

- **DISCUSSION DOCUMENT:** The Subcommittee is evaluating the information with the petition and the results of the recently published Technical Report about the characteristic and use of DTO. Of particular concern is the application rates of DTO which suggest active function rather than inert.

The Subcommittee seeks stakeholder comments in response to the following questions:

1. Does distilled tall oil as an inert ingredient provide functionality that could be beneficial to organic producers? Could that vary between usage in crop production versus livestock production?
2. As the petitioner suggests, are there no other, or few other, time-release agents available for use in organic production?
3. The regulation wherein the EPA classifies DTO as a List 3 inert is obsolete; however, according to the technical report, the rate of application for the substance as outlined in the petition could function more like an active pesticide, not an inert or adjuvant. Does the projected rate of application contribute to the substance functioning as an inert or active ingredient? Should the NOSB develop an annotation limiting the application rate of inerts and adjuvants so as to ensure they function as such and not as an active ingredients or pesticides?
4. Can DTO as an inert function as an active insecticide, making it fall outside the scope of this petition?

Read the full discussion in the [NOSB Meeting Packet](#) (p. 75-77)

## Research Priorities 2022 (DISCUSSION)

- **BACKGROUND:** Since adopting its Research Priorities Framework in 2012, NOSB has presented an annual 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 revisited and updated each year to ensure accurate reflection of existing need for new knowledge.
- **DISCUSSION DOCUMENT:** The Materials Subcommittee presents an updated list of research priorities requests input from stakeholders. The Board will review those comments for the Fall 2022 proposal. The [NOSB Meeting Packet](#) (p. 82-91) contains full descriptions of each research priority.

### **Livestock**

1. Efficiency of Natural Parasiticides and Methodologies
2. Evaluation of Methionine in the Context of a System Approach in Organic Poultry Production
3. Prevention and Management of Parasites
4. Develop a dairy program to address climate change mitigation strategies where milking capabilities are not hindered and effective forage rotations are maximized
5. Develop balanced organic livestock rations that incorporate high percentages of diverse, regionally adapted grain crops to reduce the reliance on corn and soybeans and allow farmers to realize more marketing opportunities for a robust crop rotation

### **Crops**

1. Biodegradable Bio-based Mulch Film
2. Ecosystem service provisioning and biodiversity of organic systems

3. Organic No-Till and Minimum Tillage
4. Managing Cover Crops for On-Farm Fertility
5. Disease Management
6. Identify Barriers and Develop Protocols for Organic Nursery Stock Production
7. Management and Control of Invasive Insects and Weeds
8. Nutritional Value of Organic Crops
9. Side-by-Side Efficacy Comparisons Between National List Allowed and Petitioned Synthetic Inputs Versus Non-Synthetic Alternative Inputs or Practices
10. Evaluation of Microbial Inoculants, Soil Conditioners, and Other Amendments
11. Pathogen Prevention
12. Climate Change (Reducing Greenhouse Emissions and Sequestering Carbon)

***Food Handling & Processing***

1. Chlorine Materials and Alternatives
2. Alternatives to Bisphenol A (BPA)

***Materials/GMO***

1. Fate of Genetically Engineered Plant Material in Compost
2. Integrity of Breeding Lines and Ways to Mitigate Small Amounts of Unwanted Genetic Material
3. Assess the Genetic Integrity of Organic Crops At Risk
4. Prevention of GMO Crop Contamination: Evaluation of effectiveness
5. Testing for Fraud: Developing and implementing new technologies and practices

***General***

1. Increasing Access to Organic Foods
2. Barriers to Transitioning to Organic Production

Read the full discussion document in the [NOSB Meeting Packet](#) (p. 82-91)

## **POLICY DEVELOPMENT SUBCOMMITTEE**

### **Policy & Procedure Manual: Public Comment Process (PROPOSAL)**

- **BACKGROUND:** The Policy and Procedures Manual (PPM) was established to assist the National Organic Standards Board (NOSB) in the implementation of its duties under OFPA. It contains operating procedures and policies for the NOSB.
- **PROPOSAL:** The Subcommittee is proposing the following changes to the “Public Comment” section of the NOSB [Policy and Procedures Manual](#)
  - Add a sentence requiring written commenters to refrain from personal attacks.
  - Move a sentence about oral comments from the introductory paragraph to the sub-section on oral comment, and remove a redundant header “Oral Comments”

Read the full proposal in the [NOSB Meeting Packet](#) (p. 67-74)

- **SUBCOMMITTEE VOTE:** Motion to accept the proposal on excluded methods determinations for cell and protoplast fusion: **3 Yes**, 0 No, 1 Absent.