

Recap of Written Public Comments Submitted by Public Interest Groups

Comments submitted in advance of the

National Organic Standards Board

Spring 2017 Meeting

April 19-21
Denver, CO



C O R N U C O P I A

I N S T I T U T E

How to Use This Document

For the benefit of National Organic Standards Board members, and other organic stakeholders, The Cornucopia Institute has compiled a recap of all formal written comments submitted by the following public interest groups:

1. **Beyond Pesticides**
2. **Center for Food Safety**
3. **Consumer Reports**
4. **The Cornucopia Institute**
5. **National Organic Coalition**
6. **Wild Farm Alliance**

We also included a full recap of all written comments on the hydroponics issue submitted prior to the **Fall 2016 NOSB meeting and Spring 2017 NOSB meeting**. We have endeavored to catalogue the totality of these public comments as accurately and objectively as possible due to the prominence of this issue.

Cornucopia greatly appreciates the work, dedication, and enormous time commitment required to serve on the NOSB. Our hope is to provide a valuable resource for the Board, enabling members to more fully understand the scope and sentiment of public interest groups (representing a broad swath of organic farmers and consumers).

This document is organized by listing agenda items in alphabetical order. Under each item, a table shows the corresponding public interest group position. The “Notes” section under each table provides additional explanation. The recap for hydroponics also includes citizens, elected officials, input suppliers, growers/distributors, trade associations, and consultants comments.

Thank you for your work on behalf of all organic stakeholders. Please feel free to contact us with questions regarding this summary or our methodology.

Linley Dixon
Senior Scientist and Policy Director
The Cornucopia Institute

Acidified Sodium Chlorite – HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|------------------------------|-----------------------------|---|
| Beyond Pesticides | | | X _a |

Notes:

- a. *Beyond Pesticides: This comment addresses calcium hypochlorite, chlorine dioxide, and sodium hypchlorite for crops; acidified sodium chlorite, calcium hypochlorite, chlorine dioxide, and sodium hypchlorite for handling; and calcium hypochlorite, chlorine dioxide, and sodium hypchlorite for livestock.*

To the extent possible, organic should be chlorine-free. Chlorine is hazardous in its production, transportation, storage, use, and disposal. EPA's Design for the Environment has identified safer viable alternatives for some or all uses, including other materials on the National List. It is time for the NOSB to update its thinking and approach to cleaners and disinfectants. Several steps need to be taken:

1. OFPA requires that materials on the National List be itemized “by specific use or application.” Justification of listing of chlorine materials requires that the NOSB identify the uses for which they are needed.
2. Needs for cleaners, sanitizers, disinfectants, and sterilants must be distinguished. Freedom from microbes is not always good. Not only is sterility often unnecessary, but it is also sometimes counterproductive because eliminating benign microbes can make room for spoilage organisms or pathogens.
3. Establishing the need for a “sanitizer” requires a demonstration that a certain degree of freedom from microbes is required. The NOSB must establish when microbes should be removed from what and the degree to which they must be removed.
4. Alternative practices and materials must be considered, such as those identified by technical reviews and EPA’s Safer Choice Program. NOSB must examine the need for these materials in light of alternatives and hazards. Chlorine compounds have long been identified as hazardous to humans and the environment. The NOSB, in reviewing the listings of these materials, must delve into the needs, alternatives, and hazards

Aeroponic/Hydroponic/Aquaponic Disc. Document

At the fall 2016 NOSB meeting, the NOSB did not vote on the “Bioponics” proposal, but voted to send it back to the Crops Subcommittee for further work. However, the NOSB did pass a resolution at the Fall 2016 meeting which included: “In the case of the hydroponic/bioponic/aquaponic issue, it is the consensus of the current members of the NOSB to prohibit hydroponic systems that have an entirely water based substrate.”

Two NOSB members opposed the resolution because they preferred that the resolution include the following wording: “...it is the consensus of the current members of the NOSB to prohibit hydroponic systems that have an entirely water based substrate **or are wholly dependent on liquid fertility inputs.**”

Suggested language for a new definition to be added to §205.2 Terms defined. Hydroponics Definition: The production of normally terrestrial, vascular plants in nutrient-rich solutions, or in a medium of inert or biologically **recalcitrant** solid materials to which a nutrient solution is added.

The term “recalcitrant” is used by soil scientists to describe organic materials that are resistant to microbial degradation, but will degrade slowly over time. Today, plant-based materials – like coconut coir, wood shavings, and peat – are often used in place of inert materials for the solid matrix for hydroponics because they do not readily degrade (biologically recalcitrant).

The following table includes comments submitted to the NOSB for both the Nov 2016 and April 2017 meetings.

| | Support Spring 2017 Discussion Document Definitions (pro-soil) | Oppose Spring 2017 Discussion Document Definitions (pro-hydroponic) | Seeks Clarification |
|----------------------------------|---|--|---|
| Farmers/ Citizens | Fall 2016: 364 Spring 2017: 671 Cornucopia request for comment, Keep the Soil in Organic request for comment, Jeff Moyer, Dave Chapman ^e , Colehour Bondera, Eliot Coleman | Fall 2016: 237 (Including the trade association Coalition for Sustainable Organics form letter) Spring 2017: 266 | 4 (allow aqua, not hydro) Allow sprouts |
| Public Interest Groups | Cornucopia ^a , BP ^b , CFS ^c , NOC ^d , CR ^f , FDN ^g , Lopez Community Land Trust, RAFI ^h , OSGATA ⁱ , Demeter Association ^j , Michigan Organic Food and Farm Alliance | | |
| Elected officials | | | Bernie Sanders, (Senator) Peter Welch (Congress) |
| Input Suppliers | Adaptive Seeds | Sungro, Vertigro, Marine Materials, Scott’s Miracle Grow, Ocean Organics, Blue Planet Ecoponics Systems, International | |
| Wholesalers/ Distributors | Discovery Organics, PCC Natural Markets | PuraNatura, Driscolls, Wholesum Harvest, CEA Holdings, Naturipe Farms | |
| | | | |

| | | | |
|---|---|---|--|
| Trade Associations/ Industry Consultants | Organic Growers Alliance of the UK, Montana Organic Association, Eric Sideman Keep the Soil In Organic, Organic Research Associates, Expert Group for Technical Advice on Organic Farming (EGTOP), Ontario Greenhouse Vegetable Growers, Canadian Horticultural Council | Coalition for Sustainable Organics, Western Growers, Organic Produce Wholesalers Coalition, Organic Trade Association, Katherine DiMatteo, The Aquaponic and Hydroponic Organic Coalition, The University of Akron Research Foundation, Archi's Inst. for Sustainable Agriculture, AeroGenesis Incorporated, Organic Suppliers Advisory Council | |
| Certifiers/ Inspectors | MOFGA, NOFA, Steven Wisbaum, OEFFA | CCOF, Oregon Tilth, MOSA, Quality Certification Services | |

Notes:

- a. The Cornucopia Institute: We support the clear definitions in the Crops Subcommittee (CS) discussion document. We agree to add these terms to 7 CFR §205.105 as practices prohibited in organic production. These definitions are consistent with the scientific literature.
- b. Beyond Pesticides (BP): Hydroponics, aeroponics, bioponics and aquaponics methods should not be considered eligible for organic certification. Organic production depends upon the “Law of Return,” which together with the rule “Feed the soil, not the plant,” and the promotion of biodiversity, provide the ecological basis for organic systems. Hydroponic/aeroponic/bioponic/aquaponics systems are not consistent with these principles in organic production. Containerized culture may be eligible for organic certification under limited circumstances in which organic soil-building and other practices are used.
- c. Center for Food Safety (CFS): We agree with NOSB that systems that eliminate soil, do not root plants in solid organic matter, and rely 100% on liquid solutions for nutrient fortification are inconsistent with the organic certification program, which emphasizes practices that foster soil health and fertility. In the case of aeroponics and hydroponics, the NOSB’s definitions are appropriate and classify them as systems that remove biologically active solid matter entirely. More research is needed into the systems that qualify themselves under the term “aquaponic” to ensure that the definition captures the range of these systems. It is unclear at this time whether systems considered “aquaponic” use biologically active solid rooting media, including some soil, and rely on both solid and liquid nutrient amendments. We do not support creating an additional organic label to indicate products grown in hydroponic or container-based systems. If certain, stringent container-based systems are determined able to comply with OFPA and a standard for certifying these systems as organic is finalized through notice and comment, the products should carry the organic seal.
- d. National Organic Coalition (NOC): Hydroponics/aquaponics/aeroponics systems do not meet the letter or spirit of the OFPA and should not be allowed in organic production. Although there exists a continuum of methods used in greenhouses utilizing various “containers,” we believe that the distinction between the ends of the continuum—hydroponics/aquaponics/aeroponics and in-ground farming (whether in the open or under cover) is clear enough for the NOSB to vote “no” on whether hydroponics/aquaponics/aeroponics should be eligible to be certified organic. Some container production may approach the in-the-soil end of the continuum. A preferred situation would be where only in-ground production could be labeled organic. If any full-term, container crop production is allowed under the organic label, there must be clear distinctions, and it is NOC’s view that the differences need to be carefully examined before a type of container production reaches the level of meeting the basic principles of organic production and the spirit of the OFPA. The key principle has to do with management of the soil, which has to be the ultimate source of crop nutrients. NOC will have more detailed comments on container production in time for the NOSB 2017 fall meeting.
- e. Dave Chapman of Keep the Soil in Organic, hydroponics task force member, and Long Wind Farm owner: This debate has been further confused by the insistence of some lobbyists and producers that their production systems are “container grown” rather than “hydroponic”. What makes something hydroponic in the real world outside of this organic debate is how the fertility is

supplied to the plant, not whether or not there is biological activity. Every conventional hydroponic substrate has some biological activity, as does every conventional field soil.

- f. Consumer Reports (CR): We are not opposed to hydroponic food production, but we do not believe it should be labeled "organic."
- g. Food Democracy Now (FDN): There is no question that organic farming - going back over one hundred years - has always been a soilbased production system. Therefore, production systems which are not based in the soil can not be considered organic under the OFPA and therefore, must never be certified organic. In the strongest possible terms we urge that the USDA-National Organic Program should implement an immediate moratorium, correcting its serious error which has allowed the certification of hydroponic operations.
- h. Michael Sly of Rural Advancement Foundation International (RAFI): I strongly support the concerns of Dave Chapman and others regarding this matter and urge the board to not postpone action, to address this unfairness.
- i. Organic Seed Growers and Trade Association (OSGATA): The excerpt from the Rule Section (b) (1) under §6513 provides unambiguous clarity that hydroponic systems are foundationally incapable of fulfilling the requirement for careful soil management.
- j. Jim Fullmer of the Demeter Association USA: This month (October 2016) the National Oceanic and Atmospheric Administration (NOAA) reported that measured CO2 levels in the Earth's atmosphere reached the highest levels in 3 million years, exceeding 400 ppm, not temporarily but for ever. This happened over a very short period of time approximately 100 years) with direct relation to global industrialization and the practices that came with it. Even if we stopped all the practices that contributed to this calamity today there still will be 400 ppm in the atmosphere until something is done to aid in pulling it out.

Ancillary Substances in Cellulose – HS Proposal

| | Support Proposal | Oppose Proposal | Neutral/ Seeks Clarification |
|-----------------------------------|-------------------------|------------------------|---|
| Beyond Pesticides | | X _a | |
| Consumer Reports | | X _b | |
| Center for Food Safety | | X _c | |
| National Organic Coalition | | X _d | |

Notes:

- a. **Beyond Pesticides:** The Handling Subcommittee has not performed the review necessary to support this proposal. Some of the substances that it would allow are toxic in any amount. Therefore, the NOSB must reject this proposal. The other ancillary substances proposed must also be reviewed. The HS should bring to the NOSB a proposal to prohibit the ancillary substances “polyvinylidene, vinyl chloride,” kymene, and unspecified “resin.” The statement, “Any additional ancillaries that fall within one of the functional classes listed below do not need to be reviewed further in order to be used” should be removed from all proposals on ancillary substances.
- b. **Consumer Reports:** Some of the materials identified as ancillary substances in cellulose raise concerns, such as kymene and vinyl chloride. If these materials are indeed used as ingredients in cellulose, it means that vinyl chloride and kymene could appear as unlisted ingredients in organic foods containing cellulose. According to the MSDS for kymene, it is a hazardous substance that may cause cancer. Vinyl chloride is classified as Group 1 (carcinogenic to humans) by the International Agency for Research on Cancer. These materials may pose danger to humans, and their use in the production of organic foods should be reviewed. This is why we continue to argue that OFPA requires that *all* ingredients in certified organic foods must either be produced in accordance with the federal organic standards or must appear on the National List of Approved and Prohibited Substances. If the NOSB chooses not to take this approach, it should, at the very least, specify that kymene and vinyl chloride are not allowed as ancillary substances for cellulose in organic foods.
- c. **Center for Food Safety:** Ancillary substances must be reviewed against OFPA criteria by NOSB during the review of materials in which they are contained, taking a whole-formula approach that considers synergistic and cumulative effects of the known ancillary substances. NOSB has not conducted such a review for cellulose, and the ancillary substances proposed are not compatible with organic due to human health concerns (vinyl chloride and kymene) or the use of an inappropriately broad term (resin).
- d. **National Organic Coalition:** We applaud the HS for providing transparency into the ancillary substances used in cellulose, the list includes some substances that are toxic and should not be used in organic products. The presence of these materials on a list of materials used in organic products reveals problems with a process that identifies, but does not evaluate, ancillary substances. We stress the importance of thorough NOSB reviews of materials. The integrity of the organic label depends on the NOSB performing its role in evaluating substances as a gatekeeper for the National List. It is imperative that the NOSB develop a process for reviewing ancillary substances that allows the board and the public to evaluate hazards of the materials.

Attapulgitte- HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|---|
| Beyond Pesticides | | X _a | |

Notes:

- a. **Beyond Pesticides:** Given lack of support in 2015.

Bentonite- HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|------------------------------|-----------------------------|---|
| Beyond Pesticides | | X _a | |

Notes:

- a. Beyond Pesticides: Given lack of support in 2015.

Biodegradable biobased mulch film – CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|------------------------------|-----------------------------|---|
| The Cornucopia Institute | | | X _a |
| Beyond Pesticides | | X _b | |
| Center for Food Safety | | | X _c |
| National Organic Coalition | | | X _d |

Notes:

- a. The Cornucopia Institute: NOSB should reaffirm an earlier board decision that establishes the parameters for 100% biobased mulch. Considering the dearth of scientific data and the current lack of commercial availability of 100% biobased mulch, The Cornucopia Institute suggests that the board retains the listing for BBMF with an annotation that meets the standards of the law. The NOSB should reinforce the fundamental principles and safeguards of the NOSB’s Fall 2012 decision that was intended to protect against adverse environmental impacts, including adverse effects to soil ecology.
- b. Beyond Pesticides: The 2015 report from the Organic Materials Review Institute (OMRI) and the 2016 supplemental technical review by OMRI confirm what many critics said when biodegradable biobased bioplastic mulch (BBBM) was first proposed for the National List –BBBM is “not ready for prime time.” Biodegradable bioplastic mulch film and the associated definition should be removed from the regulations. Further research is needed before BBBM meeting OFPA criteria will be available. Furthermore, neither NOP nor the NOSB can weaken the requirement in OFPA that plastic mulch –bioplastic or other— be removed at the end of the growing season.
- c. Center for Food Safety: NOSB must reinforce for all stakeholders that only 100% biobased and biodegradable products comply with OFPA. This bar should not change even if no products currently on the market meet this standard.
- d. National Organic Coalition: Additional research is required, not only in regards to BBM that meet the OFPA criteria, but also into a standard that adequately measures the biodegradability of plastics buried in soil under diverse field soil conditions. This product is “not ready for primetime.”

Boric Acid – CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | | X _a |
| National Organic Coalition | X _b | | |

Notes:

- a. Beyond Pesticides: Although boric acid has long been considered a “least-toxic” pesticide when placed in traps as non-volatile bait or gel formulations that eliminate direct exposure, its use as a dust in structures can result in exposure and hazards for exposed people. With the challenging issues of health and environmental/mining impacts and available alternative materials and practices that may be less harmful, if boric acid remains on the National List, it should be further annotated, “for use only as bait in traps or in gel formulations.” Since the NOP has allowed a number of annotation proposals to go forward in tandem with sunset proposals, we suggest that we suggest that the sunset motion be considered with an annotation motion.
- b. National Organic Coalition: We support relisting with a suggested annotation change. With the challenging issues of health and environmental/mining impacts, if boric acid remains on the National List, it should be further annotated, “for use only as bait in traps or in gel formulations.”

BPA in Packaging - HS Discussion Document

| | Support Discussion Document | Oppose Discussion Document | Neutral/ Seeks Clarification |
|---------------------------------|------------------------------------|-----------------------------------|-------------------------------------|
| The Cornucopia Institute | X _a | | |
| Beyond Pesticides | X _b | | |
| Consumer Reports | X _c | | |
| Center for Food Safety | X _d | | |

Notes:

- a. The Cornucopia Institute: We are encouraged by the Handling Subcommittee’s request for information and we oppose the use of BPA in any product labeled ‘organic.’ Numerous peer-reviewed studies show that BPA is an endocrine-disrupting chemical and is linked to a multitude of adverse health effects, including cancer, obesity, diabetes, neurological and behavioral problems, and reproductive issues.
- b. Beyond Pesticides: Bisphenol A (BPA) is an endocrine disrupting chemical that is used in the liners of food cans, including those by some organic processors. It leaches into the food. BPA should be prohibited for use in organic processing, but the NOSB must investigate alternative can linings and determine which are safe.
- c. Consumer Reports: The Handling Subcommittee writes, “organic food should be produced in a way that minimizes exposure to toxic materials in any form.” We agree, and we appreciate the subcommittee’s work to develop a discussion document on the topic of bisphenol A (BPA) in packaging materials. We will not be submitting comments on this topic prior to the March 30 deadline, because we need more time to review the discussion document and develop our comments.
- d. Center for Food Safety: BPA is an endocrine disrupter and should not be used in organic food packaging, as it can migrate into food products and pose health risks to consumers. Many alternatives to BPA should similarly be prohibited due to health concerns from their migration into foods from the packaging, including BPS, nanomaterials, and ortho-phthalates. NOP’s recent policy memo on the prohibition of nanotechnology in organic does not go far enough to effectively eliminate nanomaterials from organic, as they may be petitioned for inclusion on the National List. In its investigation of packaging materials, NOSB should recommend that NOP correct this loophole and add nanotechnology to 205.105.

Carbon Dioxide – HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | X _a | | |
| National Organic Coalition | X _b | | |

Notes:

- a. Beyond Pesticides: Carbon dioxide is generally captured as a byproduct of other processes, so its release during organic handling is a delayed release rather than an increased release of a greenhouse gas. It is used in pest control to suffocate pests, to carbonate beverages, and in cooling or freezing.

Casings – HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | | X _a |

Notes:

- a. Beyond Pesticides: The evaluation of casings from processed intestines must take into consideration the use of pesticides in the non-organic production of corn and soybeans and ensure that GMO grains are not used in producing organic products. The NOSB must consider the availability of organic intestines for this purpose, as well as the potential availability of casings if the demand was enhanced by removal of this listing. The NOSB should discuss ways to encourage the availability of organic casings and add an expiration date as a way of incentivizing the development of an organic alternative.

Chlorhexidine – LS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | | X _a |
| National Organic Coalition | X _b | | |

Notes:

- a. Beyond Pesticides: Organic producers should not be countering resistance to medications (or pesticides) through introduction of another toxic chemical, particularly one that depends on chlorine chemistry. Beyond Pesticides does not object to the use of chlorhexidine “for surgical procedures conducted by a veterinarian.” However, the annotation, “Allowed for use as a teat dip when alternative germicidal agents and/or physical barriers have lost their effectiveness” should be removed. If the NOSB chooses this option, we suggest that the LS develop an annotation that could be considered with the sunset proposal.
- b. National Organic Coalition: Chlorhexidine should be relisted for use in surgical procedures. The NOSB should weigh evidence concerning its needs as a teat dip, given the findings of the technical review that natural materials are just as effective.

Chlorine Materials – HS/LS/CS 2019 Sunset

Calcium hypochlorite, Chlorine dioxide, Sodium hypochlorite

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|------------------------------|-----------------------------|---|
| Beyond Pesticides | | | X _a |

Notes:

- a. *Beyond Pesticides: This comment addresses calcium hypochlorite, chlorine dioxide, and sodium hypochlorite for crops; acidified sodium chlorite, calcium hypochlorite, chlorine dioxide, and sodium hypochlorite for handling; and calcium hypochlorite, chlorine dioxide, and sodium hypochlorite for livestock.*

To the extent possible, organic should be chlorine-free. Chlorine is hazardous in its production, transportation, storage, use, and disposal. EPA's Design for the Environment has identified safer viable alternatives for some or all uses, including other materials on the National List. It is time for the NOSB to update its thinking and approach to cleaners and disinfectants. Several steps need to be taken:

1. OFPA requires that materials on the National List be itemized “by specific use or application.” Justification of listing of chlorine materials requires that the NOSB identify the uses for which they are needed. Needs for cleaners, sanitizers, disinfectants, and sterilants must be distinguished.
2. Freedom from microbes is not always good. Not only is sterility often unnecessary, but it is also sometimes counterproductive because eliminating benign microbes can make room for spoilage organisms or pathogens.
3. Establishing the need for a “sanitizer” requires a demonstration that a certain degree of freedom from microbes is required. The NOSB must establish when microbes should be removed from what and the degree to which they must be removed.
4. Alternative practices and materials must be considered, such as those identified by technical reviews and EPA’s Safer Choice Program.
5. NOSB must examine the need for these materials in light of alternatives and hazards.
6. Chlorine compounds have long been identified as hazardous to humans and the environment. The NOSB, in reviewing the listings of these materials, must delve into the needs, alternatives, and hazards.

Clarifying “Emergency” for Use of Synthetic Parasiticides in Organic Livestock Production – LS Disc Doc

| | Support Discussion Document | Oppose Discussion Document | Neutral/ Seeks Clarification |
|-----------------------------------|------------------------------------|-----------------------------------|-------------------------------------|
| The Cornucopia Institute | X _a | | |
| Beyond Pesticides | X _b | | |
| Center for Food Safety | X _c | | |
| National Organic Coalition | X _d | | |

Notes:

- a. The Cornucopia Institute: There needs to be more examination of the withholding times and whether the dairy, meat, and fiber produced by livestock given synthetic parasiticides is free of those same chemicals or their components. In addition to the following comments, Cornucopia feels that when an animal is given synthetic parasiticides it should lose organic status.
- b. Beyond Pesticides: We suggest the following definition, which is an edited form of the definition suggested by NODPA: “A livestock emergency is an urgent, non-routine situation in which the organic system plan’s preventive measures and veterinary biologics are proven, by laboratory analysis and visual inspection, to be inadequate to prevent life - threatening illness or to alleviate pain and suffering . In such cases, a producer must administer the emergency treatment (§205.238(c)(7)). Organic certification will be retained provided, that, such treatments are allowed under § 205.603 and the organic system plan is changed to prevent a similar livestock emergency in individual animals or the whole herd/flock in future years as required under §205.238(a).”
- c. Center for Food Safety: Recommends using the definition of livestock emergency put forward by the Northeast Organic Dairy Producers Alliance (NODPA) (unedited).
- d. National Organic Coalition: A livestock emergency is an urgent, non-routine situation in which the organic system plan’s preventive measures and veterinary biologics are proven, by laboratory analysis and visual inspection, to be inadequate to prevent life-threatening illness or to alleviate pain and suffering. In such cases, a producer must administer the emergency treatment (§205.238(c)(7)). Organic certification will be retained provided that such treatments are allowed under §205.603 and the organic system plan is changed to prevent a similar livestock emergency in individual animals or the whole herd/flock in future years as required under §205.238(a). For further clarification, the organic system plan’s preventive measures should be defined through a hierarchy of management practices first, natural materials second, and approved synthetics third.

Copper Sulfate – LS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | | X _a |
| National Organic Coalition | | | X _b |

Notes:

- a. Beyond Pesticides (BP): Copper sulfate is used in foot baths and mixed with manure for spreading on fields for disposal. The listing should be annotated, “Substance must be used and disposed of in a manner that minimizes accumulation of copper in the soil, as shown by routine soil testing.” This is comparable to the annotation for copper sulfate in crops. If the NOSB chooses this option, we suggest that the LS develop an annotation that could be considered with the sunset proposal.
- b. National Organic Coalition: Support BP’s comment.

Copper Sulfate/Coppers, fixed – CS 2019 Sunset

| | Support | Oppose | Neutral/ Seeks Clarification |
|-----------------------------------|----------------|---------------|---|
| The Cornucopia Institute | | | X _a |
| Beyond Pesticides | | | X _b |
| Center for Food Safety | | | X _c |
| National Organic Coalition | X _d | | |

Notes:

- a. The Cornucopia Institute: We support the relisting of synthetic copper sulfate and fixed copper products, as **“restricted use” materials**, provided that copper products are used in a manner that minimizes copper accumulation in the soil, and **with the added annotation: no visible residue is allowed on harvested crops and use needs to document multiple alternative attempts to control target including in-field diversity.**
- b. Beyond Pesticides: The NOSB must not let another sunset review of copper materials pass without taking steps to comply with OFPA in itemizing, “by specific use or application,” the uses of copper. A Technical Review should enumerate and evaluate needs for copper materials in organic production. Since copper products are among the most hazardous materials for workers used in organic production and generate significant criticism of organic production, this is an appropriate place to stress the importance of appropriate Personal Protective Equipment and compliance with EPA’s Worker Protection Standard. We suggest this worker protection annotation, “Steps to meet worker protection standards must be documented in the Organic System Plan.” Since the NOP has allowed a number of annotation proposals to go forward in tandem with sunset proposals, we suggest that the sunset motion be considered with an annotation motion.
- c. Center for Food Safety: We support the relisting of copper sulfate/fixed coppers at this time, but urge the NOSB to recommend measures to ensure copper products are used only when absolutely necessary and in a manner consistent with organic. In particular, NOSB needs to undertake research aimed at providing a picture of when producers resort to copper use, the strategies employed prior to resorting to copper, and the amounts applied when used.
- d. National Organic Coalition: There is a need for the NOSB to weigh and balance concerns regarding the toxicity of copper; however, NOC is also mindful of the fact that, at this time, alternatives are not yet be available to address the many combinations of diseases and affected crops for which copper may be the only practical control. That is why we support renewing fixed coppers and copper sulfate on the National List while we simultaneously call for immediate, targeted research to identify management practices and less toxic alternative materials for addressing disease control in the wide range of crops produced by organic farmers.

Diatomaceous Earth – HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|------------------------------|-----------------------------|---|
| Beyond Pesticides | | | X _a |

Notes:

- a. Beyond Pesticides: Diatomaceous earth is in need of an up-to-date review of need, alternatives, and hazards of manufacturing and mining.

Eliminating the Incentive to Convert Native Ecosystems into Organic Crop Production - CACS Discussion Doc

| | Support Disc Doc | Oppose Disc Doc | Neutral/ Seeks Clarification |
|-----------------------------------|-----------------------------|----------------------------|---|
| Farmers/Citizens | 455 | | |
| The Cornucopia Institute | X _a | | |
| Beyond Pesticides | X _b | | |
| Consumer Reports | X _c | | |
| Center for Food Safety | X _d | | |
| National Organic Coalition | X _e | | |
| Wild Farm Alliance | X _f | | |

Notes:

- a. The Cornucopia Institute: A complete prohibition is the best way to prevent the conversion of high-value land and fragile ecosystems. However, using an eligibility period of five years would de-incentivize conversion of high-value lands.
- b. Beyond Pesticides: NOP’s three-year waiting period for transitioning to organic production serves a critical purpose and it should be retained. However, we urge NOSB to recognize that the conversion of high value conservation lands and fragile ecosystems is an unintended consequence of the requirement, and to develop regulatory language to prohibit such conversion. Protection of biodiversity cannot wait for the regulatory timetable, so we call upon NOSB and NOP to develop guidance, while simultaneously working on regulations. “High value conservation land” and “fragile ecosystems” are two separate concepts. Both classes of land should be protected. We support WFA’s definition of the former. NOP should recognize that habitat is already so fragmented that further destruction of natural lands threatens entire ecological communities.
- c. Consumer Reports: We agree that the conversion of native ecosystems to farmland can have negative impacts on biodiversity and the environment. There is an incentive to convert previously unproductive land, which has not been farmed and, therefore, has not been treated with prohibited chemicals, to organic farmland because it eliminates the three-year conversion period. We support the effort of the NOSB to address this important issue. However, we will not be submitting comments on this topic prior to the March 30 deadline, because we need more time to review the discussion document and develop our comments.
- d. Center for Food Safety: We appreciate the discussion document and the intent of NOSB. NOSB should identify ways to amend the regulations to discourage landowners from converting land to organic that should remain uncultivated, and recommend a framework to assist landowners and certifiers in determining when uncultivated land may be appropriate for conversion to organic and identifying strategies for converting that land in a manner that protects or enhances the existing ecosystem.
- e. National Organic Coalition: We support the Discussion Document and submitted brief comments as a placeholder for more in-depth comments to be made after the spring docket closes, when we can approach the subject with more time and thoughtful consideration. Several additional areas of consideration were suggested: 1) The definition of the land to be protected is paramount to the successful implementation of a policy to protect native ecosystems. 2) Methods for verifying the history of the land are important. 3) Creating a standard that can be applied with fairness and equality. See full comments for additional topics under each.
- f. Wild Farm Alliance: The term “High Conservation Value Areas” has international recognition and should be used instead of “fragile ecosystems.” A rule change is required. We recommend that land should not be eligible for five years between first requesting organic certification to the allowance of that ecosystem to be transformed to organic production. WFA provides suggested defined terms and NOP regulatory changes.

Glucose – LS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | X _a | | |
| National Organic Coalition | X | | |

Notes:

- a. Beyond Pesticides: Glucose should be relisted because of its importance in treatment and the absence of adverse effects.

Herbicides, soap-based – CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | X _a | |

Notes:

- a. Beyond Pesticides: Herbicidal soaps should be allowed to sunset because they do not meet the criteria for listing on the National List. They may harm many soil-dwelling organisms including insects, earthworms, and nematodes that are supportive of organic production. The annotation restricts its use to non-crop areas, but these areas should be sources of biodiversity that support the farm. Herbicidal soaps are unnecessary—several natural materials and alternative practices can be used instead. Herbicidal soaps are non-selective synthetic herbicides. The NOSB has generally found synthetic herbicides to be incompatible with organic practices.

Humic Acids– CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | X _a | |

Notes

- a. Beyond Pesticides: Synthetic humic acids present environmental hazards in extraction, are not essential, and are not compatible with organic production. Synthetic humic acids may play a role in the transition to organic, but are incompatible with organic practices and should not be used on certified organic farms. An annotation to the effect that “humic acid may be used in the transition to organic if accompanied by a plan for building soil that provides adequate nutrition through soil-building practices and organic inputs” would be acceptable. If the NOSB chooses this option, then we suggest that we suggest that the sunset motion be considered with an annotation motion.

Konjac Flour – HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | X _a | |

Notes:

- a. Beyond Pesticides: Konjac flour should be allowed to sunset because of the hazards of pesticides used in its culture and the availability of organic konjac as documented by the HS in 2015.

Lead salts – CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | X _a | | |

Notes:

- a. Beyond Pesticides: Although OFPA specifically prohibits the use of lead salts in organic crop production, and they are no longer registered for pesticidal use by EPA, good government requires that regulations be backed up by reference to legal criteria. Such justification should be provided for lead salts. The Crops Subcommittee should consult the *Toxicological Profile for Lead* prepared by the Agency for Toxic Substances and Disease Registry in preparing its justification document. Lead salts are highly toxic and persistent, bioconcentrate in plants and animals, and cause a number of toxic effects, including the impairment of neurological development in children. They should remain listed on §602 as prohibited in organic production.

Lidocaine – LS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|--------------------------|-------------------------|-------------------------------------|
| The Cornucopia Institute | X _a | | |
| Beyond Pesticides | X _b | | |
| National Organic Coalition | X _c | | |

Notes:

- a. The Cornucopia Institute: Lidocaine is a relatively safe, effective, widely available, local anesthetic used to reduce pain in an animal during veterinary surgical procedures or during dehorning. Potential toxicity is minimal when used appropriately. Safe and effective non-synthetic alternatives are not available.
- b. Beyond Pesticides: Lidocaine and procaine should be relisted (with the annotation added in 2015) because they support the humane treatment of animals in minor surgery and are rapidly cleared from the body.
- c. National Organic Coalition: NOC supports the relisting of lidocaine and procaine (with the annotation added in 2015) because they support the humane treatment of animals in minor surgery and are rapidly cleared from the body.

L-Methionine - HS Petitioned

| | Support Listing | Oppose Listing | Neutral/ Seeks Clarification |
|--------------------------|------------------------|-----------------------|---|
| Beyond Pesticides | | X _a | |
| Consumer Reports | | | X _b |

Notes:

- a. Beyond Pesticides: Infant and pediatric enteral soy formulas (and the synthetic and nonorganic additives that make them possible) do not meet the compatibility criterion for listing materials on the National List for use in products labeled “organic” or “100% organic” because they provide macronutrients in synthetic or nonorganic form. For those cases in which such a formula is necessary, support high quality formula labeled “made with organic soy” should be used.
- b. Consumer Reports: We are not opposed to adding L-methionine to the National List with the annotation, “For use in nutritionally complete pediatric enteral formulas based on soy protein.” L-methionine is an essential amino acid, and pediatric soy-based enteral formulas would be nutritionally deficient without it.

Magnesium Chloride – HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|---|
| Beyond Pesticides | | | X _a |

Notes:

- a. Beyond Pesticides: The HS should revisit the classification decision for magnesium chloride derived from sea water. If it is found to be nonsynthetic, then it should be petitioned for listing on §205.605(a) and removed from §205.605(b). The only use supported by comments is the use for tofu, so it should be annotated, “as a coagulant in making tofu.”

Marine Algae Listings on the NL – HS Proposal

| | Support Proposal | Oppose Proposal | Neutral/ Seeks Clarification |
|-----------------------------------|-------------------------|------------------------|---|
| Beyond Pesticides | X _a | | |
| Consumer Reports | X _b | | |
| Center for Food Safety | X _c | | |
| National Organic Coalition | X _d | | |

Notes:

- a. **Beyond Pesticides:** The HS proposal to specify the particular seaweeds used in aquatic plant listing on §205.605 and §205.606 should be adopted by the NOSB. The NOSB should also create criteria that prohibits use of marine algae that are threatened by overharvesting or whose harvest is ecologically disruptive.
- b. **Consumer Reports:** We support the effort to clarify and annotate the marine algae listings through use of Latin binomials. However, we do not support the first proposal, which only uses class names, and would therefore use identical annotations for agar-agar and carrageenan, which belong to the same class. Since the board voted to remove carrageenan from the National List, we are concerned that this proposal may lead to the continued use of carrageenan under a different name. Specifically, we urge the board to clarify that the annotations should specify the genus and species, where appropriate. For agar-agar, the annotation should specify “from genus Gelidium, Gracilaria, Pterocladia, or Gelidiella.”
- c. **Center for Food Safety:** The proposal to list specific seaweeds and marine plants used in the manufacture of National List materials should be adopted. However, the NOSB must clarify how it plans to ensure that marine plants that are incompatible with organic are effectively prohibited from use in organic. It is also not clear in the proposal why species or classes proposed for each listing are being proposed.
- d. **National Organic Coalition:** Latin binomials are not static, and many species have both a traditional Latin name and a modern Latin name by which they may be commonly referred. For greatest clarity, the NOSB should recommend amending listings with both names wherever relevant.

Marine Algae listings on the National List – CS Proposal

| | Support | Oppose | Neutral/ Seeks Clarification |
|-------------------------------|----------------|---------------|---|
| Beyond Pesticides | X _a | | |
| Center for Food Safety | X _b | | |

Notes:

- a. **Beyond Pesticides:** The CS proposal to specify the particular seaweeds used in the listing on §205.601 should be adopted by the NOSB. The NOSB should also create criteria that prohibits use of marine algae that are threatened by overharvesting or whose harvest is ecologically disruptive.
- b. **Center for Food Safety:** The proposal to list specific seaweeds and marine plants used in the manufacture of National List materials should be adopted. However, the NOSB must clarify how it plans to ensure that marine plants that are incompatible with organic are effectively prohibited from use in organic. It is also not clear in the proposal why species or classes proposed for each listing are being proposed.

Micronutrients (sulfates, carbonates, oxides, silicates of zinc, copper, iron, manganese, molybdenum, selenium, cobalt) – CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | | X _a |
| Center for Food Safety | | X _b | |
| National Organic Coalition | | | X _c |

Notes:

- a. **Beyond Pesticides:** This listing covers a number of materials, and the coverage by the existing technical review is uneven. It does not address the manufacturing (mining) impacts of these materials at all. The Crops Subcommittee should address each micronutrient, looking at manufacturing impacts, essentiality, and compatibility of each. The Crops Subcommittee must bring to the NOSB a proposal that is based on examining all of the allowed synthetic micronutrients and their chelating agents in light of OFPA criteria. Beyond Pesticides suggests that an annotation be added: “Soil deficiency must be demonstrated by verifiable site-specific documentation that is accompanied by a plan for building soil that provides adequate nutrition through soil-building practices and organic inputs.” Since the NOP has allowed a number of annotation proposals to go forward in tandem with sunset proposals, we suggest that the sunset motion be considered with an annotation motion.
- b. **Center for Food Safety:** We oppose the listing of micronutrients on the basis that it is a categorical listing that does not provide specificity on the exact materials that are allowed for use in organic for this purpose. CFS does not oppose the use of micronutrients in organic, but requests that the categorical listing be removed and individual materials be petitioned and subject to the full OFPA review process before being individually re-listed, if approved by NOSB.
- c. **National Organic Coalition:** In 2015, the NOSB voted to replace the wording “Soil deficiency must be documented by testing” with “Deficiency must be documented.” The regulation has not been changed to reflect that recommendation. NOC would like to reiterate our support of that recommendation.

Nitrogen – HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | X _a | | |

Notes:

- a. **Beyond Pesticides:** Molecular nitrogen (N₂) is relatively inert and is not a greenhouse gas. It is important in food handling in replacing oxygen in oil and food containers and for quick freezing.

Oxytocin – LS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|--------------------------|-------------------------|---|
| Beyond Pesticides | X _a | | |
| National Organic Coalition | X _b | | |

Notes:

- a. Beyond Pesticides: Oxytocin should be relisted with the current annotation that limits its use to post parturition therapeutic applications. However, some comments in 2015 indicated that it was misused, to help cows let down their milk. To give guidance to certifiers and producers, the NOSB should reinforce the limitation in its recommendation.
- b. National Organic Coalition: Oxytocin should be relisted with the current annotation that limits its use to post parturition therapeutic applications. However, some comments in 2015 indicated that it was misused to help cows let down their milk. **To give guidance to certifiers and producers, the NOSB should reinforce the limitation in its recommendation.**

Pectin – HS 2019 Sunset **Non-amidated Forms Only**

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|---|
| Beyond Pesticides | | X _a | |

Notes:

- a. Beyond Pesticides: A listing on §205.606 should be limited to high methoxyl pectin (HMP), which is extracted from citrus peel and apple pomace. In reviewing the impact of the manufacture of HMP, the HS must consider the impacts of raising the non-organic crops used to produce it. Since low methoxyl pectin (LMP) is synthetic because it is the result of a chemical process that demethylates high methoxyl pectin, it should be delisted and considered for listing on §205.605(b).

Personnel Performance Evaluations of Inspectors (NOP 2027) – CACS Proposal

| | Support | Oppose | Neutral/ Seeks Clarification |
|-----------------------------------|----------------|----------------|---|
| The Cornucopia Institute | | | X _a |
| Beyond Pesticides | | | X _b |
| Center for Food Safety | | X _c | |
| National Organic Coalition | | | X _d |

Notes:

- a. The Cornucopia Institute: We support the CACS proposal for field review over inspectors once per three years—with some global concerns regarding the performance of contract and employed inspectors.
- b. Beyond Pesticides: We believe that performance evaluations of inspectors are necessary to maintain the public trust in the organic label and assure that inspections are accurate, but disagree with the current requirement for on-site, or field inspections for “every inspector, every year” portion of the rule. Instead, we recommend an updated model for on-site evaluations which prioritizes evaluating novice inspectors or inspectors who require the need for additional evaluations based on past-reviews. For certifiers who do not fall into either of these categories, allowing for an evaluation cycle timeframe of three years would remove the burdens that have been identified by certifying bodies and others. We also believe that this is a requirement that cannot be adopted unilaterally by NOP with public notice and comment procedures.
- c. Center for Food Safety: NOP 2027 and the proposed changes must be issued through notice and comment because they constitute legally binding requirements that necessitate rulemaking. Such changes cannot be made through Guidance. NOSB must not move forward with the proposal and instead recommend that NOP revoke NOP 2027 and issue the rule through notice and comment.
- d. National Organic Coalition: We understand that the NOP has re-issued NOP 2027 on March 6, 2017; however, this new instruction document lacks several of the key NOSB recommendations. While we appreciate the inclusion of a risk-based in-field evaluation approach for inspectors incorporated into 3.2(b), we strongly support other NOSB recommendations and would like to see NOP 2027 updated to include those, as well.

Potassium Acid Tartrate – HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|------------------------------|-----------------------------|---|
| Beyond Pesticides | | | X _a |

Notes:

- a. Beyond Pesticides: Although cream of tartar (potassium acid tartrate) appears to be a useful ingredient that presents few hazards, it appears to be a nonsynthetic material that does not belong on §205.605(b). It is an ingredient in many recipes that seems to be absent in many kitchens, so cooks have learned to do without it. The HS should revisit the classification of potassium acid tartrate and investigate the possibility of encouraging its production from organic grapes.

Procaine – LS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|--------------------------|-------------------------|-------------------------------------|
| The Cornucopia Institute | | X _a | |
| Beyond Pesticides | X _b | | |
| National Organic Coalition | X _c | | |

Notes:

- a. The Cornucopia Institute: Procaine is not as effective as lidocaine. Procaine is not widely available, except in combination with the antibiotic penicillin, which is not allowed for use in organic livestock production. There is no benefit to using procaine vs. lidocaine, so having it on the National List likely only creates confusion.
- b. Beyond Pesticides: Lidocaine and procaine should be relisted (with the annotation added in 2015) because they support the humane treatment of animals in minor surgery and are rapidly cleared from the body.
- c. National Organic Coalition: NOC supports the relisting of lidocaine and procaine (with the annotation added in 2015) because they support the humane treatment of animals in minor surgery and are rapidly cleared from the body.

Short DNA Tracers – HS Petitioned

| | Support Listing | Oppose Listing | Neutral/ Seeks Clarification |
|-----------------------------------|------------------------|-----------------------|-------------------------------------|
| Beyond Pesticides | | X _a | |
| Consumer Reports | | X _b | |
| Center for Food Safety | | X _c | |
| National Organic Coalition | | X _d | |

Notes:

- a. Beyond Pesticides: The petition for short DNA tracers should be rejected because they fit the definition of excluded methods, there is not sufficient evidence of no harm to humans and the environment, there is no need, and they are not compatible with organic production and handling.
- b. Consumer Reports: We urge the board to reject the petition to add short DNA tracers to the National List because they were created using excluded methods. Short DNA tracers also do not meet OFPA criteria because they are not essential and, potentially, for raising environmental and human health concerns.
- c. Center for Food Safety: Short DNA tracers meet the definition of an excluded method and the petition should be rejected. They are also not essential.
- d. National Organic Coalition: Opposes based on short DNA tracers being created using excluded methods and do not meet the OFPA criterion of essentiality. NOC supports the need for a verification system to strengthen organic integrity. NOC requests that the CACS take up this issue by adding the issue of Certification for Exempt Handlers to their Workplan.

Sodium Carbonate – HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|------------------------------|-----------------------------|---|
| Beyond Pesticides | | | X _a |

Notes:

- a. Beyond Pesticides: Sodium carbonate is in need of an up-to-date review of necessity, alternatives, and hazards of manufacturing and mining.

Sodium Phosphates – HS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|------------------------------|-----------------------------|---|
| Beyond Pesticides | | X _a | |
| Consumer Reports | | X _b | |
| National Organic Coalition | | X _c | |

Notes:

- a. Beyond Pesticides: The NOSB should seek to eliminate the addition of inorganic phosphates to organic food. Sodium phosphates are especially problematic because they add both sodium and phosphate –both of which are oversupplied in American diets. If there are particular uses of sodium phosphate that are essential, then the Handling Subcommittee should propose an annotation limiting them to those uses, to move parallel to the sunset motion.
- b. Consumer Reports: We do not support the relisting of sodium phosphate, due to human health concerns and a lack of essentiality. We noted in those comments the recent findings that a high intake of phosphorus is associated with negative impacts on bone health, kidney health, and heart health. Research also shows that phosphate food additives are more readily absorbed during digestion and lead to a higher phosphorus load, compared with phosphorus found naturally as a component of foods. No single, isolated phosphate food additive, including sodium phosphate, can be implicated as an isolated risk factor; rather, it is the widespread use of phosphate food additives that gives rise to human health concerns. Phosphate food additives, as a category, fail to meet the human health criterion in OFPA. Each individual phosphate food additive, therefore, should be reviewed on the basis of essentiality in organic food production. If a product can be made without a phosphate food additive, it is not essential. The prohibitions on sodium phosphate in European, Japanese, Codex, and IFOAM standards strongly suggest that sodium phosphate is not essential in the production of organic foods.
- c. National Organic Coalition: Do not support due to human health concerns and lack of essentiality. Phosphate food additives as a category fail to meet the human health criterion in OFPA, and each individual phosphate food additive should therefore be reviewed on the basis of essentiality in organic food production. The prohibition on sodium phosphate in European, Japanese, Codex, and IFOAM standards strongly suggests that sodium phosphate is not essential in the production of organic foods.

Soluble Boron Products– CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | | X _a |
| National Organic Coalition | | | X _b |

Notes:

- a. Beyond Pesticides: See micronutrients.
- b. National Organic Coalition: See micronutrients.

Sticky Traps/Barriers - CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | | X _a |

Notes:

- a. Beyond Pesticides: Like a number of other materials used for insect control, sticky traps suffer from the shortcoming of having the potential to kill non-target organisms. Most are non-specific and kill non-target insects, spiders, mites, reptiles, and amphibians, but can be used in such a way that the likelihood of trapping non-target animals is low. The CS should explore the possibility of an annotation that ensures the targeted use of these traps, such as “Must be used in a way that prevents the capture of non-target animals.” Since the NOP has allowed a number of annotation proposals to go forward in tandem with sunset proposals, we suggest that the sunset motion be considered with an annotation motion.

Strengthening the Organic Seed Guidance – CS Proposal

| | Support | Oppose | Neutral/ Seeks Clarification |
|-----------------------------------|----------------|---------------|---|
| Beyond Pesticides | X _a | | X _a |
| Center for Food Safety | X _b | | X _b |
| National Organic Coalition | | | X _c |

Notes:

- a. **Beyond Pesticides:** We support the proposals made by the Crops Subcommittee. In addition, the absolute prohibition on non-organic seeds that applies to sprouts should also apply to other crops not grown in soil, like microgreens; Perennials grown as annuals should be treated as perennials in the first year of growth, which would prohibit growers from selling the products of non-organically produced plants as organic and would promote the use of organically grown plants; buyers must become part of the process so that they do not inadvertently promote the purchase of non-organically produced seeds and planting stock; and guidance must give positive guidance towards helping growers and certifiers locate organically grown seeds and planting stock. The NOP, certifiers, growers, and handlers should all adopt a goal of 100% organic seeds and planting stock.
- b. **Center for Food Safety:** We support the proposed change to the organic regulations contained in the proposal, as well as many of the proposed changes to the organic seed Guidance. However, we do not support the proposed language that would be 4.1.3d of the Guidance, allowing for consideration of GMO contamination to be used as justification for sourcing non-organic seed. Existing mechanisms to prevent contamination must be followed, and mechanisms should be further improved. However, using the risk of contamination as justification for not selecting organic seed is not an appropriate mechanisms for addressing contamination issues.concerns and could create a disincentive to using organic seed.
- c. **National Organic Coalition:** We thank the Crops Subcommittee (CS) for the good work done on the Strengthening the Organic Seed Guidance (NOP 5029) Proposal. We support the proposed regulatory change coupled with stronger guidance for certifiers; however, we feel there is still work to be done. Certifier and inspector trainings: NOC encourages the NOP to regularly include organic seed topics in both national and regional certifier trainings. Handlers purchasing seed for contract growers: In 2013, the NOP missed an opportunity to have a full line of certification through the handling chain for seeds when they noted that handlers purchasing seed for contractual purposes are not subject to the seed requirement. NOC urges the NOP to address this loophole. Uncertified seed dealers: Uncertified seed dealers are held one step away from accountability with regard to completing and documenting seed searches on behalf of producers; seed dealers should be required to be certified.

Tobacco dust (nicotine sulfate) – CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|------------------------------|-----------------------------|---|
| Beyond Pesticides | X _a | | |

Notes:

- a. **Beyond Pesticides:** In 2015, the decision to relist tobacco dust (nicotine sulfate) was backed up by research relating to OFPA criteria (i.e., a checklist). Tobacco dust/nicotine sulfate is very toxic. The production of tobacco requires high inputs of fertilizer and pesticides and results in water pollution. The registration of the last remaining nicotine sulfate pesticide was cancelled in 2013, and nicotine sulfate is no longer available for sale in the U.S. It should remain on §602 to discourage use of homemade tobacco dust or use on imported products.

Tocopherols – HS Proposal

Annotation change at §205.605(b) of the National List

| | Support Proposal | Oppose Proposal | Neutral/ Seeks Clarification |
|-----------------------------------|-------------------------|------------------------|-------------------------------------|
| The Cornucopia Institute | | | X _a |
| Beyond Pesticides | | | X _b |
| National Organic Coalition | X _c | | |

Notes:

- a. The Cornucopia Institute: We recommend the removal of tocopherols from §205.605(b) and a new listing on §205.605(a). However, since the removal from §205.605(b) is not on the agenda, we recommend the **following modification to the proposed annotation and strongly recommend the addition of an expiration date** on this listing to incentivize the increase in the commercial availability of natural and organic tocopherols: §205.605(b) **Tocopherols – derived from GMO-free plant oils and extracted without synthetic solvents. Non-synthetic or organic tocopherols are to be used when commercially available.**
- b. Beyond Pesticides: In light of evidence that nonsynthetic tocopherols are available, the HS is considering listing tocopherols as allowed nonsynthetics on §205.605(a). However, for this meeting, the HS proposes to hold off on adding tocopherols to §205.605(a) until it can collect public comment. Meanwhile, the HS passed a motion to change the annotation for tocopherols listed at §205.605(b) of the National List to “Derived from plant oils. Non-synthetic or organic tocopherols are to be used when commercially available.” While it makes sense to limit use of synthetic tocopherols, and give preference to nonsynthetic or organic forms, nonsynthetic tocopherols are not currently listed on §205.605(a), so this proposal is untimely.
- c. National Organic Coalition: We support the annotation change to synthetic tocopherols at §205.605(b), as well as separating the nonsynthetic tocopherol listing out at §205.605(a) to encourage future production and removal of the synthetic form from the National List. While it makes sense to limit the use of synthetic tocopherols through the annotation change, until nonsynthetic tocopherols are listed at §205.605(a), this annotation change may cause confusion.

Tolazoline – LS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|-----------------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | X _a | | |
| National Organic Coalition | X _b | | |

Notes:

- a. Beyond Pesticides (BP): Xylazine and tolazine, which are always used together, should be relisted for the rare cases in which they are needed. However, the NOSB should examine the allowance of off-label uses of veterinary medicines and the question of how organic integrity can be protected in light of a system (FDA’s) that does not require testing to enter the marketplace.
- b. National Organic Coalition: Support BP’s comment.

Vitamin B1 – CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | X _a | |

Notes:

- a. Beyond Pesticides: Supports the sunseting of vitamins B1, C, and E in crop production. The vitamins may be produced by genetically engineered organisms, and the technical review finds them ineffective for the purposes for which they are used, listing alternative substances for vitamin B1 and alternative practices for all three.

Vitamin C – CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | X _a | |

Notes:

- a. Beyond Pesticides: Supports the sunseting of vitamins B1, C, and E in crop production. The vitamins may be produced by genetically engineered organisms, and the technical review finds them ineffective for the purposes for which they are used, listing alternative substances for vitamin B1 and alternative practices for all three.

Vitamin E – CS 2019 Sunset

| | Support Relisting | Oppose Relisting | Neutral/ Seeks Clarification |
|--------------------------|--------------------------|-------------------------|-------------------------------------|
| Beyond Pesticides | | X _a | |

Notes:

- a. Beyond Pesticides: Supports the sunseting of vitamins B1, C, and E in crop production. The vitamins may be produced by genetically engineered organisms, and the technical review finds them ineffective for the purposes for which they are used, listing alternative substances for vitamin B1 and alternative practices for all three.