

Summary of Beyond Pesticides Comments to Fall 2017 NOSB Meeting

Since some of the issues below are discussion documents or issues that are not on the docket, we indicate with "**ACTION ITEM!**" those items on which the NOSB is scheduled to vote.

Compliance, Accreditation, and Certification (CACS) Subcommittee Issues

ACTION ITEM! Eliminating the Incentive to Convert Native Ecosystems into Organic Crop Production

The proposal must be revised –send it back to the CACS.

Unfortunately, the legal requirement to avoid the use of prohibited substances for three years before land can be certified organic produces an incentive to convert unfarmed land to organic farms. We support the intention of the subcommittee proposal to incentivize the transition to organic production of lands that have had prohibited materials applied, while minimizing the loss of lands with important habitats from conversion. These lands will be necessary to support declining and rare species today and a hundred years from now, when there will be much less available due to increased human populations and climate change. We support the following language:

A site supporting a native ecosystem cannot be certified for organic production as provided for under this regulation for a period of 10 years from the date of conversion.

Native ecosystems retain dominant and characteristic species. The composition of species reflects spontaneous natural processes, such as biogeography (e.g. dispersal of plants and animals), the geophysical constraints (e.g. soil type), and natural disturbance regimes (e.g. wind, fire, and water flow). On land with natural vegetation, any past human influences are not readily recognized in the field. For semi-natural vegetation, past human influences may have significantly altered vegetation composition or structure over 50-100 years ago but these have recovered. Sites will tend to have not been previously cultivated, cleared, drained or otherwise irrevocably altered.

Click here to see Beyond Pesticides' comments.

ACTION ITEM! Exempt/Uncertified Handler and Brokers

The proposal should be revised in view of the fact that highly toxic fumigants used in conventional facilities penetrate packaging materials.

We generally support the goal of strengthening audit trails of organic products by further clarifying what operations are excluded from certification. However, the assumption that packaged goods will maintain their organic integrity under conventional handling is flawed. Fumigants used in conventional warehouses and other facilities are highly toxic and penetrate packaging materials. Therefore, handlers who handle only packaged organic goods should not be excluded from certification.

Click here to see Beyond Pesticides' comments.

Crops Subcommittee (CS) Issues

Petitions

ACTION ITEM! Fatty Alcohols (octanol/decantol mix)

Beyond Pesticides opposes this petition.

This petition should be denied because fatty alcohols pose health and environmental hazards, and are not essential to or consistent with organic production. They are registered and labelled only for tobacco production in conventional agriculture.

See Beyond Pesticides' comments here.

ACTION ITEM! Anaerobic Digestate

Beyond Pesticides opposes this petition.

We oppose the petition for anaerobic digestate because it is not essential and poses environmental and health hazards. The health and environmental problems associated with its use have not been thoroughly investigated. If the NOSB chooses to go forward with listing this material, it must do so with an annotation that limits the feedstocks and processes used to protect farmers and consumers, and only in concert with the development of guidance to avoid contaminated inputs into organic agriculture.

See Beyond Pesticides' comments here.

Sunset

ACTION ITEM! Chlorine Materials: Calcium hypochlorite, chlorine dioxide, sodium hypochlorite To the extent possible, organic should be chlorine-free. A comprehensive review of sanitizers is needed to determine which uses of chlorine materials are essential.

To the extent that organic production requires a disinfectant other than the level of residual in finished drinking water, the NOSB should be looking at non-chlorine alternatives. We do not believe that organic producers should have to filter chlorine out of the tap water they use for irrigating, cleaning equipment, washing vegetables, or cleaning food-contact surfaces. But they should not be adding more chlorine. Organic production and handling should be, to the extent possible, chlorine-free. 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. The need for cleaners, sanitizers, disinfectants, and sterilants must be distinguished. (See our comments on sanitizers.)

ACTION ITEM! Herbicides, soap-based

This material should not be relisted.

Herbicidal soaps should be allowed to sunset because they do not meet the criteria for listing on the National List. Herbicidal soaps harm the ecosystem and aquatic organisms. They are not essential, and are not compatible with organic production. If the NOSB decides to relist herbicidal soaps, it should clarify the confusion over ammonium-based soaps for use as a large animal repellent only, and allow no contact with soil or the edible portion of crop.

Click here to see Beyond Pesticides' comments.

ACTION ITEM! Biodegradable biobased mulch film

This material should not be relisted.

Biodegradable biobased bioplastic mulch film (BBBM) that is currently available in the market does not meet the standards of the organic statute and regulations. Therefore, NOSB action is required to reaffirm an earlier board decision that establishes the parameters for 100% biobased mulch. With new scientific information having emerged since BBBM was originally petitioned, the NOSB has a duty to further strengthen the restrictions on this material's use. The NOSB should promote ways of meeting the needs served by plastic mulches for weed control that are more compatible with organic production. We urge the delisting of BBBM.

Click here to see Beyond Pesticides' comments

ACTION ITEM! Boric acid

Boric acid should be relisted, but the CS should commit to considering an annotation.

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 its use as a dust in structures can result in exposure and hazards for exposed people. We urge that consideration of an annotation to the listing be placed on the CS work agenda.

Click here to see Beyond Pesticides' comments

ACTION ITEM! Sticky traps/barriers

Sticky traps and barriers should be relisted, but the CS should commit to considering an annotation.

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. The sticky coating may contain petroleum distillates, and the traps may contain volatile attractants. 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 CS has not proposed an annotation at this meeting, we urge that consideration of an annotation to the listing be placed on the CS work agenda.

ACTION ITEM! Coppers, Sulfate and Coppers, fixed

Coppers should be relisted, but the CS should commit to a review of their needs and the development of a worker protection annotation.

The NOSB should request a Technical Review to enumerate and evaluate specific use patterns for copper materials in organic production. We ask that the NOSB recommend the inclusion of language to protect farmworkers, farmers, and other users in the listings for copper products. Since copper products are among the most hazardous materials for workers used in organic production, and one that generates significant criticism of organic production, the NOSB must 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."

Click here to see Beyond Pesticides' comments

ACTION ITEM! Humic Acids

Humic acids should be relisted, but the CS should commit to developing an annotation.

Humic acids present environmental hazards in extraction, are not essential, and are not compatible with organic production. Those humic acids on the National List do not meet the criteria under OFPA, and should be delisted. Synthetic humic acids may play a role in the transition to organic, but should not be used on certified organic farms and certainly not on a routine basis. An annotation to the effect that "humic acids 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. Since the CS has not proposed an annotation at this meeting, we urge that consideration of an annotation to the listing be placed on the CS work agenda.

Click here to see Beyond Pesticides' comments

ACTION ITEM! Micronutrients: Soluble Boron Products; Sulfates, Carbonates, Oxides, or Silicates of Zinc, Copper, Iron, Manganese, Molybdenum, Selenium, and Cobalt

Beyond Pesticides opposes the relisting of micronutrients without a commitment to examine each of the allowed synthetic micronutrients and its chelating agents in light of OFPA criteria.

The Crops Subcommittee must bring to the NOSB a proposal that is based on examining each of the allowed synthetic micronutrients and their chelating agents in light of OFPA criteria. Synthetic micronutrients pose hazards for humans and the environment. If synthetic micronutrients are to be used at all, we suggest 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 CS has not proposed an annotation at this meeting, we urge that consideration of an annotation to the listing be placed on the CS work agenda.

Click here to see Beyond Pesticides' comments

ACTION ITEM! Vitamins B1, C, and E

Beyond Pesticides opposes the relisting of these materials.

We support the sunsetting of synthetic vitamins B1, C, and E in crop production. The vitamins may be produced by genetically engineered organisms, and a new Technical Report finds them ineffective for the purposes for which they are used, listing alternative substances for vitamin B1 and alternative practices for all three.

Click here to see Beyond Pesticides' comments

ACTION ITEM! Lead Salts (Prohibited)

Beyond Pesticides supports the relisting of lead salts on §602.

Lead salts should remain on §602. OFPA specifically prohibits the use of lead salts in organic crop production. They 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. Lead salts are no longer registered for pesticidal use by EPA.

Click here to see Beyond Pesticides' comments

ACTION ITEM! Tobacco Dust (Nicotine Sulfate, Prohibited)

Beyond Pesticides supports the relisting of tobacco dust on §602.

Tobacco Dust/Nicotine sulfate is an extremely toxic pesticide that is no longer available in the United States. The production of tobacco uses high inputs of fertilizer and pesticides and results in water pollution. It should remain on §602 to discourage use of homemade tobacco dust or use on imported products.

Click here to see Beyond Pesticides' comments

substances are not used in organic production.

Non-Materials Issues and Discussion Documents

ACTION ITEM! Strengthen and Clarify the Requirements for the Use of Organic Seed
Beyond Pesticides supports a rule change to the seed practice standard to require a demonstrable
improvement over time until 100% organic seed use is achieved, and strengthening the guidance in ways
that are consistent with the existing rule to ensure that plants that have been treated with prohibited

NOP's broad exemption allowing the use of conventionally produced seed maintains inconsistency in the enforcement of organic standards. Enforcement must be a first step to strengthening the organic seed requirement –certifiers must enforce consistent and uniform adherence to the present organic seed requirements. We support seeking a rule change to the seed practice standard §205.204 to require a demonstrable improvement over time until 100% organic seed use is achieved, and strengthening the guidance NOP 5029 in ways that are consistent with the existing rule. Plants that have been treated with prohibited substances should not be used in organic production. This includes, for example, plants grown in fumigated soil or from seeds treated with neonicotinoid pesticides.

ACTION ITEM! Hydroponics/Bioponics, Container and Greenhouse Production

Beyond Pesticides supports the CS proposals for prohibiting hydroponics and delineating acceptable practices for organic containers.

We support the view that hydroponic, aeroponic, or aquaponic operations should not be considered eligible for organic certification. Organic production is soil-based and is defined by principles concerning the growers' relationship to the soil. The "Law of Return," the rule "Feed the soil, not the plant," and the promotion of biodiversity, provide the ecological basis for organic production. The Law of Return says that we must return to the soil what we take from the soil. The dictum to "Feed the soil, not the plant" reminds us that the soil is a living superorganism that supports plant life as part of an ecological community. Finally, biological diversity is important to the health of natural ecosystems and agroecosystems. Biodiversity promotes balance, which protects farms from outbreaks of damaging insects and disease. It supports the health of the soil through the progression of the seasons and stresses associated with weather and farming. It supports our health by offering a diversity of foods.

Containerized culture may be eligible for organic certification under limited circumstances in which organic soil-building and other organic practices are used. These are essentially the same practices that would be required for growing in permanent beds in the soil.

We support the CS proposals for prohibiting hydroponics and delineating acceptable practices for organic containers.

Click here to see Beyond Pesticides' comments

Newspaper and Other Paper

A recent Technical Review raises questions about the use of newspaper and other paper that require further attention.

As a result of the now common use of colored inks in newspaper and the shift to soy-based inks, we have asked that the NOSB examine the current status of paper that might be used in organic production. Newspaper or other recycled paper without glossy or colored inks is currently allowed as mulch and 205.601(c) as a compost feedstock. The Technical Review reveals toxic chemicals used in the various glosses, coatings, and laminates that are applied to 'glossy' paper. Likewise, formulations vary widely as various elemental heavy metal compounds are used as pigments in certain colored inks including mercury, lead chromate ("chrome yellow"), cadmium sulfide ("cadmium yellow"), and others. The U.S. and some other countries have banned lead and hexavalent chromium from pigments in food grade packaging, but not other uses. Inks, including black inks and soy inks, contain compounds that persist in the environment. The Technical Review raises concerns about paper additives in addition to inks and glosses, and it is not easy to determine which paper will have acceptable contents for organic growers. We urge the CS to keep this on its work agenda in order to address some of these issues.

Click here to see Beyond Pesticides' comments.

Important Issues Not on the CS Agenda

"Inerts" Annotation Change, Prohibition of NPEs in "Inerts"

There has be unconscionable delay in implementing the NOSB's recommendations on "inerts."

"Inert" ingredients frequently compose as much as 99% of pesticide products. So-called "inert" ingredients are not inert, and are not disclosed to users or others who may be exposed. Due to NOSB scrutiny of active ingredients "inert" ingredients may be the most hazardous ingredients in pesticide products used in organic production. We urge the NOSB to insist that NOP move forward quickly with implementation of the NOSB recommendations on inert ingredients. Allowing the current lack of movement to persist raises serious compliance issues and threatens the integrity of the USDA organic label.

Click here to see Beyond Pesticides' comments

Click here to see the full report referenced in Beyond Pesticides' comments

Prohibition of NPEs - inerts annotation

Nonylphenol ethoxylates (NPEs) are toxic endocrine disruptors that do not belong in organic production.

The NOSB should not allow continued delays in evaluating NPEs. NP and NPEs are highly toxic to fish, aquatic invertebrates, and aquatic plants. They are also estrogenic with significant quantities of direct discharges of NPEs finding their way into surface water from agricultural fields. Organic producers should be leading the way in environmental protection and regeneration. The use of toxic and endocrine-disrupting materials like NPEs is clearly inconsistent with *The Principles of Organic Production and Handling*. EPA has identified alternatives to NPEs, and it is time for the NOSB and National Organic Program to banish these harmful substances.

Click here to see Beyond Pesticides' comments

Handling Subcommittee (HS) Issues

Sunset

ACTION ITEM! Attapulgite 205.605(a)

There was no support for relisting Attapulgite in 2015. Given the lack of interest, it should be allowed to sunset.

See Beyond Pesticides' comments here

ACTION ITEM! Bentonite 205.605(a)

Beyond Pesticides does not oppose the relisting of bentonite.

Bentonite is used for filtering orange juice, oils, and wines. It is in need of an up-to-date review of need, alternatives, and hazards of manufacturing and mining. We do not oppose the relisting of bentonite.

See Beyond Pesticides' comments here

ACTION ITEM! Diatomaceous earth - food filtering only 205.605(a)

Beyond Pesticides does not oppose the relisting of diatomaceous earth.

Applications of Diatomaceous earth include processing of vinegar, sugar, and maple syrup processing. It is in need of an up-to-date review of need, alternatives, and hazards of manufacturing and mining. We do not oppose the relisting of diatomaceous earth.

See Beyond Pesticides' comments here

ACTION ITEM! Nitrogen 205.605(a)

Beyond Pesticides supports the relisting of nitrogen.

Molecular nitrogen (N_2) is relatively inert atmospheric gas and is not a greenhouse gas. Liquid nitrogen is used in cryogenic cooling/freezing in the frozen food industry, and nitrogen gas is used to displace oxygen in containers to prevent spoilage (oxidation). We support the relisting of nitrogen.

See Beyond Pesticides' comments here

ACTION ITEM! Sodium carbonate 205.605(a)

Beyond Pesticides does not oppose the relisting of sodium carbonate, but urges the NOSB to propose an annotation clarifying the synthetic and nonsynthetic classification.

Sodium carbonate is used as a pH control agent in the production of organic starches where other pH control agents, such as hydrochloric acid, sulfuric acid, and sodium hydroxide are not approved. However, sodium carbonate is caustic and corrosive, presenting a hazard of serious eye damage, acute toxicity through inhalation, and respiratory tract irritation. The Handling Subcommittee should propose an annotation clarifying the synthetic and nonsynthetic classification of sodium carbonate. Since the HS has not proposed an annotation at this meeting, we urge that consideration of an annotation to the listing be placed on the HS work agenda.

See Beyond Pesticides' comments here

ACTION ITEM! Chlorine materials 205.605(b): Calcium hypochlorite, chlorine dioxide, sodium hypochlorite, acidified sodium chlorite

To the extent possible, organic should be chlorine-free. A comprehensive review of sanitizers is needed to determine which uses of chlorine materials are essential.

We do not believe that organic processors and handlers should have to filter chlorine out of the tap water they use for washing vegetables or cleaning food-contact surfaces. But they should not be adding more chlorine. Organic production and handling should be, to the extent possible, chlorine-free. Often we see the NOSB assuming a need for strong chemicals as cleaners or disinfectants when none may be needed. We have seen this in our own investigations with personal care products using the biocide triclosan. Research has shown that washing with ordinary soap and water is as effective as using soap containing triclosan. Furthermore, as pointed out by a 2010 report of EPA's Office of Inspector General (OIG), this problem is widespread —the OIG found that approximately 40% of all antimicrobial products have not been tested for efficacy, and one third of all products tested each year fail, without notification of users. Please also see our comments on the need for a comprehensive review of sanitizers.

ACTION ITEM! Carbon dioxide 205.605(b)

Beyond Pesticides supports the relisting of carbon dioxide.

Carbon dioxide is used for pest control, carbonation, and chilling of food. As a pest control material, it can be applied in a confined space and can come in contact with certified organic product. Carbon dioxide should be relisted.

See Beyond Pesticides' comments here

ACTION ITEM! Magnesium chloride 205.605

Beyond Pesticides supports the relisting of magnesium chloride and the reexamination of its classification

Magnesium chloride for use in crops is "classified as nonsynthetic when extracted from brine, seawater, and salt deposits." The 2016 TR describes both nonsynthetic and synthetic processes by which magnesium chloride is produced from sea water. 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."

See Beyond Pesticides' comments here

ACTION ITEM! Potassium acid tartrate 205.605(b)

Beyond Pesticides supports the relisting of potassium acid tartrate with an examination of its production from organic grapes.

Potassium acid tartrate appears to be a nonsynthetic material that does not belong on §205.605(b). The HS should revisit the classification of potassium acid tartrate and investigate the possibility of encouraging its production from organic grapes.

See Beyond Pesticides' comments here

ACTION ITEM! Sodium phosphates 205.605(b)

Beyond Pesticides opposes the relisting of sodium phosphate unless annotated to restrict it to essential uses.

The NOSB should seek to eliminate the addition of inorganic phosphates to organic food. Sodium phosphates are especially problematic because they add 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. Since the HS has not proposed an annotation at this meeting, we urge that consideration of an annotation to the listing be placed on the HS work agenda.

ACTION ITEM! Casings 205.606

The NOSB should discuss ways to encourage the availability of organic casings.

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.

See Beyond Pesticides' comments here

ACTION ITEM! Konjac flour 205.606

Beyond Pesticides supports the delisting of konjac flour.

Even if the HS and NOSB decide that the need for konjac flour overrides the environmental and health hazards created by its production in a non-organic system, the subcommittee should acknowledge those factors and state that the need outweighs them. *Amorphophallus konjac* has been genetically engineered to be resistant to rot, and the NOSB must ensure that GE konjac flour is not used in organic products. 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.

See Beyond Pesticides' comments here

ACTION ITEM! Pectin (non-amidated forms only) 205.606

Beyond Pesticides supports separating synthetic and nonsynthetic pectin on the National List.

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).

See Beyond Pesticides' comments here

Discussion Documents, Reports, Other Proposals, and Important Issues Not on the Agenda Marine Materials (Marine Algae and Extracts)
See Marine Materials under Cross-Cutting Issues.

See Beyond Pesticides' comments here

Nutrient Vitamins and Minerals -annotation change

Minerals (including trace elements), vitamins and similar isolated ingredients should be allowed to be added to organic food only when their use is required by law or to meet an FDA standard of identity in which they are incorporated.

Organic consumers expect that their food contains a full complement of vitamins and minerals based on organic agricultural production practices, not supplementation. For food—an annotation stating "Minerals (including trace elements), vitamins and similar isolated ingredients are allowed 'only when their use is required by law or to meet an FDA standard of identity in which they are incorporated'" best meets the expectations of organic consumers and original NOSB intent. For Infant Formula — An argument can be made for allowing supplementation by vitamins and minerals required by 21 CFR 107.100 because infant formula is by its nature artificial. On the other hand, it does not seem right to allow substances in organic infant formula that are not allowed in other organic foods, so such infant formula should be labeled "made with organic [specific ingredients]," rather than "organic." We urge the HS to complete work on this important issue.

See Beyond Pesticides' comments here

Ancillary Substances in Cellulose

Beyond Pesticides opposes the Spring 2017 proposal on ancillary substances allowed in cellulose.

We oppose the Spring 2017 proposal on ancillary substances allowed in cellulose because we are concerned that toxic materials, such as those identified in cellulose, continue to be added to organic products. It is important that the NOSB review all materials added to organic products and reject those that do not meet criteria specified in OFPA. In particular, it has not reviewed polyvinylidene, vinyl chloride, kymene, and resin. This lack of review is in itself a reason to reject this proposal. To identify ancillary substances without subjecting them to scrutiny according to the policy adopted by the board in 2013—only serves to raise questions about the integrity of the organic label. Moreover, if the HS had reviewed these materials, it would have found that they entail allowing 1,1-dichloroethylene (DCE), classified as a group 3 carcinogen, and vinyl chloride, a group 1 carcinogen (carcinogenic to humans, the highest classification) by the International Agency for Research on Cancer (IARC) of the World Health Organization.

See Beyond Pesticides' comments here

Livestock Subcommittee (LS) Issues

Petitions

ACTION ITEM! Sulfur

Beyond Pesticides opposes the petition for sulfur.

Sulfur is being petitioned for control of ectoparasites –fleas, ticks, and mites. It is allowed for use in crop production. The main environmental impacts come from manufacture (fossil fuel production), transportation (pipeline leaks), and storage (blowing dust) from which it can have significant impacts on plants and soil life. Although the impacts of its use are minor, and its compatibility with organic production is debatable, sulfur does not appear to be necessary for organic livestock production. The NOSB should, therefore, reject the petition for the use of sulfur as an ectoparasiticide.

ACTION ITEM! Hypochlorous Acid

Beyond Pesticides opposes the petition for hypochlorous acid.

We oppose this petition, which seeks to add hypochlorous acid to treat wounds and eye irritation in livestock. Unlike the petition approved in 2016, which added hypochlorous acid generated by electrolyzed water for uses for which hypochlorous acid in hypochlorite solution was already allowed, this petition requests a completely new use, in direct animal contact. Chlorine compounds present health and environmental hazards. Hypochlorous acid is not necessary, in view of available treatments and preventive practices that are available and compatible with organic livestock production.

See Beyond Pesticides' comments here

Sunset

ACTION ITEM! Chlorine Materials: Calcium hyphochlorite, chlorine dioxide, sodium hypochlorite

To the extent possible, organic should be chlorine-free. A comprehensive review of sanitizers is needed to determine which uses of chlorine materials are essential.

The manufacture and use of chlorine compounds results in the unintended production of other toxic chemicals. While the uses of disinfectants vary so that no one method or material is likely to be effective in all cases, there are numerous alternative methods and materials that should allow organic livestock producers to avoid the use of the most toxic materials —in particular, those containing chlorine. The active ingredients identified by the EPA's Safer Choice Program are safer and effective alternatives. Organic production and handling should be, to the extent possible, chlorine-free.

See Beyond Pesticides' comments here

ACTION ITEM! Chlorhexidine

Beyond Pesticides opposes the use of chlorhexidine as a teat dip, but does not object to use in surgery.

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. Since the LS has not proposed an annotation at this meeting, we urge that consideration of an annotation to the listing be placed on the LS work agenda.

See Beyond Pesticides' comments here

ACTION ITEM! Glucose

Glucose should be relisted because of its importance in treatment and the absence of adverse effects.

ACTION ITEM! Oxytocin

Beyond Pesticides supports the delisting of oxytocin.

Oxytocin should be allowed to sunset. Past comments have shown that the annotation is vague and that it was misused, to help cows let down their milk. Cows can become dependent on it for let-down. There are alternatives. It is a hormone, and even though its use is intended to be limited, this listing allows a use of hormone in organic dairy, which is contrary to consumer expectations.

See Beyond Pesticides' comments here

ACTION ITEM! Tolazoline

Beyond Pesticides supports the relisting of tolazine.

Xylazine and tolazine, which are always used together, should be relisted for the rare cases in which they are needed as a sedative, analgesic (pain killer) and muscle relaxant in veterinary medicine. 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.

See Beyond Pesticides' comments here

ACTION ITEM! Copper sulfate

Beyond Pesticides supports the relisting of copper sulfate if the subcommittee commits to an annotation concerning disposal.

Copper sulfate is used as an antimicrobial agent in foot baths and subsequently mixed with manure for spreading on fields for disposal. However, various management tools are available that could help reduce the cost of treatment and prevent hoof-related diseases. These include the use of additional dietary supplements, free stall (cubicle) design, limiting contact with gravel or rocky surfaces, and hoof trimming practices. The listing of Copper Sulfate 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." Since the LS has not proposed an annotation at this meeting, we urge that consideration of an annotation to the listing be placed on the LS work agenda.

See Beyond Pesticides' comments here

ACTION ITEM! Lidocaine and Procaine

Beyond Pesticides supports the relisting of lidocaine and procaine.

Lidocaine and procaine should be relisted (with the annotation added in 2015 for a shorter withholding period) because they support the humane treatment of animals in minor surgery and are rapidly cleared from the body.

Other Issues

ACTION ITEM! Defining emergency treatment for parasiticides

Beyond Pesticides opposes the Livestock Subcommittee proposal on emergency treatment and suggests an alternative approach.

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 bio logics 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)."

See Beyond Pesticides' comments here

Materials (MS)/GMO Subcommittee Issues

ACTION ITEM! Research Priorities

Beyond Pesticides supports all of the research priorities identified by the subcommittees except for the celery powder proposal, which is designed to add high levels of nitrite and nitrate to organic food. We suggest adding a priority on marine materials because research is needed to determine appropriate limitations on the harvest of marine algae (seaweeds).

See Beyond Pesticides' comments here

ACTION ITEM! Excluded Methods Terminology

Beyond Pesticides supports the proposal of the Materials Subcommittee (MS) to add cisgenesis, intragenesis and agro-infiltration to the list of excluded methods, as well as transposons, still listed as TBD in the terminology chart. Whether genes are moved or manipulated between species or within species, all four techniques fit the definition of genetic engineering Definitions and Principles and Criteria.

See Beyond Pesticides' comments here

Contaminated Inputs

Beyond Pesticides urges the NOSB to renew efforts to address contaminated inputs in organic production.

The plan to address contaminated inputs in organic production —last addressed by the NOSB two years ago—is needed more urgently than ever. It has been moved from the Crops Subcommittee to the Materials Subcommittee. The problem of contaminated water resources only adds to the problems already identified — including antibiotics in manure, pesticides in lawn wastes, and others. We urge the NOSB to devote resources to furthering the plan and its implementation, including the development of a discussion document on water contaminated by oil and gas production.

Sanitizers Comprehensive Review

Beyond Pesticides supports a comprehensive review of sanitizers, disinfectants, and cleansers used in organic production and handling.

Beyond Pesticides and others have been calling for a comprehensive review of sanitizers used in organic production. The NOSB needs to identify needs for sanitizers, disinfectants, and cleansers, and evaluate the allowed and potentially allowed materials according to OFPA criteria. We support this issue being placed on the Materials Subcommittee work agenda, and we suggest a structure for the comprehensive review. See also Sanitizers under Cross-Cutting Issues.

Click here to see Beyond Pesticides' comments.

Policy Development Subcommittee (PDS) Issue

Ancillary substance review

Beyond Pesticides supports adding a policy to the PPM that states that the NOSB must review all materials added to organic products and reject those that do not meet criteria specified in OFPA.

The NOSB must not categorically allow substances in a functional class that have not been specifically reviewed and it must not rubber stamp ancillary substance just because they are currently in use. The ancillary substances policy must define the terms it uses, and each ancillary substance must be reviewed and approved for each particular use. Allowing additional Ancillary substances without review is totally unjustifiable and contrary to the legal requirements and spirit of organic production. Creating disincentives to produce organic-compatible ingredients would move organic in the wrong direction. It is important that the NOSB review all materials added to organic products and reject those that do not meet criteria specified in OFPA.

See Beyond Pesticides' comments

Cross-Cutting Issues (Overlapping Subcommittees)

Open Docket

The Open Docket should be more fully implemented, both providing and accepting information.

The policy for Public Communication between NOSB Meetings calls for the Advisory Board Specialist to, "with support from NOP, identify, implement, administer and maintain a year-round public communication mechanism (Internet and other means) by which public feedback can be received, posted, and archived online for viewing by the NOSB, the NOP, and the public." NOSB members seem reluctant, in general, to share information beyond that supplied by subcommittee notes, apparently in the belief that such information is confidential. However, those on the "outside" cannot know what information is appropriate to share without knowing more about the issues that subcommittees are studying. Therefore, the NOSB should be working in concert with the organic community for the benefit of all. We request that implementation of the open docket be expanded to include publication of drafts and questions for the public during the period between meetings.

Click here to see Beyond Pesticides' comments

Oversight and Enforcement

Oversight over the National Organic Program must be improved.

Organic producers are subject to much more rigorous oversight than their counterparts in chemical-intensive or conventional production and processing. However, the enforcement process has fallen short in several instances, and additional actions are needed to safeguard the integrity of the organic label. Through recent reporting, public attention has been drawn to imports of nonorganic grain entering the certified organic stream of commerce, organic factory eggs, and questionable organic milk. The investigations that uncovered this fraud have not been undertaken by the National Organic Program (NOP), but by independent organizations like Consumers Union, Cornucopia Institute, and Organic Farmers' Agency for Relationship Marketing (OFARM). The problems of inadequate oversight and enforcement by NOP also include allowing certification of hydroponic and aquaculture. The NOP Peer Review Panel should be appointed by the NOSB and have the authority to request any files and evaluate any certifier that it judges to be appropriate.

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Sanitizers and Disinfectants

A comprehensive review of sanitizers, disinfectants, and cleansers used in organic production is needed to give context for decisions about these materials.

Beyond Pesticides and others have been calling for a comprehensive review of sanitizers used in organic production. The NOSB must identify the need for sanitizers, disinfectants, and cleansers, and evaluate the allowed and potentially allowed materials according to OFPA criteria. We support this issue being placed on the Materials Subcommittee work agenda. Sanitizers, disinfectants, and cleansers include 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, including substitutes for National List materials. 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. The need 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.

Marine Materials

The use of seaweeds in organic products and production needs to be reexamined to ensure that marine ecosystems are not harmed.

Marine biodiversity is important, and the roles played by marine algae (seaweed) are important to marine biodiversity and ecology. Human threats to marine environments include overfishing, global warming, biological introductions, and pollution. The NOSB should continue its efforts to clarify the identities of species of marine algae used in organic production as well as to develop guidance for the application of the wildcrafting standard to marine algae. Application of Latin binomials to seaweeds needs to be clarified, and any restrictions need to be justified. The NOSB must investigate mechanisms for protecting marine ecology from the impacts of over-harvesting marine algae for use in organic products and production. It must also look at natural materials in use in crops and livestock as well as those on the National List. Lastly, the NOSB must protect rockweed (*Ascophyllum nodosum*) to the extent possible and specifically list it as a prohibited natural. Seaweeds (marine algae) and products made from them should be allowed as ingredients in organic food, feed to organic livestock, and crop inputs only "when harvested from a designated area that has had no prohibited substance applied to it for a period of 3 years immediately preceding harvest and when harvested in a manner that ensures that such harvesting or gathering will not be destructive to the environment and will sustain the growth and production of the population of the species."