NORTHWEST HORTICULTURAL COUNCIL
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April 3, 2024

Ms. Michelle Arsenault
Advisory Committee Specialist
National Organic Standards Board
USDA-AMS-NOP
1400 Independence Ave. SW
Room 2648-S Mail Stop 0268
Washington, DC 20250-0268

RE: Docket Number AMS-NOP-23-0075-0001; Notice of Meeting of the National Organic Standards Board

Dear Ms. Arsenault,

The Northwest Horticultural Council (NHC) appreciates the opportunity to comment on the National Organic Standards Board (NOSB) sunset reviews and discussion documents listed in the most recent NOSB meeting materials posted in the *Federal Register* on February 7, 2024. Many of the NOSB subcommittee documents referenced in this letter are especially pertinent to the growers, packers, and shippers of organic apples, pears, and sweet cherries in Idaho, Oregon, and Washington that the NHC represents.

The Pacific Northwest region is the epicenter for organic pome fruit and cherry production in the United States, leading the nation in the production of organic apples, pears, and cherries. More than 15 million boxes of organic apples are now harvested from more than 28,000 acres in Washington state. There is also a significant volume of organic pears and cherries grown in our region, with more than 6,500 acres planted across the Pacific Northwest. According to certifier data, an additional 1,000 acres of tree fruit orchards in Washington were transitioning to organic in 2022.

Washington state hosts 89 percent of the reported organic apple acres in the U.S., producing 97 percent of the nation's reported fresh organic apple volume. Washington also has 71 percent of the organic pear acreage and grows 60 percent of the volume in the country, and 83 percent of the sweet cherry acreage and 93 percent of the volume (USDA NASS, 2021).

The total value of the organic tree fruit crop in the Pacific Northwest topped $756 million in 2021, of which organic apples alone accounted for approximately $668 million. In fact, organic tree fruit generated more than 50 percent of the farmgate value of all organic products grown in Washington state that year.

Organic tree fruit production, handling, and shipping are very complex. Our farmers must routinely manage pests that have the potential to make fruit unfit for consumption, or that suppress tree growth and overall production. In the Pacific Northwest, growers must protect fruit from injury by 33 direct insect pests (those that feed directly on the fruit), 47 indirect insect pests (those that feed on the tree), two common bacterial pathogens, eight fungal pathogens, ten viral pathogens, five phytoplasmas and viroids, and seven postharvest diseases (Washington State University, 2023). Invasive or emerging pests are also a continual threat.

In addition to pests and diseases that affect the fruit or the tree, our growers and packers must also combat foodborne pathogens, such as *Listeria monocytogenes*, pathogenic *E. coli*, and *Salmonella*, that are naturally occurring in the environment. Growers and packers must have access to the sanitizers necessary to prevent cross-contamination on food contact surfaces through the harvest and packing processes. Access to different types of sanitizers with different modes of action is critical to sanitizing the various types of food contact surfaces and combating the multitude of microorganisms that can be found in the growing and packing environments.

The Organic Foods Production Act (OFPA) states that synthetic substances may be permitted if, among other things, the substance is deemed "necessary to the production or handling of the agricultural product because of the unavailability of wholly natural substitute products." We ask NOSB members to be cognizant of the impacts to the practical abilities of organic growers and packers to produce organic food in a manner that allows for effective management of threats from plant pests and diseases and human pathogens when considering whether a listed material truly has a wholly natural alternative. In particular, the evolution of insect, weed, and microbe resistance means that producers and packers need access to multiple tools to deploy season-long pest management programs that allow for the rotation of products with differing modes of action to manage the evolution of pest resistance and therefore to be able to continue growing and handling organic food. A single product often cannot and should not be considered as a full substitute for another.

Not all alternatives provide equal efficacy in controlling the target pest organism; nor is it certain that an alternative product is compatible with all pest management or food safety programs in all regions of the country to manage varying pest and pathogen complexes under a myriad of different weather and soil conditions. Impacts to material supply chains are another important consideration when deliberating whether to delist existing organic materials. Manufacturers and input distributors may not have the capacity to easily ramp up production and distribution of alternative products to fill a void created by delisting a material, leaving end users without the materials they need to produce and pack organic produce.

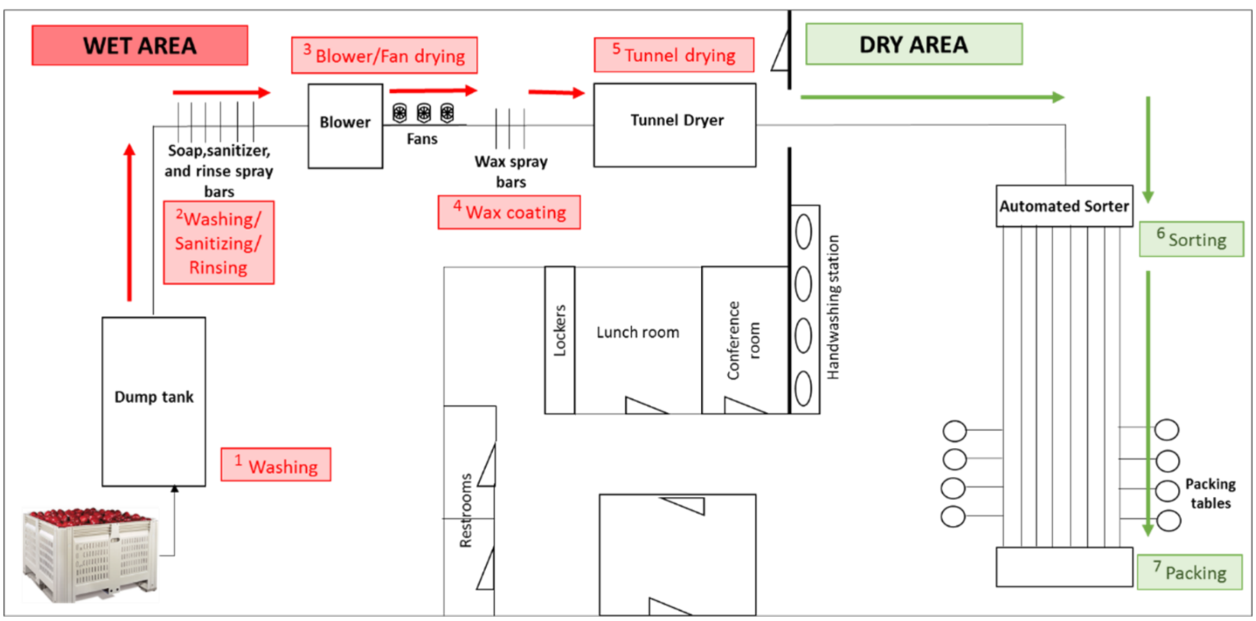
The NHC thanks the NOSB members for their service to the organic industry and appreciates their work in the preparation of this year's proposals, discussion documents, and sunset reviews. We have compiled a list of materials from those listed by the NOSB for review that are of particular importance to organic tree fruit growers and packers. Below, you will find this list, with NOSB citation and a description of the material's standard usage, as well as our feedback on the Board's discussion documents and an explanation of the critical use of sanitizers and disinfectants in organic fruit packing facilities.

Sanitizers and Disinfectants

Fresh produce is grown in the open environment where dangerous, and sometimes deadly, pathogens exist. It is impossible to eliminate the potential for these pathogens to reach the surface of produce in the field, and therefore it is critical for growers and packers to have the tools necessary to combat these pathogens before they reach the consumer. This includes cleaning the produce itself, as well as cleaning and sanitizing wash water and all food contact surfaces to reduce the potential for cross-contamination. Protecting public health is the top priority of the tree fruit growers and packers we represent, and we encourage the NOSB to not make it more difficult for them to deliver a safe and healthy product to consumers.

In order to understand the need for various sanitizers with different modes of action to adequately protect public health, it is important to understand the packing and storage process for tree fruit. After harvest, apples may be stored for up to 12 months in either refrigerated or controlled atmosphere cold storage. Following storage, fruit is run through a packing line to be washed, graded, and placed in various packaging (see Figure 1). Packing lines consist of a wet area and a dry area. The wet area consists of a water flume system called a dump tank, various conveyor systems, an array of spray bars for soap, rinse, and sanitizer application, and a fan and heated tunnel system to dry the fruit. The main parts of the dry area are an optical sorter/grader and various packaging stations.

Figure 1: Depiction of a typical apple packing line (Source: Dr. Faith Critzer, University of Georgia)



Growers and packers need access to more than one type of sanitizer to be able to achieve the critical objective of delivering a safe and healthy product to consumers year-round. Each sanitizer and disinfectant listed below has specific benefits that make it the most effective and appropriate choice for a particular circumstance. It is also important to note that different products with different modes of action are regularly used in postharvest handling to manage the vast array of public health microorganisms, which include viral, protozoan, and bacterial targets. Therefore, growers and packers must have access to multiple products to combat the full plethora of pathogens of human health concern. Many packers rely on an environmental monitoring program to assess when to change products for a particular action – whether it be a sanitizer used on a particular food contact surface, or applied to water systems such as hydrocoolers, dump tanks, flumes, and spray bars.

For example, a grower may use peracetic acid (PAA) to sanitize food contact surfaces in the field. Once the fruit reaches the packinghouse, the packer may use calcium hypochlorite as a wash water sanitizer and PAA in the spray bars. At the end of the workday, the lines may be sanitized using chlorine dioxide or ozone, while sodium hypochlorite may be used to sanitize the cold storage rooms. This regimen may change should environmental-monitoring data show that the effectiveness of sanitation on a particular food contact surface is reduced.

Along with the need to attack these pathogens from multiple directions, the maintenance of multiple sanitizers is also important because of concerns that reliance on a single type of sanitizer could lead to resistance evolution by the pathogens. Lastly, it should be noted that in addition to protecting human health, these sanitizers are needed for growers and packers to comply with the requirements of the Food Safety Modernization Act's Produce Safety Rule and Preventive Controls for Human Food Rule.

Crops Subcommittee (CS)

Discussion Document: Compost Production for Organic Agriculture

In recommending potential changes to compost regulations, the NOSB must be cognizant of possible impacts to the practical abilities of organic growers to source and use organic compost in an effective, economical manner. A reduction in available compost supplies and/or a rise in their costs will be challenging for small, medium, and large organic operations across the country who depend on a reliable, affordable supply of compost.

Compost is an expensive input for farmers, but most organic growers prefer to use it instead of the NOP-allowed chemical substitutes. This benefits the soil's long-term health and the overall environment. If pricing or supply are jeopardized, organic growers will be forced to make tough choices about inputs/amendments – decisions that could make the difference between staying in business or not during years of razor-thin profit margins.

Current organic regulations refer to carbon-to-nitrogen (C:N) ratios of between 25:1 and 40:1. The NHC contends – as supported by available science – that no change to this C:N ratio is necessary, as that is the ideal range for compost production. Anything lower will not complete the composting process. Testing should continue to be conducted at the end of the composting process to determine the final C:N ratio composition. Existing testing and certification requirements in place for finished compost products should be considered sufficient and appropriate absent new data that proves otherwise. The NHC opposes additional testing requirements, which may impose supply burdens on compost manufacturers and would likely increase the cost of compost to organic growers.

The subcommittee's questions and deliberations regarding contamination are unclear, as the subcommittee acknowledges that "Every effort is made by composters to remove contamination from feedstocks before the composting process." At what levels have the listed contaminants (pesticides, heavy metals, PFAS, glass, plastic) been found in compost? Where is the evidence that they are found at levels that may have a negative impact on the environment or human health?

Pesticides are degraded by the high temperatures and/or microbial activity that occurs during compost production. Composting can simultaneously degrade multiple legacy pesticides and achieve high degradation efficiencies of 80 to 87 percent after 100 days of composting (Lin et al., 2022). However, there may be some overlap between Unavoidable Residual Environmental Contamination (UREC) and the compost contaminants of concern. The NHC supports the conduction of a scientifically-sound risk assessment to demonstrate whether there are contamination issues with current composting practices.

The NOSB should consider the significant organic compliance verification processes already in place for organic compost production. Composters conduct testing on both feedstocks and finished compost, and are required to submit testing results to the Organic Materials Review Institute (OMRI). Many growers in the Pacific Northwest purchase organic compost from dealers that are certified by the Washington State Department of Agriculture's Organic Program. Additional testing by producers and/or certifiers will be costly, and those increased expenses will be passed on to organic growers who are already dealing with a surge in input costs over the last few years.

Education should always be an important component of composting programs, whether for the public or composting facilities. The NHC supports any efforts for educating the public, compost manufacturers, and growers. However, absent of conclusive evidence that contaminants exist at potentially harmful levels, burdens from additional testing or restrictions that limit availability of this important tool should not be imposed on composters and growers.

The NHC supports the continued science-based discussion on biodegradability metrics within organic regulations, and whether and how other feedstocks should be allowed. If composters or other stakeholders wish to petition the NOSB for the addition of a synthetic material for compost production to the National List, those petitions should be allowed to fairly progress through the NOSB petition process.

While the goals of the NOSB and Crops Subcommittee in regard to the regulation of organic compost production are not entirely clear, what is clear is that rigorous, scientific studies and risk assessments are needed to better understand how organic compost is produced and to assess potential contamination concerns before additional requirements are placed on growers or composters.

2026 Crops Sunset Reviews

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

Hydrogen Peroxide
§205.601(a)(4) - As algicide, disinfectant, and sanitizer, including irrigation system cleaning.
§205.601(i)(5) - As plant disease control
The NHC supports the continued listing of hydrogen peroxide both as a disinfectant and for disease control. It is used by a majority of organic tree fruit growers in the Pacific Northwest.

In the orchard setting, hydrogen peroxide is an effective antimicrobial for the sanitation of equipment, such as pruning shears, picking bags, and buckets, as well as for cleaning and disinfecting irrigation infrastructure. Using it as an algicide in drip irrigation or micro-irrigation systems removes algae growth from contaminated lines. Hydrogen peroxide is used in combination with other sanitizers when cleaning irrigation systems, which increases its effectiveness compared to use as an individual sanitizer. It breaks down quickly in the environment and has no residual effects.

When used as a fungicide, hydrogen peroxide is usually applied preharvest to help control pathogens like blights and mildews. By mitigating these pathogens, hydrogen peroxide helps to increase the number and size of fruit on the trees, reduce fruit drop, and increase fruit yield and quality (Orlikowski et al. 2023). Spraying trees with hydrogen peroxide occurs at specific stages of growth and can be used on its own or in formulation with other approved materials. With the loss of antibiotics in organic production, hydrogen peroxide is an important tool in managing fire blight in organic apples and pears.

Soaps, ammonium
§205.601(d) - As animal repellents, for use as a large animal repellant only, no contact with soil or edible portion of crop.
Pacific Northwest tree fruit growers use ammonium soaps to deter and repel unwanted browsing by rabbits, porcupines, deer, and elk that can cause damage to fruit trees and drip line irrigation systems. The U.S. Environmental Protection Agency (EPA) lists ammonium soaps under the lowest possible toxicity classification and EPA studies show that ammonium soaps undergo a rapid degradation in the environment (EPA, 1992).

These animal repellent products are used on an as-needed basis. While there are other natural substances that may be used as animal repellents, each have their limitations. Maintaining the allowance of ammonium soaps provides for an effective suite of repellents. We support its relisting.

Oils, horticultural
§205.601(e)(7) - As insecticides
§205.601(i)(7) - As plant disease control
The NHC strongly supports the continued listing of horticultural oils, as insecticides and as plant disease control. All organic tree fruit growers use these oils, and they consider them a critically important material. Oils used today are lightweight (i.e., lighter viscosity), which allows for a smaller application rate compared to products used in the past.

As a part of a tree fruit grower's integrated pest management strategies, horticultural oils are broad-spectrum in action and are used as both insecticides and miticides. Specifically, they are used to control red mites, rust mites, pear psylla, leafhoppers, codling moth, apple aphid, and other arthropod pests, which cause significant damage to tree fruit. The oils are most often applied in late winter / early spring to smother any eggs, larvae, and nymphs, but can also be used during the growing season to control insect pests and during the fall as a preventive measure against blights and bacteria that can overwinter. They are also effective in helping to control powdery mildew and apple scab.

Horticultural oils provide a safe and consistent level of disease control. They have many favorable factors both for growers and the environment, including low cost, low mammalian toxicity, and few negative environmental effects (Fernandez et al., 2006). The potential alternatives on the National List are not effective substitutes for horticultural oils, with some even being phytotoxic to fruit on the tree and the tree foliage.

Pheromones
§205.601(f) - As insect management
Pheromones are of great importance in organic tree fruit production and are used by 100 percent of organic and conventional tree fruit growers across all their orchards. They are essential to the control of pests such as codling moth and leafrollers, which often pose a significant threat to organic tree fruit. We strongly support the continued listing of this material, as its loss would be catastrophic for organic tree fruit production.

Pheromone-based mating disruption is a method of control that has become widely adopted by both organic and conventional tree fruit growers due to its high efficacy and low toxicity to humans, natural enemies, and the environment. It is now the foundation of apple and pear Integrated Pest Management (IPM) programs and enables growers to make fewer pesticide applications than would otherwise be necessary. The advantages of codling moth mating disruption include enhanced levels of biological control, reduced costs associated with worker protection and labor management, and decreased potential for the development of insecticide resistance (Thomson et al., 2001).

The codling moth (*cydia pomonella*), a non-native species, is a key pest of pome fruit in the Pacific Northwest. Codling moth control in organic orchards is exponentially more difficult without the use of pheromone-based mating disruption. In the absence of control measures, crop losses caused by larvae feeding directly on the fruit are typically 80 to 90 percent. For organic tree fruit producers, the number and kinds of organic pesticides allowed for codling moth control are limited, therefore control is more challenging and damage to the fruit is often much higher than in conventional operations. The insecticide spinosad (Entrust®) is one of the few effective organic insecticides, but the number of applications per season is restricted by the label. Other botanical and biological insecticides have been less effective at controlling codling moth in organic orchards.

Ferric phosphate
§205.601(h) - As slug or snail bait
The NHC supports the continued listing of ferric phosphate as slug or snail bait. Ferric phosphate is used on an as-needed basis, primarily around packinghouses to prevent slugs or snails from entering the facilities. Much like elemental sulfur, it is more likely to be used in wetter growing climates where slugs are more prevalent than in drier, arid growing regions. While sulfur-based products are effective, ferric phosphate is important to have as another tool in rotation with elemental sulfur or when sulfur-based products are less efficacious.

Potassium Bicarbonate
§205.601(i)(9) - As plant disease control
The NHC supports the continued listing of potassium bicarbonate. It is an effective and affordable fungicide, used to help control plant diseases like fire blight and powdery mildew, providing a good level of control against these diseases (Washington State University, 2023). Potassium bicarbonate can be applied after signs of powdery mildew appear in the orchard and will stop the spores from spreading further, especially in sweet cherry orchards. Alternatives are not effective in halting the spread of mildews.

Potassium bicarbonate is used in a rotation of products with differing modes of action, such as biologics, to manage the evolution of pesticide resistance. By using it in the dry season, it is less likely to cause russeting to the fruit and damage to the foliage than other available tools. It is considered an important tool by organic tree fruit growers, a majority of whom use this product.

Magnesium Sulfate
§205.601(j)(6) – As plant or soil amendments
Magnesium sulfate is used by the vast majority of organic tree fruit growers, as it is a critical nutrient for the soil, trees, and fruit. It is most often used during the growing season as a soil amendment when nutrient deficiency is detected in the orchard. Certain apple varieties are more susceptible to this deficiency than others, particularly Honeycrisp. Growers utilize soil analyses to inform when and how many applications should be made. Symptoms of nutrient deficiency can also appear in the tree foliage.

Fertilization with magnesium sulfate is effective in an orchard of marginal potassium nutritional status, promoting root health for the tree, which in turns improves cumulative yield, fruit size, and red coloration (Neilsen & Neilsen, 2011). Magnesium deficiency can lead to fruit quality issues following the storing and packing process. Magnesium sulfate products play a vital role in aiding organic farmers, therefore we support its continued listing in organic production.

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

Ash from manure burning
§205.602(a) - Nonsynthetic prohibited
The NHC supports the continued listing of ash from manure burning as a prohibited material.

Sodium fluoaluminate (mined)
§205.602(g) - Nonsynthetic prohibited
The NHC supports the continued listing of sodium fluoaluminate (mined) as a prohibited material.

<u>Handling Subcommittee (HS)</u>

2026 Handling Sunset Reviews

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

Hydrogen Peroxide
§205.605(b)(17) - Synthetics allowed, for use as an algicide, disinfectant, and sanitizer.
The NHC supports the continued listing of hydrogen peroxide as an algicide, disinfectant, and sanitizer for its important antimicrobial effects in the packinghouse setting. It is a benign substance used to reduce and control microorganisms for food safety purposes. Hydrogen peroxide leaves no harmful residues and quickly breaks down into water and oxygen molecules (Orlikowski et al. 2023). Some sanitizer products contain a combination of hydrogen peroxide, acetic acid, and peroxyacetic acid for packing line sanitation.

Hydrogen peroxide is used to remove bacterial and fungal contamination from the surface of fruits, greatly reducing the potential for *E. coli* contamination. It is also used to disinfect belts and brushes on the packing line to prevent cross-contamination. When used directly on food contact surfaces, it does not require a rinse before product contact.

Peracetic Acid / Peroxyacetic Acid
§205.605(b)(22) - Synthetics allowed, for use in wash and/or rinse water according to FDA limitations. For use as a sanitizer on food contact surfaces.
The NHC strongly supports peracetic acid / peroxyacetic acid (PAA) remaining on the National List, as it is critical to tree fruit packinghouse operations. PAA is a strong oxidizer widely used across the fresh produce industry as a sanitizer or disinfectant for equipment, and for water tank treatment / water sanitation to reduce potential cross-contamination. All organic tree fruit packing facilities use PAA.

PAA is typically used in rotation and/or in combination with other flume, spray bar, or rain pan sanitizer applications within a systems approach towards microbial decontamination. This increases its effectiveness and helps to manage potential resistance development. Chlorine, electrolyzed water, and ozone are the only other widely used sanitizers permissible under the organic regulations, and reliance on a single sanitizer can lead to resistance development by pathogens. Packing lines will use PAA as a dump tank / flume water sanitizer in rotation with chlorine or in situations where chlorine is not appropriate.

Peracetic acid / peroxyacetic acid presents good antimicrobial properties at low temperatures and at a wide range of operational pH values (Ölmez & Kretzschmar, 2009). It will penetrate biofilms that protect harmful pathogens like *Listeria monocytogenes*, so it is much better at reducing biofilms in recirculating water pipes on a continuous basis.

PAA is also used in spray-bar applications to reduce cross-contamination potential on equipment and the fruit itself. PAA does not leave residue on the surface of fruit. Organic apple and pear packing lines often use PAA in multiple separate spray bars to help sanitize brushes on the lines. After PAA degradation, harmless residues (acetic acid and oxygen) readily dissolve in water and have no effect on the environment (Haute et al., 2015).

In addition to flume water and spray bars, fruit packinghouses rely heavily on PAA for post-cleaning sanitation of equipment. PAA is a critical sanitizer on the dry side of the packing line, used directly on food contact surfaces for dry side sanitation. Other chlorinated products require a rinse prior to organic use, which is not conducive to keeping the dry side dry. PAA is by far the best option for organic-approved no-rinse sanitizers.

<u>Materials Subcommittee (MS)</u>

Discussion Document: Research Priorities 2024
The NHC generally supports the NOSB's 2024 research priorities. The NOSB's annual list of organic food and agriculture research priorities is a good example of how the organic industry has shown itself to be forward-thinking on challenging issues.

Many of the research priorities under *Crops* would benefit organic tree fruit production, particularly collaboration with the IR-4 project to conduct research into organic pesticide products and cultural control methods. We also support studying the economic, social, and environmental impacts of different farming systems; identifying practices that reduce greenhouse gas emissions; development of plant disease management strategies to address existing and emerging plant disease threats; and strategies for the prevention, management, and control of problem insects and weeds, with an emphasis on systems-based approaches.

For the research priorities under *Food Handling and Processing*, the NHC supports improving methods and practices for organic handling and processing, particularly the effectiveness of rotational use strategies with sanitizers. Using different sanitizers with different modes of action makes them effective against viral, protozoan, and bacterial targets in specific circumstances, enabling producers to reduce threats to human health. Growers and packers need access to more than one type of sanitizer to make the most appropriate choice for a particular circumstance and be able to achieve the critical objective of delivering a safe and healthy product to consumers year-round. Additionally, we recommend research into postharvest physiology and postharvest decay management be added to the NOSB priorities to support the critical need to better understand postharvest issues in organic fruit.

Both of the *General* research priorities are important areas of research for the continued and increased success of organic farming and sales. There are many barriers to consumers accessing organically produced foods and we support studying methods for alleviating those barriers. We also support research into effective methods for providing increased assistance to growers to successfully transition to organic production.

Discussion Document: Inert Ingredients in Pesticide Products

As the NOSB considers options to revise the outdated references to inert ingredients on the National List, any new regulatory approach must minimize unintended harm to organic production and the NOSB process, in part by meeting these criteria: address both EPA List 3 and List 4, avoid increasing the workload of the NOSB, maintain consistent availability of organic pest management materials for organic growers, and provide certainty of regulatory authorization of materials for pesticide manufacturers so that they can continue to produce the products organic growers rely on. The NHC strongly opposes listing all inert ingredients individually on the National List.

The NOSB must be cognizant of impacts to the practical abilities of organic growers and packers to produce and handle organic food in a matter that allows for effective management of diverse pest threats. In particular, the evolution of insect, weed, and microbe resistance means that producers and handlers need access to multiple pesticide formulations to deploy season-long pest management programs that allow for the rotation of products with differing modes of action to manage the evolution of pest resistance, and therefore be able to continue growing and handling organic food while meeting all federal regulations. Not all alternatives provide equal efficacy in controlling the target pest organisms or pathogen complexes, nor is it certain that an alternative product is compatible with all pest management or food safety programs across the varied growing regions of the country under a myriad of weather and soil conditions.

<u>Questions:</u>

1. *Please provide feedback on the format and analysis of Appendix A. The Board will use this to comprehend the practical impact the various options will have on the number of substances that would need to be added to the National List based on the corresponding option (e.g. if all inerts*

are listed individually or that would be allowed under various subsets of EPA regulations depending on the option)?

Response: The NHC strongly opposes listing all inert ingredients individually on the National List, which would likely double the number of materials subject to sunset review. The NOSB risks compromising its ability to thoroughly conduct the sunset reviews by creating a lengthy, complicated process for maintaining inert ingredients on the National List. Significantly increasing the number of materials on the five-year cycle would be beyond the administrative capacity of both the NOSB and NOP staff.

2. *What areas of expertise should the MS consider when inviting speakers to subcommittee meetings in order to obtain the fullest and most accurate understanding of this topic?*

   Response: Under OFPA, the NOSB is required to review EPA information concerning the potential for adverse human and environmental effects of substances included, or proposed for inclusion, on the National List. It is the role of the EPA, not the NOP or NOSB, to determine the level of toxicological concern of active and inert ingredients.

   The NOSB and NOP should always rely on EPA's evaluations of safety, necessity, and efficacy in evaluating inert ingredients used in pesticide products. This includes, but is not limited to, incorporation of EPA's Safer Chemical Ingredient List (SCIL), routine dialogue with EPA's Safer Choice Program, and direct communications with EPA staff.

   The Materials Subcommittee should also review and consider work already completed by the Inerts Working Group as part of a valid solution, including, but not limited to, inviting members who served on the Inerts Working Group to subcommittee meetings.

3. *Please provide feedback on whether the list of inert ingredients currently in use (see Appendix A), is accurate.*

   Response: Evaluation and analysis from the EPA should be utilized to determine the accuracy of Appendix A. Inert ingredients that are allowed for use in passive pheromone dispensers under §205.601(m)(2) should all be included in any list NOSB and/or NOP considers. These inerts are critically important in stabilizing active ingredients in mating disruption products – such as pheromone dispensers and lures – against degradation from ultraviolet light and oxidation. They are therefore used in nearly all pheromone dispensers and lures, which are crucial to successful mating disruption and integrated pest management programs in organic orchards.

4. *Does the potential reduction in the number of substances the Board must review outweigh the inflexibility associated with the option to develop a single, external list of allowed inert ingredients?*

   Response: No, it does not. The NOSB and NOP have an important role in aligning EPA evaluations with OFPA and National List regulatory criteria. However, the regulation of inert ingredients in organic production must first and foremost be based on the EPA's rigorous, scientific analysis of inerts.

5. *Would designation of a specific entity responsible for maintaining the single external list of allowed inert ingredients change stakeholder's opinions of this option?*

   Response: A single external list of allowed inert ingredients is one of the more viable options the NOSB is considering. Should EPA be designated as that specific entity, stakeholders would be able to raise concerns during the EPA's periodic review of active and inert ingredients. Growers, grower groups, grower advocacy organizations, and other stakeholders can and do submit comments when these materials go through the EPA's rigorous scientific review process.

Conclusion

The NHC's comments are focused on materials important – and in some cases critical – to organic tree fruit production. The loss of these products would negatively impact the abilities of organic tree fruit growers and packers of all sizes to protect against and manage injury from insect, disease, and microbial pests. Without the allowance to use some of these materials, organic regulations could have the unintended impact of forcing Pacific Northwest tree fruit growers and packers out of organic production, particularly small commercial growers.

We ask that members of the NOSB consider their decisions carefully while recognizing the importance of these materials for the role each plays in organic tree fruit production and in preserving management options necessary to respond to food safety concerns and operational needs in organic production and packing. Thank you for your thorough consideration of these comments.

Sincerely,

NORTHWEST HORTICULTURAL COUNCIL

Dan Langager
Technical Communications Manager

cc: NHC Science Advisory Committee and Organic Subcommittee

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