September 30, 2021

National Organic Standards Board
USDA – AMS
1400 Independence Ave, SW
Washington, DC 20250
RE: AMS-NOP-21-0038

National Organic Standards Board members:

The Ohio Ecological Food and Farm Association (OEFFA) is a grassroots coalition of more than 4,200 farmers, gardeners, retailers, educators, and others who since 1979 have worked to build a healthy food system that brings prosperity to family farmers, safeguards the environment, and provides safe, local food. Certified organic farmers make up the bulk of our membership, as well as the bulk of our policy advisory council. OEFFA’s Certification program has been in operation since 1981. OEFFA certifies more than 1,280 organic producers and food processors, in a twelve-state region, ensuring that these operations meet the standards established for organic products, and collaborates with partners such as the Accredited Certifiers Association and International Organic Inspectors Association to foster consistency and clarity both in the way we conduct ourselves, and in what we expect from producers and handlers we certify, as well as from our colleagues at the NOP and NOSB.

OEFFA employs education, advocacy, and grassroots organizing to promote local and organic foods, helping farmers and eaters connect to build a sustainable food system. We work collaboratively with groups such as the Organic Farmers Association, the National Organic Coalition, and the National Sustainable Agriculture Coalition to affect positive food systems change. We want to support our farmers in their efforts to protect organic integrity and educate their communities about its benefits, its rigor, and its strong values of transparency and continuous improvement.

We thank you for your service to the organic community, and we respectfully offer the following comments:
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COVID-19: GRATITUDE

We are wishing NOSB members, your families, and USDA NOP staff and their families all the best during this ongoing global pandemic. We are thankful for NOP’s efforts to increase accessibility by livestreaming the meeting, and for the NOSB members’ focus and attention during a challenging time. Situations like this offer a clear reminder of the importance of a vibrant and robust local and regional food system that offers healthy food to communities and fair prices to farmers. Thank you for all you do to support and strengthen the organic movement!

BIG PICTURE

THE NOSB WORK AGENDA AND UNHEEDED RECOMMENDATIONS

Over the past 10 years, the NOSB made 20 recommendations that the USDA failed to bring forward to the rulemaking process.

Members of the National Organic Standards Board have worked diligently to bring clarification and greater consistency to the organic industry. At the same time the USDA has restricted and controlled the NOSB work agenda. In a February 27, 2014, memo, the NOP states that for an item to be added to the NOSB work plan it “must be a priority for the USDA/NOP.” However, OFPA gives the NOSB the duty “to assist in the development of standards for substances to be used in organic production and to advise the Secretary on any other aspects of the implementation of this chapter.” This duty to advise...
transcends NOP priorities. Indeed, as stated in U.S.C. § 6518(a), NOSB should help to establish NOP priorities. This is further reflected in the responsibility, 47 U.S.C. § 6518(a), never undertaken, to “hire a staff director.” Clearly, OFPA intends that the NOSB play a large role in setting priorities of the National Organic Program. Despite the stated motivations for this move, USDA’s constriction of the work agenda has not reduced the workload for board members. In the meantime, the challenges to organic integrity have increased and the integrity of the label remains in jeopardy.

The NOSB was envisioned to be more than a traditional Federal Advisory Committee Act (FACA) board. OFPA directs the Secretary to consult with the board and gives members responsibility for advising the Secretary in all aspects of the implementation of the Act, as well as spelling out several specific areas of responsibility. Designed to not only fulfill the traditional role of FACA boards, the NOSB is charged with consulting organic practitioners and proponents to guide USDA development and administration of the program.

The USDA is, contrary to the requirements of FACA, exerting undue influence on the recommendations of the NOSB. Previous memos from the program itself detail that “Once a work plan is assigned to a subcommittee, NOP must ensure that the subcommittee is not inappropriately influenced by the appointing authority (e.g., the NOP itself) or by any special interest.”

USDA/NOP actions change organic policy making from one driven by the public process to one controlled by USDA, which can choose to dismiss critical issues. For example, the NOP continues to arbitrarily remove agenda items and has required that USDA/NOP priorities drive the public process. The NOSB was designed to maximize public input from a community with strong and diverse views about the meaning of “organic.” That input and the 2/3 “decisive vote” requirement ensure that NOSB proposals can only pass when they garner broad and diverse support from different stakeholder groups.

Agency influence on NOSB recommendations through agenda-setting and inaction on existing recommendations runs contrary to the intent and purpose of statute. Again, we urge the Board to assert its statutory right to determine work agenda items and organic policy priorities.

Over the past 10 years board members worked diligently to address concerns that, to this day, are problematic and lessen the value of the organic label to many consumers. Clarity and consistency are not just important for enforcement of the organic standards; a clear and transparent process for bringing issues forward and for ensuring that those issues are acted upon sets the tone for the program.

**We urge the NOSB to honor your responsibilities under OFPA. We ask that you:**

- Request that the NOP provide an update on all previous recommendations made but not advanced including a rationale for NOP inaction, and a “corrective action plan” including a timeline for moving NOSB recommendations forward, just as we regularly request from organic producers. If NOP needs help prioritizing, perhaps NOSB could recommend a path forward. We need a plan to prevent the perpetuation of this dysfunctional situation.
- Request full results from peer review audits conducted annually by the American National Standards Institute. The Board should pay careful attention to peer review findings as one way to assess the health of the NOP’s accreditation program and to identify areas of future work so they can make recommendations to the NOP about ways to address systemic shortcomings in the NOP’s accreditation program.

- Explore the possibility of “chunking” NOSB recommendations with the NOP. If the NOP could list more than one set of recommendations in rulemaking, as it does, for example, with NOSB materials, perhaps rulemaking could move forward more expeditiously.

The credibility of both the National Organic Program and the resulting organic marketplace is dependent on the Board being able to advance issues of concern to the community and the NOP’s action on those recommendations.

**FIELD AND GREENHOUSE CONTAINER PRODUCTION**

We are part of an informal group of certification, education, and policy organizations who agree that soil is the foundation of organic agriculture, and who strive to achieve consistency in our organizational policies and certification decisions.

Specifically, we agree upon the following ideas:

- Soil is the foundation of organic agriculture.

- A full reading of the Organic Foods Production Act (OFPA 6513) and the Regulations requires that organic plants be grown in soil. Aeroponic, hydroponic, and crops grown to maturity in containers do not comply with [OFPA 6513(b)(1)].

- We cannot achieve consistency in our policies and decisions until the NOP goes through the formal rulemaking process for Greenhouse Production Standards which were recommended by NOSB nearly 20 years ago, and

- We cannot achieve consistency in our policies and decisions until containers go through the process of NOSB discussion, recommendation, and NOP rulemaking.

The members of this group agree that the following crops grown in containers have historically been certified organic, and ought to be allowed to be certified organic moving forward. We have adopted them into certification policies in the absence of clear and applicable standards.
• **Sprouts** (which are mentioned in the rule as requiring organic seed, and which take their nutrition entirely from the seed)
• **Microgreens** (which are not mature at the time of harvest, but are sold as an immature plant, and which also derives much of its nutrition from the seed)
• **Fodder** (sprouts for livestock)
• **Transplants**, annual seedlings, and perennial planting stock (which are subsequently transplanted and grow to maturity in soil)
• **Mushrooms** (fungi, not plants, but widely certified with somewhat consistent ad hoc policies developed by certifiers over time, based on the NOSB Final Recommendation on the Mushroom Practice Standard, or using livestock standards, as fungi are other, non-plant life. There are, however, significant differences in terms of what certifiers allow as substrate.)

Based on our interpretation and full reading of OFPA and the NOP regulations, our current consensus is that the above is a complete list of crops that should be allowed to be certified when grown in containers. These items still require NOSB discussion, recommendation, and rulemaking to improve the consistency of existing extrapolation, interpretation, and certification. The 2010 NOSB recommendation on Terrestrial Plants in Containers and Enclosures should be used as a starting point. Admittedly, this “cart before the horse” approach to rulemaking, in which production types are certified before clear standards exist, is backwards and ought to be avoided moving forward.

Finally, we urge the NOSB to activate the latent agenda item “Field and Greenhouse Container Production” which was listed on the NOSB Work Agenda grid from 2017 until Spring 2021 as “On Hold,” but which recently disappeared from that list. We would happily provide detailed input as to the forward movement of this agenda item with the shared goal of improved transparency and consistency, and bringing us into greater alignment with the global organic movement, including the recent IFOAM position on Hydroponics\(^1\). Please work to add “Field and Greenhouse Container Production” back to the NOSB work agenda and lead our community in a discussion of this essential topic.

### Racial Equity

OEFFA appreciates the work of the current Administration to bring equity issues to the fore within USDA, and the efforts of NOC to bring these issues to light within the organic community. We support NOC’s racial equity comments and have the following two specific requests:

1. **Establish a Diversity, Equity, and Inclusion Subcommittee within the NOSB.**

   In order to make sure this topic receives the time and attention it deserves, we ask the NOSB to establish a Diversity, Equity, and Inclusion (DEI) Subcommittee to lead this work on the part of the Board. We know the NOSB has a set call schedule and recommend the

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\(^1\) [https://www.ifoam.bio/sites/default/files/2021-06/organicsinaction.pdf](https://www.ifoam.bio/sites/default/files/2021-06/organicsinaction.pdf), p.45 – Hydroponic Production not in line with Organic Principles
merging of the policy subcommittee with the CACS to make room for this important work. In having a subcommittee with the purpose of moving DEI work forward within organic, the NOSB will build-in its own review process to ensure we challenge, and do not repeat, patterns of structural racism.

2. **Add Fairness standards to the NOSB work Agenda and work to develop them.**

Given that the Biden Executive Order on “Promoting Competition in the American Economy” sets the priority for development of fairness labeling so consumers can support fairness for farmers and workers, the members of NOC recommend that the NOSB engage in a public consultation process to develop social justice standards for the National Organic Program. The NOSB should add this topic as a work agenda item. We agree with NOC that IFOAM’s Principles of Fairness are a good starting point for discussion. The Principles are as follows:

- Organic Agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities
- Fairness is characterized by equity, respect, justice, and stewardship of the shared world, both among people and in their relations to other living beings.
- This principle emphasizes that those involved in organic agriculture should conduct human relationships in a manner that ensures fairness at all levels and to all parties – farmers, workers, processors, distributors, traders and consumers. Organic agriculture should provide everyone involved with a good quality of life, and contribute to food sovereignty and reduction of poverty. It aims to produce a sufficient supply of good quality food and other products.
- This principle insists that animals should be provided with the conditions and opportunities of life that accord with their physiology, natural behavior and well-being.

The NOSB could also refer to the Food Justice Certified (FJC) standards developed by the Agricultural Justice Project, which were developed over a four-year period of stakeholder input— involving farmers, farmworkers, interns and apprentices, and indigenous, retail, and consumer groups—and are an attempt to codify in concrete terms what making a legitimate claim of “social justice” in organic and sustainable agriculture means.

We thank the Board for your attention to these matters and we would be happy to support your efforts in this arena as OEFFA certifies to the AJP certification standards.

**THE CONVERSION OF NATIVE ECOSYSTEMS**

OEFFA supports the NOSB’s previous recommendation regarding the conversion of Native Ecosystems, and appreciates the ongoing work of the Wild Farm Alliance to be in conversation with certifiers.
regarding tools and techniques for implementation. We urge the NOP to move forward with the implementation of this and many other latent NOSB recommendations. Please also see our comment on the NOSB Work Agenda and Unheeded Recommendations.

**TIMING AND FORMAT OF MEETINGS**

We appreciate the Board’s efforts to make the public comment process fairer and more accessible, and we provided comments in the Policy Subcommittee’s document on the Public Comment Process.

OEFFA’s Grain Growers have continually requested an alternative to the current meeting schedule. They have heard the constraints of the board with regard to scheduling and continue to request a solution which would allow greater engagement of this important organic constituency. They suggested moving the schedule back two weeks each meeting. This would mean the meeting would rotate throughout the year, equally benefitting and inconveniencing various stakeholders over time.

Please provide an update on alternatives to ensure that the meetings are scheduled to maximize input from a variety of organic production systems across the country. Further, we would like to again thank the Program for making the NOSB meeting virtual during the pandemic. We appreciate the ability to access both the public comment and the formal meeting virtually. The virtual format increases access to participants, both individual partners and organizational stakeholders, who may not have the funds, time, or farm and family circumstances to enable several days away from home to attend the meeting. Please consider this feedback as you plan for future meetings.

**COMPLIANCE, ACCREDITATION, & CERTIFICATION SUBCOMMITTEE**

**PROPOSAL: LETTER TO SECRETARY RE: CLIMATE CHANGE INITIATIVES**

Thank you for your leadership in communicating with the Secretary on this topic. We also support the comments submitted to the open docket by the National Organic Coalition (NOC) on August 3, 2021, indicating additional ways in which NOSB’s advocacy is needed. NOC noted in addition to the items in the letter regarding climate change, the NOSB should:

1. discuss the critical role of organic agriculture in bolstering the resiliency of the U.S. food and farm system,

2. urge Secretary Vilsack to strengthen enforcement of the soil health provisions in the organic regulations, and
3. highlight the opportunity to increase domestic production of organic to meet consumer demand for organic food while meeting climate change and food system resilience goals.

As the advisory body to the USDA on the National Organic Program, you have a unique opportunity to use your collective voice in communication with the agency in an ongoing way to urge the recognition of certified organic agriculture’s many strengths, especially as a comprehensive and voluntary systems-based approach to climate smart agriculture. With this letter, and by continuing to communicate with USDA, you can help the NOP have a seat at the table as the department reviews feedback and provides administrative recommendations for program and policy to address these important issues. We thank you again for this letter and urge you to continue to use your role as the organic community’s leadership board to advocate for organic.

OEFFA is working with other organic advocates to raise the profile of organic agriculture as a holistic, voluntary program which incorporates synergistic suites of practices that can effectively address the climate crisis. We have attached an opinion piece we cowrote with Midwest Sustainable and Organic Education Services that was previously published in The Hill. We look forward to working with you to raise the profile of organic agricultural systems in addressing the climate crisis.

**Oversight Improvements to Deter Fraud: Modernization of Organic Traceability Discussion Document**

We appreciate the board’s myriad efforts to address fraud in the organic sector. We see the proposed Organic Link System (OLS), as one tool in the toolbox of fraud prevention. Additional layers to the existing Organic Integrity Database make sense to us and would offer a more centralized way for real-time communication if it were to be consistently utilized in the way you propose. We also appreciate that you attempted to remove the burden of interface with this system from the farmer and to place it more squarely on the shoulders of handlers. That said, this skips the first link in the business-to-business purchase and sale tracking chain - at the farm gate. We are trying to imagine a way for farmers to share sales information in real-time on such a system to provide the first link the chain, but this poses a significant challenge with the diversity of technology use by the farmers with whom we work.

In response to your questions:

Questions for Stakeholders:

1. **How can technology efficiently and effectively be deployed to enhance supply chain traceability?**

   Your idea of a centralized database that would allow for real-time traceability of transactions, import certificates, and transaction certificates makes sense as a tool for fraud prevention.

2. **What form must an organic link system take to be non-burdensome for organic stakeholders, including certifiers, inspectors, handlers, operations, importers, etc.?**
A mobile app with a desktop interface would make the most sense, as it would enable inspectors in the field, buyers at the mill, tech-savvy farmers in the field, and other handlers and certifiers working at computers to access the information on a computer screen or phone. As we stated above, we think the first sale by the farmer to the initial business buyer must be included in this system, and that part of the chain is trickier, given great diversity in access to and use of technology.

Because some farmers may not be able to add sales into an app in real time, one OEFFA Grain Grower suggested that certifiers could potentially create accounts and input initial data into an app as part of an initial transaction certificate, or similar service, then perhaps handlers could input additional links in the chain, and Certifiers and USDA officials may have additional layers of access within the app beyond that to which a handler or farmer might have access. Farmers could log in and see where their grain ended up, as could certifiers and inspectors. OEFFA would support integration of a similar service with the Organic Integrity Database but we have questions about the details of such a service, which will affect its burden and feasibility of use. We are particularly concerned with the possible requirement to track every individual crop, livestock, and product sale, which would be greatly burdensome to any entity (farmer or certifier) required to input the data.

3. What challenges exist with the implementation of an organic link system?

Access to and use of technology is a primary concern. This idea works best where there is broadband internet and a smart phone or computer, but many of the producers we work with do not have ready access to those tools. That said, it could still work. Perhaps there could be a phone-in option for sale reporting within a certain amount of time of the product leaving the farm gate, for example.

4. Is there value in AMS, certifiers, and inspectors getting more granular with transaction-level detail to gain transparency throughout the complex supply chain?

Yes, this is why transaction certificates and import certificates should and do exist. This is why mass balance and traceback audits happen at inspection. You make the important point that we need key information regarding traceability and volume cataloged and readily accessible. We need the same sorts of accessible tools for yield data in all areas of the world where USDA organic crops are grown.

5. What other methods exist for enhancing transparency?

In addition to a technological tool such as the one you note here, we see the need for a high level, central party to assess risk and collect and share data related to organic production, yields, and transaction documentation. It seems like the mission of such a group might go beyond the OLS, and it is unclear to us whether this group should be a part of, or adjacent to the NOP. Beyond this centralized need, the following existing and emerging tools play important roles in fraud prevention and detection:

**Existing tools and parts of the certification process such as:** Annual inspections and ongoing inspector training, unannounced inspections, residue sampling, good certifier communication
and information sharing. The Integrity Database is valuable, and additional consistency is needed in the way certifiers list information on certificates and within that database.

**Mapping Tools:** The Native Ecosystems conversation led by the Wild Farm Alliance has recently shared a number of mapping and remote imaging tools that could be useful.

**Regional Yield Data:** As mentioned above, yield data would be important for certifiers issuing import and transaction certificates, and inspectors running mass balance calculations. It would also be an important tool for analysis at the NOP for complaint investigations.

**Boots-on-the-ground:** We need more people at ports of exit and entry who understand the organic system and are tasked with upholding it. Ongoing collaboration with Customs and Border Protection and other relevant anti-fraud groups could aid in training and accountability in this arena. Additional on-site inspections guided by higher-level risk assessments (especially by a centralized authority with access to information about the entire supply chain) can be used to verify that records are not being falsified. We have heard reports of organized crime being behind some large-scale organic grain fraud, and we do not think that sophisticated fraud can be prevented or identified by transaction-logging tools alone because records can be falsified from the start.

6. Are there additional areas that need to be considered for improvement to prevent fraud or react to fraud?

Yes. Please see below:

**Storage and transport pest management requirements:** In previous discussions related to transport, it has come to light that spraying for specific pests or invasive species occurs during transport in some cases. These practices are being taken into account inconsistently in the organic certification process and could impact the organic status of bulk shipments of grain if prohibited substances are, for example, being used during shipping. The exemption of transporters from certification increases this risk, as they do not have oversight to ensure the accuracy of their attestations of cleanliness and absence of prohibited substances.

**Food and feed grade sales distinctions:** We recently became aware of a situation in which one of our farmers intentionally sold grain into the feed grade market, and his buyer, a broker, subsequently sold the same grain as food grade. The grain technically could have been sold into the food grade market, so it did not present an organic integrity issue, but rather a fairness issue with regard to pay price to the farmer. That said, had production practices been different, the switch could have been problematic on multiple levels (including food safety). If the grain grade or pay price is not tracked throughout a centralized system, this could be occurring far more often than any of us realize.

**Additional regional yield data:** We need additional organic and transitional yield research and data globally so that accurate expectations for commodity yields can be determined. In the meantime, efforts could be concentrated in regions of particular concern or fraudulent history.
7. Should the industry require land to be registered 36 months prior to certification?

In our extensive experience supporting transitioning producers, many farmers do not know with certainty three years prior to certification that they are going to certify as organic. In recent years, with extreme weather events, a prevent plant year has often served as the impetus for organic transition. Fields that are rented or that change hands could often not be registered with that much notice, as the land manager changes over time. Additionally, land coming out of various conservation programs, or simply managed as a low-or no-input pasture or hay field sometimes enters into organic certification as it comes out of such programs or management, but the decision to move in that direction is often not made a full three years ahead of time, and we maintain that farmers should have flexibility in the way they choose to manage their land.

That said, we are aware of situations in which farmers have reported that land *magically* transitions in less than 36 months, and our current tools of self-reporting field history, or providing a Prior Land Use Statement do lack rigor. We have two ideas in response to this challenge:

**Inspection tied to 3rd Year of Transition:** A T3 inspection could aid in evaluating the condition of the field and soil, and ensure with eyes-on-the-ground, that practices in the 3rd year of transition are meeting the standards. This would require an early submission of an organic system plan, and would increase costs to producers, some of which could be off-set through transition funding that may be available at the federal level. On the positive side, this “early” inspection could help to meet first-year of certification deadlines so that crops produced early in the first year the farm is eligible to certify would not be missed as organic sales due to the timing of the certification process.

**An Organic Integrity Hotline:** An anonymous, phone-based reporting hotline could prove a helpful tool in addition to the existing complaint form on the NOP website. Producers could call the hotline to report instances of fraud, including a too-early transition, without fear of their contact information being shared by the certifier or the program. The NOP could receive and filter such calls, and, when appropriate, could refer them back to the certifier for follow-up. We think the anonymity of such a hotline would be appealing to producers, and could provide timely and relevant information for fraud prevention.

**CROPS SUBCOMMITTEE**

**PROPOSAL: CHITOSAN- PLANT DISEASE CONTROL-PETITIONED**

OEFFA does not support the addition of Chitosan to the National List. No clear argument was made regarding its need, and no data was provided demonstrating its efficacy. Further, we have concerns about the way it is produced, especially when considering organic agriculture as a solution to climate change.
**PROPOSAL: COW MANURE DERIVED BIOCHAR- petitioned**

OEFFA does not support the addition of Cow Manure Derived Biochar. In systems of sustainable agriculture we seek to close loops. By adding fossil fuels to process what is already an organic input, we would be doing the opposite. Organic is not a market, nor is it a recycling facility, for the overly processed negative externalities of conventional agriculture.

**PROPOSAL: AMMONIA EXTRACTS- petitioned**

OEFFA thanks the Crops Subcommittee for its thorough and thoughtful work on this petition. **We support all three motions** made by the Subcommittee. Ammonia extracts are not compatible with systems of organic agriculture, are not necessary in a system of organic production, and are toxic to humans and other organisms.

We support the motion to add **205.203(f): Nitrogen products with a C:N ratio of 3:1 or less, including those that are components of a blended fertilizer formulation, are limited to a cumulative total use of 20% of crop needs.** This motion should help to curb the use of highly soluble inputs. If the motion passes, we would request the NOP share guidance similar to what was shared regarding DMI calculations in the pasture rule. Some producers will need assistance in determining crop needs and calculating 20% of crop needs; many have been challenged by past restrictions on sodium nitrate. Additional research may be needed to determine the nitrogen needs of individual crops based on region, climate, soil type, etc. A consistent tool from NOP for wide use and distribution would be an asset, and we request that this **guidance tool be made available prior to implementation of the additional language at 205.203(f)** so that farmers, inspectors and certifiers can share a consistent approach to verifying compliance.

**PROPOSAL: KASAUGAMYCIN-petitioned**

While we respect the challenges faced by fruit producers, especially, we harbor serious reservations about the inclusion of antibiotics on the National List and believe this would set a dangerous precedent. While fire blight is a terrible problem for orchards, kasugamycin is unlikely to stay effective against blight for very long given the history of other antibiotics used; therefore, even if we consider it necessary at present and allow it, we will no longer consider it necessary (let alone effective) in a handful of years.

More importantly, the questions around the use and efficacy of this material miss the main question about whether we should be considering the inclusion of a class of materials that is currently excluded from organic certification. Kasugamycin does not meet any of the OFPA criteria for the National List—it poses health and environmental dangers, is not necessary, and is incompatible with organic practices.

**OEFFA opposes the inclusion of Kasugamycin on the National List.**
PROPOSAL: HYDRONIUM- PETITIONED

Based on the OFPA criteria, incompatibility with systems of sustainable agriculture, and soil health concerns, we do not support the addition of hydronium to the National List.

PROPOSAL: CARBON DIOXIDE- PETITIONED

We disagree with the subcommittee on this material, and with the reasoning that the “recycled” nature of this product makes it compatible with a system of sustainable agriculture. Creating a market in organic for byproducts of other processes does not make those processes more sustainable; rather, it allows the manufacturers to profit from outsourcing their externalities to organic producers. It is not clear to OEFFA why synthetic sources of carbon dioxide are needed in organic systems given that nonsynthetic carbon dioxide is available. Further, we have concerns that expanding the availability for organic use of a greenhouse gas will have deleterious effects on global climate change.

PROPOSAL: LITHOTHAMNION

OEFFA supports the subcommittee’s assessment regarding Lithothamnion- it does not meet wild crop criteria and ought not be eligible to be certified to the wild crop standards. Additionally, as we work to steward the aquatic environment as we do the land, we would like to see such topics discussed as a part of the bigger picture of marine materials. Finally, we have concerns about the way this material was handled historically. Memos, such as the one issued regarding aquatic plants being certified under the organic regulations during the discussion around aquaculture, often create more confusion than clarity, as is evidenced by this situation and the NOP’s request for NOSB to review the material years later. As we work towards greater consistency, we need to promptly utilize the NOSB process to discuss grey areas or confusing issues, and rely less on memos in the absence of the public process.

PROPOSAL: BIODEGRADABLE BIOLBASEMULCH ANNOTATION CHANGE

OEFFA appreciates the Crops Subcommittee’s continued work on this topic. Biodegradable biobased mulch films are regularly sought by OEFFA certified producers. We worry about the microplastics being released into the soil from the use of non-biodegradable plastic, which is currently allowed in organic systems. That said, we harbor several of the concerns we shared previously. As an additional concern, no product is currently on the market meeting these criteria, which we fear will cause further confusion. We see the potential benefit to producers and the environment, and the producers certainly desire the labor and waste-saving potential of this material, but not at the cost of the soil food web. In
the absence of longitudinal data on the effects of the mulch on the soil food web over time, we cannot support this proposal. More research is needed comparing these systems.

**PROPOSAL: SODIUM NITRATE- petioned**

We support the reinstatement of the listing of Sodium Nitrate and appreciate that the Crops Subcommittee made this proposal.

**2023 CROP SUNSET REVIEWS: 205.601 AND 205.602**

**OZONE GAS**

**205.601(a)(5)**

Ozone is requested occasionally by our producers for use in irrigation lines. As it is relatively environmentally friendly and there are no comparable allowed substances, we support relisting ozone gas.

**PERACETIC ACID**

**205.601(a)(6) 205.601(i)(8)**

Peracetic acid has historically been used infrequently by our certified producers, but there have been increasing requests in recent years. Given its relatively low toxicity to humans and the environment we support its relisting but note that this substance would also benefit from consideration as part of a comprehensive review of cleaners and sanitizers.
EPA List 3- Inerts of Unknown Toxicity

205.601(m)

This group listing functions differently than much of the National List, which allows or disallows specific materials. The group listing and long defunct reference leads to regulatory inconsistency among certifiers. Additionally, the board voted to remove this material unanimously in 2012. We urge the board to again take the same action. Please remove List 3 inerts of unknown toxicity from 205.601 and review them individually.

Chlorine Materials

205.601(a)(2) (i) Calcium hypochlorite; (ii) Chlorine dioxide; (iii) Hypochlorous acid- generated from electrolyzed water; (iv) Sodium hypochlorite

We support the relisting of chlorine materials for use in crop production. Please also see our comment regarding assessing cleaning and sanitation materials used in crops, livestock, and handling.

Calcium Chloride

205.602(c) brine process is natural and prohibited for use except as a foliar spray to treat a physiological disorder associated with calcium uptake

We support the continued listing of calcium chloride.

Rotenone

205.602(f)

OEFFA supports the relisting of rotenone on §205.602, prohibited nonsynthetic materials. The Environmental Protection Agency’s registration for rotenone was cancelled for all uses except as a piscicide in 2006—and thus rotenone is not allowed in organic production in the United States. That said, it continues to be allowed in other countries. Unless rotenone is relisted as a prohibited substance, organic farms in other countries certified to the USDA Organic Standards will be able to use it for foods imported to the US and labeled organic. Organic agriculture had been widely criticized for using rotenone, which is associated with Parkinson’s disease and other central nervous system damage in farmers and farmworkers. OEFFA supports rotenone’s continued listing at §205.602.
HANDLING SUBCOMMITTEE

PROPOSAL: ZEIN- petitioned

OEFFA does not support the motion to add zein at 205.605(a). It is not essential in organic production, as is evidenced by its absence from the Canadian, CODEX, EEC, and JAS standards, as well as the IFOAM Norms. Further, new processes could allow this product to be made from organic raw material, negating the need for this listing.

PROPOSAL: FISH OIL ANNOTATION- petitioned

OEFFA supports the middle-of-the road option put forth by the subcommittee below.

Fish oil annotation: 205.606(e) Fish oil (Fatty acid CAS #'s: 10417-94-4, and 25167-62-8)- stabilized with organic ingredients or only with ingredients on the National List, 205.605 and 205.606. Sourced from fishing industry by-product only and certified as sustainable against a third-party certification that is International Social and Environmental Accreditation and Labeling (ISEAL) Code Compliant or Global Seafood Sustainability Initiative (GSSI) recognized.

We agree with the subcommittee that the annotation will need to be reevaluated with the approval of aquaculture standards. Regarding implementation of the annotation, we request further clarification in the form of guidance. It is unclear to us whether the sourcing verification of this material as “by-product only” will occur as a self-attestation from the manufacturer (for example, in the form of a flow chart or as part of a harvest record), or whether this verification is part of the third-party certifier’s evaluation.

2023 SUNSET REVIEWS: 205.605(a) & 205.605(b)

AGAR AGAR

205.605(a)

OEFFA supports the continued listing of Agar agar on the National List. As we strive for good stewardship practices in water, as we do on land, we urge the board to consider agar agar in conjunction with the broader conversation on marine materials, especially given its reported increased demand.
ANIMAL ENZYMES

205.605(a) – (Rennet- animals derived; Catalase – bovine liver; Animal lipase; Pancreatin; Pepsin; and Trypsin)

OEFFA supports the continued listing of Animal Enzymes, as there are no viable alternatives for organic handling.

CALCIUM SULFATE- MINED

205.605(a)

OEFFA supports the continued listing of calcium sulfate, particularly due to its use in baking powder.

CARRAGEENAN

205.605(a)

OEFFA supports the NOSB’s motion to again remove Carrageenan from the National List. Please also refer to our comment The NOSB Work Agenda and Unheeded Recommendations.

TARTARIC ACID

205.605(a) Tartaric Acid - made from grape wine.

We continue to wonder whether there might be an adequate supply of tartaric acid able to be produced from organic grape byproducts. If the allowance for “non-organic” tartaric acid persists, this may not present itself as an opportunity for a stacked enterprise for organic grape growers and wine producers.
CHLORINE MATERIALS

205.605(b) disinfecting and sanitizing food contact surfaces, equipment and facilities may be used up to maximum labeled rates. Chlorine materials in water used in direct crop or food contact are permitted at levels approved by the FDA or EPA for such purpose, provided the use is followed by a rinse with potable water at or below the maximum residual disinfectant limit for the chlorine material under the Safe Drinking Water Act. Chlorine in water used as an ingredient in organic food handling must not exceed the maximum residual disinfectant limit for the chlorine material under the Safe Drinking Water Act.

(i) Calcium Hypochlorite, (ii) Chlorine dioxide, (iii) Hypochlorous acid- generated from electrolyzed water, (iv) Sodium hypochlorite

OEFFA supports the continued listing of chlorine materials. That said, we continue to assert that these materials, rather than being reviewed at sunset individually, would benefit from a comprehensive and comparative review. Please see our comment on Assessing Cleaning and Sanitation Materials Used in Crops, Livestock, and Handling.

SILICON DIOXIDE

205.605(b) Silicon dioxide- Permitted as a defoamer. Allowed for other uses when organic rice hulls are not commercially available.

OEFFA supports the continued listing of Silicon Dioxide.

LIVESTOCK SUBCOMMITTEE

2023 LIVESTOCK SUNSET REVIEWS: 205.603

ACTIVATED CHARCOAL (CAS# 7440-44-0)

205.603(a)(6)- Must be from vegetative sources.

We support the relisting of activated charcoal, which is the only substance currently allowed as a toxin binder. Charcoal can be a lifesaving measure for livestock who have accidentally eaten a poisonous plant while grazing. We regularly hear from producers asking to use activated charcoal.
**Calcium Borogluconate and Calcium Propionate**

**205.603(a)(7) and 205.603(a)(8)**

Calcium borogluconate and calcium propionate are critical treatments for lactating animals with milk fever and we support their continued availability to organic producers. It is necessary to have a variety of calcium products to treat milk fever because each performs differently (i.e. some offer a quick shot while others are long lasting to prevent relapse, some are better for I.V. and others for oral administration). While the listing for electrolytes at 205.603(a)(11) and the listing for nutritive supplements at 205.603(a)(21) encompass calcium borogluconate and calcium propionate, they are not redundantly listed because they have special restrictions that other electrolytes and nutritive supplements do not.

**Chlorine Materials**

**205.603(a)(10)**

Currently chlorine materials are one of the few categories of sanitizer mutually agreed on by the Federal Milk Production Order (FMPO) and NOP. Hydrogen peroxide is not an approved sanitizer per the FMPO; peracetic acid leaves a strong and unpleasant smell in milk; we have not yet been able to approve any phosphoric acid sanitizers due to the presence of inactive or inert ingredients in conflict with the National List (which means these products have been approved as cleaners but not as sanitizers without a rinse). There are inconsistencies related to inert ingredients in the way certifiers review these materials. This cleaner/sanitizer distinction is also counterproductive, as rinsing with clean water itself runs contrary to the FMPO. As we say later in comments for Comprehensive Review of Cleaning and Sanitation Materials, harmonizing the organic regulations with these other regulations is essential and could be done most effectively with a comprehensive look at all such materials. Further, collaboration between federal organizations such as the NOP and the FMPO will lead to better outcomes for both organic farmers and organic livestock. In the meantime, we support relisting chlorine materials, including calcium hypochlorite, chlorine dioxide, hypochlorous acid-generated from electrolyzed water, and sodium hypochlorite for use in organic livestock production.

**Kaolin Pectin**

**205.603(a)(17)**

Kaolin pectin is an important tool for dealing with diarrhea in organic livestock. We have struggled to approve kaolin products because various manufacturers have been unwilling to disclose complete information on inactive ingredients. We support continued listing of kaolin pectin at 205.603.
**MINERAL OIL**

**205.603(a)(20)**

Mineral oil is critical for relieving a compacted or impacted rumen. Natural oils get partially digested and do not work as effectively. We have had many requests from producers for mineral oil use and support its relisting.

**OIL NUTRITIVE SUPPLEMENT: INJECTABLE TRACE MINERALS, VITAMINS, AND ELECTROLYTES**

**205.603(a)(21)**

Nutritive supplements are probably one of the most effective organic treatments and are critical for assisting the animal help itself heal by boosting the vitamin/mineral responsible for whichever body function is affected by illness or injury. Many types are requested by producers and we currently have at least 200 products approved in this category.

There are some challenges with materials in this category deserving of attention by the NOSB. For example, Vitamin K, which is not on the American Association of Feed Control Officials (AAFCO) list, is needed to promote blood clotting in situations of blood in the milk from an injured udder or bloody milk upon freshening. Vitamin K would be administered by prescription and under the order of a licensed veterinarian, but due to its lack of appearance on the AAFCO list, OEFFA cannot approve this material. This is another opportunity for collaboration between the NOSB, the NOP, and an extra-organic group, namely AAFCO. Better collaboration could lead to better outcomes for organic livestock and farmers alike.

**PROPYLENE GLYCOL**

**205.603(a)(27)**

Propylene glycol is an important treatment for ketosis as it works faster than other sugars. We currently have five products approved in this category and a handful of producers requesting their use.
**SODIUM CHLORITE, ACIDIFIED**

205.603(a)(28) & 205.603(b)(9)

We have approved several teat dips containing sodium chlorite for our certified producers but it is not frequently used. We would support keeping one but not both of the listings as they appear to be redundant.

**ZINC SULFATE**

205.603(b)(11)

Zinc sulfate is more environmentally friendly than copper sulfate and just as effective for heel warts and other foot issues. Currently we have approved just one zinc sulfate product due to difficulty getting information from manufacturers when producers have requested we review additional products. We support its relisting.

**POLICY SUBCOMMITTEE**

**DISCUSSION DOCUMENT: PUBLIC COMMENT PROCESS**

OEFFA thanks the subcommittee for thinking through these issues, and for posing questions to the community. We agree that there is already disproportionate access to the NOSB, much of which takes place behind the scenes. Therefore, we are in favor of multiple ways for stakeholders to engage in this process. In particular, we appreciate the thought given to putting additional, clear constraints around written comments, which will do more to level the playing field than the various options presented regarding oral comments. We also greatly appreciate the recent livestreamed meetings, which enabled more of our staff to participate than in prior years, and we hope that the practice of livestreaming the meetings will continue in perpetuity regardless of meeting format. We address the Board’s questions below:

1. *Should the Board move to an entirely virtual format for oral comments the week before in-person meetings or maintain the pre-pandemic format of hearing oral comments, both virtually prior to the in-person meeting as well as in-person at the public NOSB meeting?*

   We are in favor of both virtual and in-person comments - the more ways for people to engage in this public process, the better!
2. **If NOSB meetings move to a model wherein all oral comments are heard virtually the week before the meeting, would it reduce the attendance of stakeholders at the Board meeting?**

Yes, we suspect holding all oral comments ahead of time would reduce stakeholder attendance at an in-person Board meeting. That said, it would increase access for those commentors who might not have had the ability to travel for the in-person Board meeting, and everyone would have the opportunity to hear comments. Hearing all oral comments the week before the meeting may also provide the Board with additional time to deliberate and consider comments before the meeting takes place. If in-person comments continue, we request that they be livestreamed along with rest of the NOSB meeting.

3. **Restrictions due to the pandemic aside, would the availability of a live-stream meeting discourage in-person attendance?**

A live-stream meeting would not discourage in-person attendance, but it would make the meeting more accessible for those stakeholders who are not fiscally or logistically able to attend the meeting to hear it in real time. Prior to the pandemic, some OEFFA staff who could not attend every meeting followed three different Twitter feeds to try to piece together what was happening at the meeting. A live-streamed meeting is a much better option, as it gives an accurate picture of conversations and votes.

4. **Is the practice of scheduling multiple oral comments by a single organization (such as a business/company/non-profit/trade group) inherently unfair? Is there a path by which the Board can field multiple areas of expertise from a single organization, while balancing the limits of time, fairness, and the importance of receiving a wide range of stakeholder feedback?**

While it may be unfair that some organizations take up greater public comment time, we think stricter rules in this arena would be difficult to enforce and ultimately counterproductive. Sometimes an organization speaks from multiple viewpoints, offering different and valuable areas of expertise; other times an organization’s staff doesn’t speak at all, but instead the group organizes (and in some cases fiscally supports) the attendance and comments of several farmer participants. Further, commentors may wear multiple hats, as a non-profit member, farmer, and member of a policy organization.

Thankfully, written comments, submitted by the deadline, allow each organization to engage according to its ability, capacity, and expertise. While we appreciate you thinking about how to make the process fairer, limiting comments to a certain number per entity would not only add monitoring and enforcement challenges, but it is likely to have negative and unintended consequences.
MATERIALS SUBCOMMITTEE
ASSESSING CLEANING AND SANITATION MATERIALS USED IN ORGANIC CROPS, LIVESTOCK, AND HANDLING

Thank you for organizing the panel discussion on sanitizers on November 12, 2020. The discussion made clear just how useful a comprehensive review of sanitizers, disinfectants and cleaners would be to the organic sector and started us in the right direction. Some of the challenges identified were categorization (plurality of both common names and CAS #s), harmonization between organic and other regulations (dairy farmers are especially challenged by this regarding final substances used before milk contact), diversity of specific situations encountered by producers and handlers (on-farm water quality, resistance and adaptation by bacteria and ubiquity of biofilms), and varying approaches by food handlers (inconsistent cleaning quality affecting sanitizer efficacy).

The panel also suggested several existing regulatory bodies we could lean on for determining the safety of various cleaning and sanitation materials, including EPA-approved food contact substances, FDA-approved food treatments, and GRAS limits. These other regulations are a good starting point to filter options (both at Sunset and new petitions) but do not address all criteria in OFPA including necessity for use in an organic system and environmental toxicity (for FDA substances). In conversation with the panelists, the Board raised several excellent ideas which we support exploring further: a holistic view of food safety meshing with an IPM-like approach to microbial populations in food processing environments, safety for handlers of the materials, and considering only those materials that pass through a publicly-shared decision tree that incorporates OFPA criteria as they specifically relate to cleaners and sanitizers.

We continue to support the request for a Technical Review for each active sanitizer ingredient to provide a foundation for this broader review and the pragmatic idea to have a reference document that could be passed to future NOSB members. The Technical Review should incorporate a “standard of identity” for the active ingredient which includes common inert ingredients that accompany it. It is our understanding that the NOP has not put this Technical Review topic out for bid because the topic is viewed as being too unwieldy or broad. That is precisely why we need to get started with such a technical review, so we urge the NOSB and NOP to support a Technical Review, even if it is not all-encompassing at this time. Our participation in the ACA Materials Working Group has informed our position but has not been able to resolve this issue.

One of the needs in the organic community is for better educational resources and technical assistance for farmers and food handlers. Specifically, resources should be developed to help operators learn cleaning and sanitation best practices including monitoring site-specific sanitation needs, hygienic design, water quality standards, cleaning methods and sanitizer rotation. Using these best practices may reduce the need for "emergency" materials which are typically more toxic to handlers and/or the environment and often leave chemical residues that contact food. (Indeed, quaternary ammonium compounds are designed to do precisely that.) NOSB could collaborate with educational institutions to simultaneously develop such resources and improve its own ability to judge which materials belong on the National List.

We also support the development of a tool, as NOC suggests, that identifies the needs in organic production for cleaners, sanitizers, and disinfectants, and that would help inform the NOSB when...
evaluating petitions for sanitizers to assess whether other materials currently on the NL meet the same needs, or if there is a special characteristic to the material under review that justifies its placement or renewal to the NL. This assessment may help identify areas where there are gaps in necessary sanitizers or disinfectants which aid organic crops, livestock, and/or handling operations in the promotion of food safety.

In the course of reviewing each sanitizer, NOSB would first note if there is an identified need, then evaluate the full list of ingredients (including common inerts) against the criteria in OFPA. This process would happen every three years and could include revisions of the Technical Review to include new ancillary/inert ingredients as necessary. If new ancillaries are not in keeping with OFPA, the listing could be annotated to exclude those specific formulations. For example, “Chlorine materials, except chlorine materials containing quaternary ammonium compounds.” Anything mentioned in the Technical Report as a standard ancillary ingredient, or other inert ingredients that are consistently included by materials manufacturers with a listed active ingredient, would be considered automatically allowed along with the active ingredient unless specifically restricted by annotation. Materials review organizations would then review only the listed active ingredient in a sanitizer product unless the National List entry for that active included an annotation (and then would review inerts/ancillaries as well).

We think the previously proposed evaluation criteria and list of materials classified by their active ingredients are a good start and appreciate NOSB’s acknowledgement of previous comments and desire to move this topic forward. As NOC noted, the goal of this work would be to result in a comparative reference tool for the NOSB to help them understand the various categories, classes, or families of sanitation materials, where they are most needed, and what would have the least and most environmental and human health impacts. Both the NOSB and the broader community need reference tools that will help them decide if petitioned materials are filling a need, as well as if a material that is less desirable could be taken off the list and replaced with a new material.

We thank you for your continued interest in this topic, and we urge the NOP to support NOSB by issuing initial Technical Review(s) to begin this important work.

**DISCUSSION DOCUMENT: NOSB RESEARCH PRIORITIES- FALL 2021**

OEFFA appreciates the board’s overall recommendation that integrated research consider whole farm systems. This is especially pertinent as we experience a long-term climate crisis. We further request that the board and USDA advance research into the role of holistic systems, such as organic agriculture and the role that organic can play as we work to address climate change.

While we support the range of research priorities identified by the NOSB we continue to reiterate the top-line research priorities that we have advanced for the past several years. Given the increases in NIFA funding, please amplify the importance of these sustainable alternatives to the USDA.

**Prioritize research examining barriers to participation of BIPOC farmers in organic certification**

OEFFA supports the work of NOC in raising the need for racial equity work within organic. A first step to addressing disparities in representation is understanding the source of these disparities and
OEFFA encourages the NOSB to prioritize research into **understanding barriers to participation in organic certification for BIPOC farmers**. This research should include information about institutions and policies that have perpetuated discrimination and provide relevant information to support the actions of USDA’s Office of the Assistant Secretary for Civil Rights. Research into barriers to participation in organic certification should also support the development of technical assistance and outreach specifically designed to best serve BIPOC farmers and the unique challenges they face.

We also support a research priority area suggested in the Union of Concerned Scientists’ Policy Brief in May 2020, to develop “markets for ethnic specialty crops and culturally relevant fruits and vegetables, leveraging the skills of immigrant and refugee farmers, helping them thrive while also contributing to local economies.” We support reexamining the national organic marketplace to support organic small farms, inclusive of Black and Indigenous small farmers.

Finally, OEFFA supports research to **limit and avoid the contamination of Black and Indigenous farmlands and conservation lands by off farm sources and neighboring farms, and remediation research to address racial and environmental justice disparities**.

**The Role of On-Farm Research**

**The Way in Which Research Is Conducted**

The way research is conducted is just as important as the research itself. To the extent possible, organic research should be done in partnership with organic producers on working farms. This will help ground the research in the realities faced by organic producers in the field. Further, researchers should take care to disseminate the interim and end-of-study findings of research with organic producers, in brief, accessible technical publications, and in paper and digital formats, to maximize farmers’ access to this information.

**Livestock**

1. **Evaluation of methionine for use in organic poultry production**

OEFFA supports NOSB’s priority of “Evaluat[ing] natural alternatives to DL-Methionine in a system approach for organic poultry feed program.”

We have noticed an increased use of metal methionine hydroxy analogue chelates, or, in common language, synthetic methionine stuck to copper, manganese, or zinc. We have allowed the use of such chelates under §205.603(d)(2), “Trace minerals, used for enrichment or fortification when FDA approved,” because these substances are AAFCO approved as sources of these minerals. Typically, however, synthetic methionine use would be regulated under §205.603(d)(1), which specifically addresses DL-Methionine. This work-around underscores the urgent need for natural methionine sources within a holistic, systems-based approach to poultry production.

Substantial research has already been conducted investigating isolated strategies for raising chickens organically and humanely without synthetic amino acid supplementation. **Systems based research on eliminating DL-Methionine in organic poultry feeds should investigate the**
impacts of natural methionine feed sources, breed, and high-welfare management strategies simultaneously. If we don’t spend time investigating natural methionine sources in a systems-based approach, creative ways of including synthetic methionine in poultry diets will continue to proliferate.

Crops

1. Conservation tillage systems in organic agriculture, carbon sequestration and the soil microbiome

OEFFA supports NOSB’s priority of “Organic no-till practices for diverse climates, crops, and soil types.”

That said, conversations around agriculture and climate change as well as soil health often dissolve into a focus on no-till vs. minimal tillage systems. We are seeing some progress on organic no-till and more research continues to be needed in this area. However, it is also necessary to acknowledge producers who have lost entire crops in organic no-till experimentation and research suggesting that organic systems using minimal tillage may also prevent erosion and provide the carbon sequestration and level of biological activity needed to meet our goals for climate and food system resilience. They need on-site technical assistance and research support as they test this system out in varied geographies and soil types across the country.

It is equally important to research minimal/conservation tillage systems in terms of how they affect the soil food web and carbon sequestration. While organic no-till is something to be working toward, we should not ignore the fact that it may not work in all areas and all production systems and that there may also be unique advantages to conservation tillage systems that require further study.

2. Study the decomposition rates and effects of biodegradable biobased mulch film residues on soil biology

OEFFA supports the NOSB’s research priority related to biodegradable biobased mulch film, and acknowledges that it would be a great asset to producers. Simultaneously, a great deal of plastic is currently in use by organic producers, much of which ends up in the landfill at the end of each season. While we are eager for an alternative to plastic mulch, we would like to see more research, including longitudinal studies, on the effects of biodegradable mulch decomposition on soil biology and human health. Additional research and development of a safe, biodegradable biobased mulch film for organic production is imperative.
Excluded Methods

OEFFA supports NOSB’s research priorities outlined related to coexistence with GE crop production.

3. **Integrity of breeding lines and ways to mitigate small amounts of genetic presence**

Given the current climate crisis and potential future impacts, the integrity of public germplasm collections is of even more pressing importance. Those resources must be kept viable and free from contamination for the viability of the organic food system but also as they may be needed to respond to future climate change. This is a critical research priority.

4. **Prevention of GMO contamination: Evaluation of effectiveness**

Organic and non-organic systems have continued to coevolve for decades now with minimal attention to the impacts on organic growers, who have been bearing 100% of the risk and the cost of contamination. We know this is not effective or equitable. A research strategy that combines the state of the science on drift and other forms of contamination accompanied by the social science dynamics of these very different farm cultures would be able to bring together these dynamics and make workable recommendations for both organic and non-organic growers. As more and more producers focus on soil health, organic AND regenerative agriculture, the issue will only continue to grow in importance.

5. **Excluded Methods database**

Please see our research comments included in the Excluded Methods section related to a federal database of existing and emerging GE technologies in the food and agriculture sector along with the research support necessary for organic producers, handlers, certifiers, and this Board, to stay educated on emerging methods and the potential for contamination of certified agricultural products.

Food Handling and Processing

1. **Alternatives to Bisphenol-A in organic product packaging**

BPA poses serious hazards and OEFFA supports its elimination from organic food packaging. At the same time, since known alternatives to BPA may also present similar problems, the NOSB should approach the issue of food packaging in a comprehensive way. Research on alternatives would help inform NOSB discussion on organic packaging moving forward.
2. Water quality

In Ohio and many other states, concerns about agricultural impacts on water quality continue. Whether the concerns relate to nitrogen or phosphorous, state governments and farmers alike are being tasked with identifying and implementing solutions. After approximately 10 years of study and tens of millions of dollars of federal investment in the Western Lake Erie Watershed Basin, more than ¾ of the agricultural land in the watershed remains without winter cover crops. While there has been some reduction in nutrient loading, significant progress toward the international goal of reducing dissolved reactive phosphorus by 40% remains out of reach.

Organic producers must plan their applications of nutrients in a way that protects watershed health. They do not use the synthetic phosphorous which is a significant contributor to nutrient loading, and which some research indicates can be exacerbated by the use of glyphosate. Despite these benefits of organic management systems, there has been little to no study of how wider adoption of these management practices could help meet water quality goals. In addition to the research priorities you have already identified, please ensure that USDA prioritizes research into the connections between organic management systems and water quality.

EXCLUDED METHODS DETERMINATIONS

OEFFA appreciates the board moving the issue of Excluded Method forward after a period of inaction. We also support the continued affirmation that genetic manipulation of any kind is to be prohibited in organic agriculture and that “…GMOs are a transgression on the integrity of the entire organic supply chain from cell to table.”

Identifying emerging technologies in the food sector and determining whether they will be considered excluded methods in the organic system will need to be an ongoing priority of this and subsequent boards and the continuity of that work must be maintained. The NOSB and the NOP should not, however, be doing this work in isolation from the rest of the USDA. In 2016, OEFFA provided a recommendation to the board that USDA begin housing a database of all GE methods used in agriculture. This work could be completed in cooperation with the Food and Drug Administration (FDA).

The past two years demonstrated to many, and to our emergency management agencies in particular, that we need increased attention to the security and resilience of the U.S. food system. A comprehensive listing of the existing and emergent GE technology related to food and agriculture should be catalogued and analyzed as a matter of national security.

1. Should the NOSB prioritize developing additional criteria for excluded methods determinations before continuing to work on the remaining TBD list techniques?

The NOSB must juggle both priorities at the same time. Due to the ever-changing nature of GE technology, we agree with our NOC colleagues that NOSB (and NOP) should proceed as follows:
• The NOP should codify the prohibition in organic for the eleven methods identified by the NOSB by publishing a guidance document for the NOP handbook to ensure clarity for all stakeholder groups.

• The NOP should codify that the four methods identified by the NOSB are allowed in organic by publishing a guidance document for the NOP handbook to ensure clarity for all stakeholder groups.

• The NOP should codify the four evaluation criteria used to determine if methods should be excluded by publishing a guidance document for the NOP handbook to ensure clarity for all stakeholder groups.

• Failure to continue work in this area will negatively impact organic plant breeders and the organic seed industry, who need certainty to advance plant breeding efforts that meet the needs of organic operations.

While the term “guidance” is used in this comment as a way to implement the NOSB recommendations on excluded methods, we ask the NOP and NOSB to discuss the best ways to have these recommendations be consistent between certifiers and enforceable on all operations. This may include having some of the criteria and definitions incorporated into the regulations. To provide stronger consistency between certifiers and give clear direction to accreditation auditors, placing the list of excluded and allowed methods in an instruction to certifiers should also be considered.

2. Is Policy Memo 13-1 complete and applied consistently in organic systems, i.e., do cell fusion and protoplast fusion need to remain on the TBD list or can they be moved to the excluded methods section with the notes that allowance is made for these techniques when employed within taxonomic plant families?

We defer to our more qualified colleagues in answering this question.
3. As the NOSB makes excluded methods determinations on the remaining TBD list techniques, should this organic system include allowance for historical use and a time frame for phasing out excluded uses?

The majority of additions and revisions to organic standards have a one-year implementation period and we feel that this would be appropriate for excluded methods as well. Historical use of a method provides justification for an implementation period beyond the immediate publication date of a rule but does not justify longer-term ongoing use once the method has been determined to be excluded.

On behalf of the Ohio Ecological Food and Farm Association and OEFFA Certification,

Amalie Lipstreu

Amalie Lipstreu, Policy Director