



March 30, 2017

National Organic Standards Board
USDA – AMS
1400 Independence Ave, SW
Washington, DC 20250
RE: AMS-NOP-16-0100

National Organic Standards Board members:

The Ohio Ecological Food and Farm Association (OEFFA) is a grassroots coalition of over 4,400 farmers, gardeners, consumers, 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 to consumers. OEFFA employs education, advocacy, and grassroots organizing to promote local and organic foods, helping farmers and consumers connect to build a sustainable food system. OEFFA's Certification program has been in operation since 1981. OEFFA certifies over 1,200 organic producers and food processors, ensuring that these operations meet the high standards established for organic products.

We respectfully offer the following comments.

Contents

Gratitude for NOSB Work	2
Organic Livestock and Poultry Practice Standard.....	2
HANDLING SUBCOMMITTEE.....	3
Proposal: Short DNA Tracers- Petitioned	3
Certification of Some Exempt Handlers	3
LIVESTOCK SUBCOMMITTEE.....	3
Copper sulfate.....	3
Lidocaine and Procaine.....	4
Excipients and Iodine (NPEs, APEs).....	6
COMPLIANCE, ACCREDITATION, AND CERTIFICATION SUBCOMMITTEE	7
Proposal: Personnel performance evaluations of inspectors (NOP 2027).....	7
Discussion document: Eliminating the incentive to convert native ecosystems to organic production	7

CROPS SUBCOMMITTEE.....	8
Biodegradable Biobased Mulch Film	8
Fixed Coppers and Copper Sulfate	8
Micronutrients.....	9
Proposal: Strengthening the organic seed guidance (NOP 5029)	9
Discussion Document: Aeroponics/Hydroponics/Aquaponics.....	11
CROSS-CUTTING TOPICS	11
Research Priorities.....	11
Genetic Contamination on Organic Farms	12
Fracking and Oil and Gas Industry Infrastructure Impacts on Organic Farms.....	13
Comprehensive Review of Sanitizers.....	14

Gratitude for NOSB Work

As we transition to a new federal administration and welcome new NOSB members, it is important to express how much we value the service and unique role the NOSB plays in the organic community, a role the board has played since before the National Organic Program existed. At points in the history of the NOP, the recommendations of the NOSB have served as unofficial guidance as organic advocates, producers, and certifiers wait for formal policy to be adopted. Not only does the NOSB steward the pruning and development of the National List of Approved and Prohibited Substances, but it takes on and tackles big-picture issues of great importance to organic producers, handlers, and everyone who supports a strong organic program.

It is precisely because of the leadership role of the NOSB that we look to you for solutions to difficult problems that can threaten the integrity of organic agriculture. Organic founders devised the NOSB structure and function with great intention. You are leaders of our community with a record of dedication, doggedness, and an ability to parse out complexities in the face of great controversy. The issues we face will continue to demand those qualities. Thank you for your service.

Organic Livestock and Poultry Practice Standard

This community worked tenaciously to advise and inform the creation of the Organic Livestock and Poultry Practice Standard (OLPP). OEFFA continues to await and support the adoption of the OLPP, and while that conversation has moved beyond the NOSB to the members of Congress, we continue to appreciate the work that went into it and urge its adoption from the grassroots-up and the top-down.

HANDLING SUBCOMMITTEE

Proposal: Short DNA Tracers- Petitioned

OEFFA supports the NOSB motion to **not** allow the inclusion of Short DNA Tracers on the National List of Approved and Prohibited Substances, due to the use of an excluded method for production of the tracers. DNA purification, biochemical copying, and synthetic manufacturing of primer oligonucleotides may “mimic” the natural synthesis of DNA, but they are not natural processes, are not essential, and are inconsistent with a system of sustainable agriculture and organic handling.

Certification of Some Exempt Handlers

The need for handlers to be certified across the production and supply chain is highlighted by several ongoing issues: the import of large volumes of suspect organic grain from Eastern Europe, the proposed inclusion of Short DNA Tracers on the National List as a technological fix for a process-based challenge, and the day-to-day experiences of organic farmers searching for reliable sources of organic seed, as well as associated services, such as seed mixing. The Accredited Certifiers Association (ACA) provided context regarding the organic produce industry’s traceability challenges to the National Organic Program (NOP), and the NOP identified gaps in the certification of handlers at winter meetings. The NOP also recently clarified the requirement for auction houses selling organic animals to be certified.

OEFFA agrees with NOP, ACA, Organic Farmers’ Agency for Relationship Marketing (OFARM), National Organic Coalition (NOC), and others that there is room for improvement in traceability and auditability in the organic sector. We also see organic as a process-based, rather than a testing-based standard, and we think a solution to this challenge could be through implementing existing organic requirements to a broader range of currently exempted organic handlers. Let’s all get on the same page about organic handling, and require the same of importers, seed dealers, brokers, livestock mineral mixers, and others that we require of organic producers: clear, auditable records, and accountability to a certifier through the certification process. Attention to these matters cannot happen too soon.

LIVESTOCK SUBCOMMITTEE

2019 Sunset Reviews:

Copper sulfate

§205.603(b) As topical treatment, external parasiticide or local anesthetic as applicable
(1) Copper sulfate.

OEFFA supports the continued listing of copper sulfate on the National List for livestock production.

OEFFA certified operations are already utilizing several cultural practices to support hoof and foot health in their organic management systems, including rotational grazing, maintaining dry housing and laneways, confining animals in very wet conditions, and conducting hoof trimming as needed. Despite

these practices, foot and hoof issues such as foot rot, heel warts, and hairy warts arise from time to time. OEFFA producers are generally seeing these issues in one to three animals at a time, not in the entire herd. More issues seem to arise in those herds engaged in comparatively less grazing, while still meeting the organic grazing requirements.

Currently, OEFFA producers are using varied remedies to treat foot issues, including copper sulfate, hydrogen peroxide, iodine, and various home remedies including sulfur and garlic powder, a sugar/molasses paste, and dietary supplements including salt. Copper sulfate is typically administered as a walk through footbath, and footbath wastewater is typically mixed with manure and applied to fields. Although the copper sulfate would compose a relatively small portion of the manure applied, it should be disposed of in a manner that minimizes accumulation of copper in the soil, which could be monitored through soil testing.

Copper is a controversial input in organic production and, due to the negative effects it can have on soil, aquatic ecosystems, and farmworker health, its use is included in critiques of organic production systems. For these reasons, we want to encourage further research into other viable disease management tools for use in organic production. We are cognizant of the spring 2015 vote for the addition of zinc sulfate to the National List for foot and hoof treatment. **Even with the potential addition of zinc sulfate, we continue to note copper sulfate as an important tool in organic livestock production.**

Lidocaine and Procaine

§205.603(b) As topical treatment, external parasiticide or local anesthetic as applicable

(4) **Lidocaine**—as a local anesthetic. Use requires a withdrawal period of 90 days after administering to livestock intended for slaughter and 7 days after administering to dairy animals

(7) **Procaine**—as a local anesthetic, use requires a withdrawal period of 90 days after administering to livestock intended for slaughter and 7 days after administering to dairy animals

OEFFA agrees with the NOSB vote in spring of 2016 to amend section 205.603(b) for both lidocaine and procaine, as follows, and urges their continued listing on the National List.

As topical treatment, external parasiticide or local anesthetic as applicable.

(4) Lidocaine—as a local anesthetic. Use requires a withdrawal period of ~~90 days~~ 8 days after administering to livestock intended for slaughter and ~~7 days~~ 6 days after administering to dairy animals

(7) Procaine —as a local anesthetic. Use requires a withdrawal period of ~~90 days~~ 8 days after administering to livestock intended for slaughter and ~~7 days~~ 6 days after administering to dairy animals

Regarding the additional information requested by NOSB:

1. Is procaine used in organic livestock production?

OEFFA producers tend to list lidocaine on Organic System Plans for use as a local anesthetic. Procaine is rarely listed on OEFFA producer OSPs.

2. Is procaine available in the U.S. in its pure form or only in combination with antibiotics?

While we're not sure if procaine is available in the U.S. in its pure form, we can attest to it being listed as an ingredient on the label along with antibiotics. We usually only see such a material on an OSP for an emergency treatment, or in the event a producer has made a mistake and utilized antibiotics with organic animals, which is then addressed through the compliance process.

Discussion Document: Clarifying "emergency" for use of synthetic parasiticides in organic livestock production

In the past, OEFFA has asked the NOSB livestock subcommittee to develop an "emergency use" definition. It was our thinking that, in addition to the selection of species and types of livestock suitable for site-specific conditions and resistance to prevalent diseases and parasites, as is required under §205.238(a), it would also be important for operators and certifiers to have clarification of this "emergency" term. In the interim, the Organic Livestock and Poultry Practice Standard was published, which includes a comprehensive parasite management plan as part of the Organic System Plan §205.238(d) that requires organic livestock operations to minimize internal parasite problems. Further, the plan to minimize internal parasites must include preventative measures such as pasture management, fecal monitoring, and emergency measures in the event of a parasite outbreak. Livestock producers must also work with their certifying agents to establish a parasite control plan as part of their OSP.

The effective date of the Organic Livestock and Poultry Practice Standard has been delayed in order to ensure the new policy team has an opportunity to review the rules. The current effective date is May 19, 2017. **Should the Organic Livestock and Poultry Practice Standard indeed be implemented, as we strongly urge it to be, OEFFA believes the additional standard at §205.238(d) will be sufficient to enable certifiers and producers to have a common understanding of the "emergency" term as part of the parasite management plan. However, if the Organic Livestock and Poultry Practice Standard continues to be delayed, or is ultimately not implemented, then OEFFA would request NOSB to define the term "emergency." Our previous comments suggested doing so by further clarifying the hierarchy defined at §205.238(a-b), perhaps drawing from the structure of the facility pest management standard at §205.271.**

Regarding the additional information requested by NOSB:

1. Does the term "emergency" need to be defined?

Yes, either through the Parasite Management Plan as part of the Organic System Plan between producers and certifiers, or by the NOSB, if the Organic Livestock and Poultry Practice Standard does not continue to move forward.

2. If so, how should the term "emergency" be defined?

OEFFA suggests further clarifying the hierarchy defined at §205.238(a-b), perhaps drawing from the structure of the Facility pest management standard at §205.271.

3. Should there be more specific guidelines, such as specific tests for parasite levels as part of the producer's parasite prevention plan, before it is determined that emergency treatment with an

approved parasiticide might be needed?

No, we do **not** think tests should be required. In the event of an emergency, it may not be possible or practical to engage a veterinarian, or await test results before moving forward with treatment.

4. What are the challenges for producers, inspectors and certifiers in verifying the documentation and implementation of a parasite management plan in organic operations, and how might these be addressed?

OEFFA believes that verifying a parasite management plan is analogous to the multiple other verifications that are required through the organic certification process. It is the certifier's job to facilitate the creation and clarity of the parasite management plan through the Organic System Plan, and the producer's job to provide clear and thorough information.

Excipients and Iodine (NPEs, APEs)

OEFFA previously shared comments with the Livestock Subcommittee that iodine is necessary for organic livestock production. We also shared the subcommittee's concern regarding nonylphenol polyethylene glycols (NPEs), a class of alkylphenol ethoxylates in iodine products including teat dips, and supported the proposal to remove NPEs from excipients allowed for use in organic production due to their toxicity in aquatic systems and their endocrine disrupting effects.

We also shared the following context regarding OEFFA's experience in reviewing these types of excipients in livestock inputs:

"OEFFA has wrestled with the issue of NPEs in the recent past and we would like to relate our experience to inform the board's discussion on this subject. When establishing more detailed protocols for reviewing teat dip products, we considered how to deal with excipients allowed at 205.603(f). Specifically, we found that some of the NPEs being used in teat dip formulations were approved by FDA only as *indirect* food additives. Further research showed that these substances had the significant health risks currently under discussion. OEFFA's certification policy panel, composed of staff, producers, inspectors, and scientists, determined that a prudent course of action would be to limit the use of teat dips containing NPEs to post-milking applications so that potential contact with organic products would be minimized. We began identifying these dips separately and working with clients to enact this policy in 2009. After some push back and losing a few clients to other certifiers over this issue, we reached out to the broader community and found that other certifiers accepted indirect food additives including NPEs to fit the criteria at 205.603(f) for materials allowed as excipients in livestock drugs. After much consideration, in the spirit of consistency of enforcement, and in an effort to not require anything beyond the national standards, we dropped the additional restriction in 2011. Though since 2012 we discontinued collecting information on NPEs, our materials database notes that 40 of the teat dips we currently approve contained NPEs at that time."

Since we shared this experience with the board, many manufacturers have reformulated products by replacing NPEs with other alkylphenol ethoxylates. OEFFA has continued to review these ingredients as excipients and has consistently struggled to verify that the replacements comply with the criteria at 205.603(f) for excipients in livestock drugs. However, it has been suggested that these ingredients may not need to be reviewed given that the board considered their presence based on the TR the NOSB

reviewed when relisting Iodine in 2015.

As a certifier, it is our goal to be consistent in our reviews and expectations. To that end, **please clarify if the recommendation for Iodine to be listed at 205.603(a)(14) includes complexing agents, or if the expectation is that certifiers and materials review organizations should be reviewing complexing agents for compliance individually.**

COMPLIANCE, ACCREDITATION, AND CERTIFICATION SUBCOMMITTEE

Proposal: Personnel performance evaluations of inspectors (NOP 2027)

OEFFA supports the NOSB proposal regarding personnel performance evaluations of inspectors. We also support the NOP's revised instruction document 2027 of March 6, 2017. We particularly appreciate section 3.2(b) of NOP 2027 which states:

“Field Evaluation (Inspectors only)

Field evaluations involve evaluating inspectors while they are conducting inspections and are considered the most effective method to assess inspector performance. Each inspector should be subject to a regular field evaluation. The field evaluation system should be developed using best practices, such as a risk-based approach (i.e., inspector experience, annual number of inspections, work product assessment, etc.) or another approach sufficient to determine inspector competency. Inspectors who have demonstrated full competency may be field evaluated less regularly but still require an annual performance evaluation.”

We see this statement as working in concert with NOSB's proposal, especially number 4, which states:

“All inspectors must receive a personnel evaluation annually, but an in-field witness audit need only be conducted every three years, or more frequently where concerns have been raised about the individual inspector's work or for a novice inspector.”

We appreciate the time and energy NOSB and NOP put into responding to public comment on this topic, and we expect that these proposed (NOSB) and already articulated (NOP) changes will lead to a workable inspector evaluation and professional development process for certifiers and inspectors alike.

Discussion document: Eliminating the incentive to convert native ecosystems to organic production

OEFFA appreciates the thoughtful and thorough discussion document presented by the NOSB. We support this important work moving forward and we look forward to spending more time consulting with colleagues in the field of conservation biology and natural resources conservation to comment more substantively in advance of the fall 2017 NOSB meeting.

CROPS SUBCOMMITTEE

2019 Sunset Reviews:

Herbicides, soap-based

Reference: §205.601(b) As herbicides, weed barriers, as applicable (1) herbicides soap-based—for use in farmstead maintenance (roadways, ditches, right of ways, building perimeters) and ornamental crops

OEFFA does **not** support the continued listing of Herbicides, soap-based, for farmstead maintenance and ornamental crops. We do not think this material is essential for farmstead maintenance.

Regarding the additional information requested by NOSB:

2. Do herbicidal soaps have a special niche in weed management that cannot be met by alternatives such as natural materials and methods?

No, we are not aware of a special niche in weed management for farmstead maintenance and ornamental crops for which herbicidal soaps would be required.

Biodegradable Biobased Mulch Film

OEFFA acknowledges that a biodegradable biobased mulch film would be a great asset to producers, and we receive constant requests for its use. Simultaneously, a great deal of plastic is currently in use by organic producers, much of which is ending up in the landfill at the end of each season. We have no desire for a product to be in use which would cause environmental and health effects as it breaks down in the soil, however, we are eager for an alternative to plastic mulch. Additional research and development of a safe, biodegradable biobased mulch film for organic production is imperative.

Fixed Coppers and Copper Sulfate

OEFFA strongly supports the continued listing of fixed coppers and copper sulfate on the National List for organic crop production.

OEFFA producers utilize many cultural practices to support plant health and prevent diseases, including pruning, wider spacing between plants, crop rotation, variety selection, nutrient management, and mulches. They also employ products containing hydrogen peroxide, as well as several other remedies including milk, oils, and microbial inputs to manage diseases. While these practices and products are helpful, they are insufficient to manage disease problems such as phytophthora in tomatoes, peppers, eggplants, and cucurbits. OEFFA producers work to make sure that copper does not accumulate in the soil by using specially designed sprayers and spraying techniques, as well crop rotations and soil testing. Some report success in managing disease by alternating between hydrogen peroxide and copper applications, further reducing the use of copper.

Copper is a controversial input in organic production and, due to the negative effects it can have on soil, aquatic ecosystems, and farmworker health, its use is included in critiques of organic production systems. For these reasons, we want to encourage further research into other viable disease

management tools for use in organic production. However, copper remains a necessary tool in growing organic produce. Our producers maintain that copper is an essential part of their disease management programs and there is currently no comparable substitute available.

Micronutrients

Soluble boron products §205.601 (j)(6) -As plant or soil amendments. Micronutrients—not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed. Soil deficiency must be documented by testing. (i) Soluble boron products.

Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt §205.601 (j)(6) -As plant or soil amendments. Micronutrients—not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed. Soil deficiency must be documented by testing. (ii) Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt.

In 2015, the NOSB voted to replace the wording “Soil deficiency must be documented by testing” with “Deficiency must be documented.” The regulation has not yet been changed to reflect that recommendation. OEFFA supports that recommendation, as the documentation of deficiency continues to be a challenge for organic producers and certifiers alike.

Proposal: Strengthening the organic seed guidance (NOP 5029)

OEFFA appreciates the thoughtful work of the Crops Subcommittee in addressing the issue of strengthening the organic seed guidance. Our comments are organized based on the framing for the NOSB discussion document.

Crops at risk from GMO contamination might need to be acknowledged, emphasized and have additional requirements for sourcing seeds:

- We appreciate the reiteration from previous commenters indicating a need for “...more incentive for seed companies to develop organic seed, keep it protected from contamination, and require growers to use it consistently.” We also concur with the need for determining a level of contamination that would trigger the compliance process for seed.
- The identification of at risk crops that may trigger additional seed sourcing requirements is useful and also relates to suggested language expressed in 4.1.3 (d) Contamination from GMO consideration: non-organic seed can be used if organic used cannot be sourced because of GMO contamination. We also support the inclusion at 4.1.2 of “...and the conventional replacement variety can be documented as being produced without the use of Excluded Methods.”
- OEFFA supports measures to strengthen recordkeeping, but we do **not** support a universal requirement for contacting a minimum of five seed sources. OEFFA is not convinced that this

additional burden, placed on the producer, will affect the desired outcome of increased use of organic seed. In our minds, different tools, rather than bigger versions of the same tools, are needed to meet the organic seed requirement. We support the concept of continuous improvement, and we support an industry-wide effort to move toward more organic seed use, balancing that effort among requirements for producers, handlers, variety developers, seed producers, and seed dealers. We **do** support allowing on-farm variety trials to serve as one of the three sources required of producers for identifying appropriate organic varieties.

- We support the inclusion of 4.4.5. Certifying agents should review the prevention measures taken to avoid contamination for seed of at-risk crops.
- We offer the following edit for 5029 -4 “Producers must prevent and avoid contamination from excluded methods in seed of at-risk crops (corn, soybeans, canola, alfalfa, beets, chard, cotton, rice and summer squash). We suggest *replacing prevent with “take measures to”* avoid contamination. Producers may take all measures available to them and find the seed source to be contaminated as there may be causes outside of their control.

Continuous Improvement:

With regard to the suggested rule change at §205.204(a)(1)(i), we agree with the goal of continuous improvement in relation to seed usage, but offer the following adaptation of the suggested language: (i) Improvement in sourcing and use of organic seed and planting stock must be demonstrated every year ***with documentation of consistent inability to source organic seed provided to the certifying agent*** (emphasis illustrating modification). Until we can clearly demonstrate that producers have the ability to fully comply with (a), caution should be used, and provision of specific types of seeds that are difficult to source could be collectively reported to the NOP.

Documentation of quality, quantity and equivalent variety:

We concur with the Crops Subcommittee statement that it is reasonable for ACAs to ask for improvements in compliance over time and also that consistent enforcement is needed. The addition of 4.2.1(a) stating that “Justification for use of varieties needs to be specific to each variety on the list and which issue (form, quality, quantity, or equivalence)” is appropriate and would also help inform areas where there may be insufficient supply or where additional research is needed.

With regard to variety trials, we agree with the utility of this tool and encouraging its use ***on a voluntary basis*** (emphasis added) to support producers’ seed and planting decisions. We are thankful for the acknowledgement by the Crops Subcommittee that compliance must be assured, not only by producers, but also by seed companies and brokers. Further, we support ACAs ensuring that the same three sources are not used every year, that brokers fully document the search (including names of sources checked), and that seed sources demonstrate that they carry organic seeds.

We are concerned about the requirement at 4.4.4(b) that noncompliances should be issued for repeated lack of progress in sourcing and using commercially available organic seed over time. Until we can be sure that we can adequately source all organic seed in the quality, quantity, and form needed, we should exercise caution when it comes to corrective actions.

Handlers supplying seed to contract growers:

It is important to close the loophole that enables buyers to evade accountability for promoting and requiring the use of organic seed when contracting with crop producers. The onus of responsibility should not fall exclusively to producers. We support addition of (3) to 4.2.1 stating that “If seed sourcing is carried out or mandated by the buyer of a contracted crop, the producer must keep records of **the buyer’s documentation** (emphasis added) on attempting to source organic seed as part of the producer’s own Organic Systems Plan. Such documentation must be comparable to that required of a producer who sources their own seed.”

Organic Seed Finder:

OEFFA is supportive of a more comprehensive and accessible clearinghouse for listing the availability of seed varieties. We believe the best available option to support improvements in this area is for the NOP to provide funds to an entity charged with managing an organic seed variety availability database. We believe it is important to have an independent entity charged with the details of varietal characteristics, assisting producers in determining if there are equivalent varieties available to substitute the non-organic varieties in use and to illustrate areas in need of increased development.

Discussion Document: Aeroponics/Hydroponics/Aquaponics

Organic production systems must promote ecological balance and conserve biodiversity, as was recognized by the creators of OFPA and is clearly stated in the Organic Rule. OEFFA believes the maintenance and management of organic matter in the soil, along with the diverse populations of organisms that are essential to soil ecosystems, are the foundation of organic farming.

In the absence of clear, applicable standards, OEFFA has not certified hydroponic operations to date. We thank the crop subcommittee for its continued work on this topic. OEFFA contends that hydroponics, aeroponics, and aquaponics are not consistent with organic production.

OEFFA will submit more detailed comments on container production in time for the NOSB 2017 Fall meeting.

CROSS-CUTTING TOPICS

Research Priorities

Organic no-till

The NOSB has acknowledged that “Organic no-till preserves and builds soil organic matter, conserves soil moisture, reduces soil erosion, and requires less fuel and labor than standard organic row crop farming.”

We support research focusing on the benefits of organic no-till. This has been viewed by many as the gold standard for sustainable production. While we support this research, we also understand that continued focus and research on the multifunctional benefits of organic soil building and management

systems must be maintained. Existing research examining tillage and soil carbon sequestration has raised questions about the value of no-till for carbon sequestration, calling for more in-depth research and analysis. While there are other benefits to no-till and reduced tillage systems, additional research should focus not just on this practice, but as the NOSB has stated, with consideration of the whole farm system.

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

There are many questions about the viability of public germplasm collections. Understanding inadvertent presence of GMOs in those collections is critical. Maintaining pure breeding lines is a foundation for a strong organic agriculture system and should be prioritized.

Prevention of GMO contamination: Evaluation of effectiveness

We support a better understanding of how **prevention strategies** are working to maintain the integrity of organic crop production systems. Advocating best practices for both organic and conventional farmers is important for organic farmers who are required to take preventative measures, and for conventional farmers that chose to be good stewards and good neighbors. In those instances where organic producers cannot rely on the best practices of good neighbors, policy research is needed to develop a mechanism that will not just provide conventional growers incentives to take their own prevention measures, but will also focus on mandatory compensation mechanisms paid by patent holders to farmers that experience contamination

Genetic Contamination on Organic Farms

Recognizing the ongoing review of issues around genetic contamination in organic agriculture and the need to ensure seed purity, OEFFA is sharing some of the insights from a 2016 survey of our producers. OEFFA surveyed approximately 1200 producer members and received a 23% response rate. Responses came from twelve states with the top three states represented being Ohio, Indiana, and Pennsylvania.

Producers were asked if they had experienced contamination from genetic material and pesticide drift, had a product rejected due to contamination, and whether companies responsible for developing and selling GE crops and related chemicals should be required to compensate non-GE farmers for damages. They were also asked to complete a contamination prevention costs worksheet.

Approximately 3% of respondents experienced genetic contamination, 5% experienced pesticide drift and 2.5% have experienced both. When looking at grain producers specifically, the percentage of farmers experiencing contamination jumps to over 7%. Approximately 4.3% of respondents had product rejected due to contamination.

An average estimate of contamination prevention costs based on the lowest estimated feed grain prices in 2016 were more than \$2000 per farm. Approximately 55% of the farms surveyed were between 50 and 500 acres in size. Clearly, as farm size increases, so too do contamination prevention costs and the cost of product rejection.

OEFFA will be reaching out to producers that experienced genetic contamination and product rejection for additional qualitative information to inform future policy development around the impacts of

genetic engineering on organic farms. We appreciate the work of the NOSB in addressing how to minimize GE contamination.

Fracking and Oil and Gas Industry Infrastructure Impacts on Organic Farms

For some time now, OEFFA has requested that the NOSB add the topic of Fracking and related Oil and Gas Industry Infrastructure and Impacts on Organic Farms to its work agenda. We continue to ask for the NOSB to look more closely at this issue. To help in that work we believe a discussion document focused on the items detailed below will clarify the need and potential ways to address this admittedly unwieldy and critically important topic.

Why should the NOSB address the impact that Oil and Gas Industry Infrastructure has on Organic Farms?

Fracking is a method of extracting oil and gas that relies on massive inputs of water, chemicals, and sand to release these natural resources. This method of resource extraction also releases heavy metals and naturally occurring radioactive material from deep underground rock formations. This impacts the quantity and quality of water available as an input for organic farming, exposure to contamination during the accidents that can and have occurred and also incorporates additional infrastructure that can negatively impact organic farms. Two components of that infrastructure are particularly impactful for organic farming and warrant further study by the NOSB.

Pipeline infrastructure is being constructed across the United States to transport natural gas from producing regions to other areas of distribution both within and outside the US. These broad impacts are more likely to affect a larger number of organic producers than direct exposure to fracking wells or produced water. More than 10% of organic farmers are in close proximity to direct drilling activity (Auch 2015) and while an analysis of rapidly expanding pipeline infrastructure has not been conducted, those impacts are likely to be much higher. OEFFA has been working with organic farmers that have no choice about the siting of this infrastructure on their farms and are working diligently and proactively to protect their organic certification, their financial livelihood, and way of life.

Aside from pipeline impacts, organic farmers are likely to be impacted by how this activity affects water as an input in terms of availability and quality. Not only are large amounts of water utilized, they are mixed with often undisclosed chemical mixtures, exposure to naturally occurring radioactive material (NORM) and returned to the surface as “produced water.” Stored in open air pits or injected underground, these mixtures would not be an acceptable input for organic farmers whether exposure occurs accidentally or intentionally as irrigation water.

The NOSB can be proactive in providing guidance and resources to organic farmers, certifiers and policymakers. OEFFA has previously shared an Organic Agriculture Impact Mitigation Plan resource with the Board and by studying this issue, other resources can be made available to help maintain the integrity of organic farms in proximity to oil and gas infrastructure.

Please develop a discussion document to help inform the board on this issue. We have engaged with NOSB members requesting more information on this topic and that information is included in the attachments filed with these comments.

Comprehensive Review of Sanitizers

OEFFA has previously noted that we could benefit from a review of sanitizers and disinfectants as a class, to aid the NOSB with future reviews of these items as they come before the board either as a new petition or at sunset. We recognize that a wide variety of sanitizers and disinfectants are a necessary part of food production on the farm, as well as within food processing facilities. Materials are needed so they can be used in rotation in order to prevent the development of “super-bug” type pathogens when management options do not produce the expected results. Further, the diversity of situations encountered when producing and handling organic foods, including wet or dry, hot or cold, as well as the bacteria or viruses being targeted by use of these materials, require a robust toolbox of options. The listing of this class of materials has been responsive to petitions and historical use, without the benefit of research into which could be most compatible with organic production. This type of research would provide the NOSB with the background they need make informed decisions when these materials come before the board. The questions asked of the public concerning this material illustrate the need for a discussion on sanitizers and disinfectants as a whole. We recommend this topic of information gathering on sanitizers and disinfectants be placed on the NOSB work agenda.

OFPA requires that materials on the National List be itemized “by specific use or application.” This requires the NOSB identify the uses for which these materials are needed. Needs, uses, and relative toxicities for cleaners, sanitizers, disinfectants, and sterilants must be distinguished.

Additional Questions for the NOSB Evaluation Criteria for Substances Added To the National List

Cleansers, sanitizers, and disinfectants have special characteristics and play a unique role in organic production and handling. As such, cleansers, sanitizers, and disinfectants, which, for the purpose of this comment will be referred to as “sanitizers,” deserve special consideration. Currently, The NOSB Evaluation Criteria for Substances Added to the National List serves as a checklist, to be used by NOSB members in evaluating petitioned or sunset materials. In order to better account for the special characteristics and utility of sanitizers in decision-making, we propose the following questions to be added to a “sanitizer” section of the checklist. Although for the ease of commenting, we havegrouped them together, the need for materials as cleaners, sanitizers, disinfectants, and sterilants must be distinguished.

1. Is the use of this material required by law?
2. What is the need that is fulfilled by this substance that makes it essential for organic production or handling?
3. Are there natural alternatives (such as vinegar, essential oils, aloe vera, etc.) that are at least equally effective for the uses for which the material is needed?
4. Does this material have a conditional registration? If so, please describe.
5. Is this material used in rotation with other “sanitizers” to prevent bacterial or viral resistance?
6. Is personal protective equipment required for the use of this material?
7. How does this material compare, in terms of toxicity, with other “sanitizers” employed in similar ways?

Further, in Category 1 of the checklist: Adverse aspects on humans or the environment, we suggest the following sub-questions be added regarding human health which are drawn from the EPA’s Safer Choice Program criteria for the least hazardous classes (i.e. III and IV) of EPA’s acute toxicity category hierarchy:

“Are there any harmful effects on human health from the main substance or the other substances that may be added to it? [§6517(c)(1)(A)(i); 6517 (c)(2)(A)(i) ; §6518(m)(4), 205.600(b)(3)]”

- Is it unlikely to have carcinogenic properties?
- Is it unlikely to have endocrine disruptor properties?
- Is it unlikely to cause developmental, reproductive, mutagenic, or neurotoxicity issues?

It is our hope that these additional checklist questions will help with future decision-making for all materials, with special regard to the unique uses of sanitizers within organic production and handling systems.

Thank you for your consideration of these comments.

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



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