NOSB Report Spring 2016

The National Organic Standards Board (NOSB) held its public meeting **April 25-27** in Washington D.C. View Meeting Agenda (pdf).

Below is an overview of the introductory presentations and meeting highlights followed by an at-a-glance view and summary chart of all NOSB proposals and final decisions. A complete transcript of this meeting will eventually be posted on the National Organic Program (NOP) website. The final recommendations will be posted in the near future at www.ams.usda.gov/NOSBMeetings.

To better understand the proposals and discussion documents reported on below, read OTA's user-friendly summary of all NOSB agenda items. We also developed a comprehensive resource booklet in preparation for the meeting that provides additional background alongside OTA's positions. This informative booklet is available for viewing as a flipbook or download the PDF. Quick summaries of discussions, public comments, and votes can also be found on OTA Twitter.

INTRODUCTORY PRESENTATIONS

The meeting kicked off with NOSB member introductions and an address from Elanor Starmer, the new Administrator of USDA's Agricultural Marketing Service (AMS). OTA welcomes Administrator Starmer and the following six new NOSB members: Scott Rice (certifier rep), Jesse Buie (producer), Emily Oakley (producer), Harriet Behar (resource conservationist), Dan Seitz (consumer rep), A-dae Romero-Briones (consumer rep).

Administrator Starmer was followed by a USDA Organic Working Group Update by AMS Organic Policy Advisor Betsy Rakola. Rakola started off by announcing that USDA's goal was to increase the number of certified organic operations to 20,000 by 2018. However, in 2016 we have already exceeded that goal with 31,000 certified operations worldwide. Rakola highlighted achievements under USDA's marketing and conservation programs such as the organic exemption rule that now extends to "split" operations that can apply to no longer pay assessments for market promotion activities into Research and Promotion Programs/Marketing Orders, and the Natural Resources Conservation Service National Organic Farming Handbook published in Summer 2015. Rakola also provided information on expanded crop insurance tools for organic producers including a transitional option. Finally, Rakola highlighted data from the recent Organic Production Survey along with proceedings of the USDA Organic Research Conference followed by helpful tools and resources for transitioning to organic. *View Presentation*: USDA Organic Working Group update (pdf)

National Organic Program's Deputy Administrator Miles McEvoy provided an update on NOP's efforts to ensure integrity in the organic marketplace. McEvoy reviewed several NOP accomplishments, and outlined guidance and rulemaking priorities including animal welfare, aquaculture, pet food, mushrooms, apiculture, import certificates and classification of materials. McEvoy also highlighted NOP's compliance and

enforcement authority, pointing to 2016 activities and notable enforcement actions. McEvoy's report also addressed the controversial issue of hydroponics by explaining the background and reasoning that led to AMS-NOP convening a hydroponic-aquaponic NOSB Task Force. McEvoy concluded by thanking everyone for contributing to the growth of organic agriculture. *View Presentation*: NOP Report (pdf)

Also, Dr. Lisa Brines, USDA's NOP National List Manager, gave a presentation and materials update on the National List. Dr. Brines reviewed the status of several petitions currently in progress and/or withdrawn, reviewed National List *materials to be discussed and voted on at this meeting, and previewed the 2018 Sunset materials that will be considered at the spring 2016 and fall 2016 NOSB meetings. *View Presentation:* Materials Update (pdf) (*materials = farm/livestock inputs, ingredients, processing aids).

Last but not least, Hydroponic Task Force members Dr. Stacy Tollefson (University of Arizona) and Dr. John Biernbaum (Michigan State University) provided updates on the work of the task force to-date. Together they represented the spectrum of viewpoints on how to apply organic principles to production systems that utilize containers and hydroponic practices. See "meeting highlights" for an expanded summary. View Presentation: Hydroponics Task Force update (pdf)

MEETING OVERVIEW & HIGHLIGHTS

- **Public comments:** Over the course of the three-day meeting, NOSB heard comments from approximately 110 members of the public on a number of issues. Including the public comment webinars held prior to the in-person meeting, there were 140 total oral commenters and 15 hours of oral comments. NOSB discussed these and other comments of support and suggested changes from 2,999 written comments submitted electronically prior to the meeting.

- **2018 Sunset Review Discussion:** The Crops and Handling Subcommittees discussed the comments received on the 15 National List materials (5 Crops, 10 Handling) scheduled to sunset in 2018. Research conducted by subcommittee members and comments received from the public indicate that the majority of the 2018 Sunset materials are necessary and/or essential. NOSB anticipates it will renew most of the materials. However, concerns and outstanding questions remain for carrageenan, cellulose, animal enzymes, potassium hydroxide and beta-carotene extract color. Public comments are still requested to help shape the vote that will take place at the fall 2016 meeting. Make your voice heard and weigh in through OTA's Sunset Survey System!

- **PROPOSALS (AT-A-GLANCE):** NOSB discussed and voted on 12 proposals at this meeting**:**
  - **PASSED – forwarded to NOP for approval and rulemaking**
    - **Squid Byproducts** (*Crops)*: Petition to allow as a synthetic fertilizer in organic crop production
    - **Sodium Lactate and Potassium Lactate** (*Handling)*: Petition to allow as a sanitizer (microbial agent) & pH regulator only
    - **Electrolyzed Water** (*Crops, Livestock & Handling)*: Petition to allow as a sanitizer (alternative chlorine material)
    - **Lidocaine and Procaine** *(Livestock)***:** Proposal to change the withholding time required by the annotation

- **Parasiticides** *(Livestock)***:** Multiple proposals to change the withholding time and use allowance required by the annotation. Emergency use only.
- **Ancillary Substances** *(Handling)*: Proposal on a definition, review procedure and compliance criteria
- **Policy and Procedures Manual (PPM) Revision (***Policy)*: Proposal to update the PPM to align with current practices

o **FAILED – will continue to be PROHIBITED in organic production and handling**
- **Ash from Manure Burning** *(Crops):* Petition to revise annotation to allow a restricted use
- **Oat Beta-Glucan** (*Handling)*: Petition to add for use as a natural fiber supplement (adds fiber to processed foods)

o **TABLED - Back to Subcommittee for further review (revisit at fall 2016 meeting)**
- **Soy Wax** (*Crops)*: The proposal to allow as an input in organic mushroom production was sent back to subcommittee to further discuss whether the annotation, "must be made from non-GMO soybeans," should be specified on the listing itself given the fact the excluded methods/GMOs are already a general prohibition in the organic regulations.
- **Sodium Dodecylbenzene sulfonate (SDBS)** *(Handling)*: Proposal to allow for use as a sanitizer was sent back to subcommittee to request a technical report (TR) and further explore its potential benefit in supporting restaurant and retail certification
- **Excluded Methods Terminology** *(Materials):* Proposal for NOP guidance to update and clarify the definition of Excluded Methods (GMOs) was sent back to subcommittee to address the many comments received to improve its accuracy

- **Hydroponics**: NOSB and attendees heard presentations from Dr. Stacy Tollefson (University of Arizona) and Dr. John Biernbaum (Michigan State University) regarding NOSB's Hydroponics Task Force. The two researchers represented the spectrum of viewpoints on how to apply organic principles to production systems that utilize containers and hydroponic practices. There is general agreement that organic production requires a biologically active system to deliver nutrients to plants, but opinions diverge when it comes to defining how this looks on a certified organic farm, ranging from the soil in the ground to containers of compost to hydroponic systems using compost tea. Public commenters also presented a wide range of views regarding which types of systems should be allowed to produce organic crops. Many traditional, long-time organic farmers who feel strongly that organic farming must be soil based called for NOP to implement the 2010 NOSB Recommendation on container growing and greenhouse crops. This recommendation defined hydroponics - *The production of normally terrestrial, vascular plants in nutrient-rich solutions or in an inert, porous, solid matrix bathed in nutrient-rich solutions* – and recommended that this practice be prohibited on organic crop production. Growers who produce crops in containers would be governed by the recommendation's proposed regulations, which incorporate organic principles into greenhouse settings. The 2010 recommendation was the last opportunity for public comment on the topic, and OTA supports its implementation. The Hydroponic Task Force will continue its discussion, and provide a report to NOSB in the early summer. NOSB intends on including a discussion around the Task Force report at its fall 2016 meeting in St. Louis, MO.

- **Excluded Methods Terminology:** The Materials/GMO Subcommittee discussed the numerous comments received on its proposal to update the excluded methods (GMO) terminology used in the organic regulations. It also heard from an expert panel convened to present on the emerging GMO technologies used in agriculture. The expert panel provided the subcommittee with excellent feedback on its proposal, shedding light on both the science behind GMO technology as well as the ethics and values that should be considered in the process of establishing guiding principles. Although there was strong support for the NOSB work completed to-date, the general consensus from all stakeholders, including OTA, was to send the proposal and the discussion document back to the subcommittee with the understanding that the definitions need to be more accurate and the terminology chart needs further work. The subcommittee hopes to bring a finalized proposal on definitions to the fall 2016 meeting along with a discussion document covering the topics needing further deliberation.

- **Seed Purity:** Despite extensive work to explore the feasibility of a seed purity standard, NOSB explained it is still not to a proposal stage. However, organic stakeholders continue to express that this is a very important topic, and the comments received on this round of discussion were supportive and helpful. Of the four options presented in the discussion document, the majority of stakeholders would like to see a task force developed to design a framework and plan for testing and collecting data on GMO contamination levels to help shape a seed purity standard. The subcommittee will likely come back with a recommendation to convene a task force on this topic. There was also strong support to strengthen the provisions in the organic regulations that require organic seed when commercially available. NOSB has accordingly added this topic to its work agenda so it may explore what else can be done.

- **Carrageenan:** Comments were very diverse and opinions mixed on this controversial material. NOSB is challenged to make a balanced decision based on sound science, the availability of organic alternatives, and consumer preference. To help address environmental concerns, the subcommittee requested a separate Technical Review on the farming and harvest of seaweed. Subcommittee members will also look into how the listing of this material impacts farmer livelihood. With respect to human health impacts of carrageenan, subcommittee members are challenged to find “unbiased” information. The subcommittee will fully evaluate all available research studies but is requesting that stakeholders send the entire study and not just the abstract. The subcommittee is also encouraging more comments on the use and effectiveness of alternatives. Comments stated that there are **no** alternatives to carrageenan in vegan capsules and marshmallows (non-gelatin products) and in infant formula. The subcommittee will consider an annotation to accommodate these specific purposes. The NOSB scientist seat representative encouraged everyone on the board to pay attention and take the time to read at least some of the scientific literature. Most NOSB members are uncertain how they will vote on carrageenan at the fall 2016 meeting.

- **Vitamins and Minerals:** The Handling Subcommittee heard from several stakeholders on the advantages and disadvantages to the options presented for revising the annotation on the allowance of vitamins and minerals. Some stakeholders would like to see vitamins and minerals allowed in organic products only when they are required by law, while others would like to see vitamins and minerals that are deemed essential (by FDA) or required by law continue to be allowed for appropriate fortification of select organic products as needed. Although the subcommittee believes this is a very important topic, it is choosing to focus on other priorities because it is not confident its

work will have any impact given that the topic has already been taken up by NOP and is stalled in an interim rule that apparently will not be moving forward any time soon. Subcommittee members expressed frustration and said they would be putting this topic aside for now.

- **Ancillary Substances:** A handful of ingredients on the National List are multi-component substances where the listed ingredient is combined with additional ingredients to provide a necessary technical effect. One example is the listing for microorganisms. When a certified operator purchases a microorganism product such a dairy culture or wine yeast, the product will include additional ingredients to "carry" and/or "feed" the microscopic living organisms. The organisms would die without the presence of the additional ingredients. NOSB is referring to these added ingredients as "ancillary substances." NOSB continues to grapple with the best way to review and approve these ancillary substances, and organic stakeholders continue to disagree on the best approach. To assist this process, the Handling Subcommittee brought forth a recommendation that clearly defines "ancillary substances" along with a review procedure and set of compliance criteria that will be used for all future evaluations by NOSB, certifying agencies and Materials Review Organizations. The proposal passed unanimously and will now move forward to NOP for approval.

- **Parasiticides**: NOSB'S proposal revising practice standards and National List annotations for the use of parasiticides in organic livestock passed unanimously (15 yes; 0 no). The proposal passed with strong support from public commenters, who included livestock producers, veterinarians, animal welfare groups, and OTA. The final recommendation provided specific regulatory language updates which would require:
    - That parasiticides continue to be prohibited in slaughter stock
    - That parasiticides continue to be allowed only in emergency situations
    - That the milk withholding period after treatment with Fenbendazole or Moxidectin be changed from 90 days to 2 days for dairy cows, and 36 days for goats and sheep.
    - That the listing for Ivermectin remains as presently listed, with a 90-day withdrawal period
    - That Moxidectin be allowed for both internal and external use
    - That fleece and wool from fiber-bearing animals be allowed to be certified organic even if use of parasiticides were necessary (emergency) at some time in the animal's life
    - That Fenbendazole be allowed without written order of a veterinarian

  The allowance for emergency use of parasiticides on wool-bearing sheep is welcomed by organic sheep producers who find the current total ban on parasiticides in organic fiber-bearing animals to be a significant barrier to the organic wool market. The NOSB Livestock Subcommittee indicated that it will pursue a proposal for the fall 2016 meeting to eliminate Ivermectin from the National List and recommend a definition for "emergency use" to ensure that producers are using these materials judiciously and consistently.

- **Policy and Procedures Manual:** The Policy and Development Subcommittee brought forth a proposal to revise the PPM to bring it in line with current NOSB operating procedures. Currently, the PPM is out of date, almost to the point of irrelevance, and it is confusing to the board members. Prior to this final proposal, NOSB provided the public with a draft version at the fall 2015 meeting. Public comments were received, and the subcommittee made revisions where necessary. The PPM was revised by members of the subcommittee in collaboration with the National Organic Program. Some organic stakeholders were strongly opposed to the revisions made because the changes reflect the sunset voting procedures that continue to create dissension in the organic community. With great care and consideration of public comments and NOSB's duty to follow the organic law and the requirements of a Federal Advisory Committee Act (FACA), NOSB passed the proposal to accept the updates and revisions to the PPM. The NOSB process and the oversight of organic food and agriculture continue to be the most transparent and rigorous public process of any food system in the world.

- **Soy Wax:** Soy wax is a synthetic soy-based wax used in mushroom log production and an unexpected highlight of this meeting. The Crops Subcommittee recommended its addition to the National List and recommended it include an annotation that it must be "made from non-GMO soybeans." Discussion at the full board level revealed reluctance for including this annotation because there is already a general prohibition on GMOs in organic production, and it was unclear how including the annotation on one material would impact how a general prohibition that applies to the entire National List. After lengthy consideration, NOSB voted to return the proposal to subcommittee for further consideration on removing the annotation to the listing. Soy wax does appear to be a more natural alternative to the currently allowed micro-crystalline cheese wax, and NOSB agreed that it should be added to the National List. Its decision to return the proposal to subcommittee was based entirely around whether to include or remove the annotation since it is redundant to the current regulations that prohibit the use of GMOs in organic production and handling.

- **Fracking:** A new topic brought to this NOSB meeting through public comment is a desire from farmers and certifiers to develop guidance around potential contamination from fracking and other oil and gas extraction operations. There is growing concern, particularly in the Midwest regarding proximity to fracking wells. Organic requirements clearly require producers to implement practices that prevent contamination of organic crops. Many commenters expressed a desire for NOSB and NOP to consider how organic farmers can best adhere to the organic requirements when there are potential impacts from oil and gas extraction operations. It is unclear when this discussion can fit into NOSB's work agenda.

- **NOSB Fall 2016 Work Plan:** NOSB provided an overview of its work agenda between now and the fall meeting. Critical topics include but are not limited to the 2018 Sunset materials, a hydroponics report & proposal, changes to inspector evaluations, BPA in packaging, excluded methods terminology and multiple petitions for crops, livestock and handling. *View Work Agenda:* NOSB 2016 fall Work Agenda (pdf)

SUMMARY CHART OF MOTIONS AND FINAL DECISIONS FOR ALL NOSB AGENDA ITEMS

As specified in the Organic Foods Production Act (OFPA), two-thirds of the votes cast at an NOSB meeting at which a quorum is present shall be decisive of any motion [§2119(i)]. As there were 14 NOSB members present at the meeting, 10 votes in favor were needed to pass any recommendation.

- **Non-input related proposals:** two-thirds of NOSB members must vote in favor of the motion for the recommendation to pass
- **Petition to add or remove an input or ingredient to/from the National List:** two-thirds of NOSB members must vote in favor of adding (or removing) the input/ingredient in order for USDA to have the authority to add or remove it from the National List

PROPOSALS

Subcommittee	Agenda Item	Motion and Votes	Fail/Pass
Materials	Excluded Methods Terminology	**Motion to approve three sections of the proposal: (Definitions, Principles & Criteria, Terminology Chart)** **Full Board Vote:** Yes: 15 No: 0 Abstain: 0 Absent: 0	**TABLED**
Livestock	Hypochlorous Acid (Petition to Add)	**Classification:** Synthetic **Motion:** List on 205.603(b) **Full Board Vote:** Yes: 15 No: 0 Abstain: 0 Absent: 0	**PASSED**
Livestock	Lidocaine & Procaine	**Motion to amend the listing of Lidocaine & Procaine** **Full Board Vote:** Yes: 15 No: 0 Abstain: 0 Absent: 0	**PASSED**
Livestock	Parasiticides	**Motion to:** • Revise the milk withholding period after treatment with Fenbendazole or Moxidectin from 90 days to 2 days for dairy cows, and 36 days for goats and sheep • Ivermectin remains as presently listed, with a 90-day withdrawal period • Moxidectin be allowed for both internal and external use • Fleece and wool from fiber-bearing animals be allowed to be certified organic even if use of parasiticides were necessary (emergency) at some time in the animal's life • Fenbendazole be allowed without written order of a veterinarian **Full Board Vote on all of the above:** Yes: 15 No: 0 Abstain: 0 Absent: 0	**PASSED**

Policy Development	PPM Updates & Revisions Proposal	**Motion to accept the Updates and Revisions to the PPM** **Full Board Vote:** Yes: 11 No: 1 Abstain: 2 Absent: 0	**PASSED**
Handling	Sodium Lactate and Potassium Lactate (Petition to Add)	**Classification:** Synthetic **Motion:** List on 205.605(b) antimicrobial/pH **Full Board Vote:** Yes: 12 No: 1 Abstain: 2 Absent: 0	**PASSED**
Handling	Oat Beta Glucan (Petition to Add)	**Classification:** Agricultural **Motion:** List on 205.605(b) **Full Board Vote:** Yes: 0 No: 15 Abstain: 0 Absent: 0	**FAILED**
Handling	Hypochlorous Acid (Petition to Add)	**Classification Motion:** Synthetic **Motion:** List on 205.605(b), chlorine materials **Full Board Vote:** Yes: 15 No: 0 Abstain: 0 Absent: 0	**PASSED**
Handling	Sodium Dodecylbenzene (Petition to Add)	**Classification Motion:** Synthetic **Motion:** List on 205.605(b) **Vote to send back to subcommittee - Yes:** 8 **No:** 6 **Abstain:** 1	**TABLED**
Handling	Ancillary Substances Procedure	**Motion to accept the Ancillary Substance Procedure (Definition, criteria & procedure)** **Full Board Vote: Yes:** 15 **No:** 0 **Abstain:** 0	**PASSED**
Crops	Ash from Manure Burning (Petition to Revise Prohibition)	**Classification:** Currently listed as a prohibited non-synthetic **Motion:** Revise Annotation on § 205.602 **Full Board Vote:** Yes: 0 No: 15 Abstain: 0 Absent: 0	**FAILED**
Crops	~~Squid and~~ Squid Byproducts (Petition to Add)	**Classification Motion:** Synthetic **Motion:** List on 205.601 **Full Board Vote:** Yes: 15 No: 0 Abstain: 0 Absent: 0	**PASSED**
Crops	Hypochlorous Acid (Petition to Add)	**Classification:** Synthetic **Motion:** List on 205.601 **Full Board Vote:** Yes: 15 No: 0 Abstain: 0 Absent: 0	**PASSED**

Crops	Soy Wax (Petition to Add)	**Classification:** Synthetic **Motion:** List on 205.601 (4 Yes, 0 No, 1 Absent) **Vote to send back to subcommittee - Yes:** 14 **No:** 0 **Abstain:** 1	**TABLED**

*(National List References: 205.601=allowed synthetics for crops / 205.603=allowed synthetics for livestock / 205.603(b)=prohibited non-synthetic in livestock / Handling: 205.605(a)=allowed non-synthetics / 205.605(b) = allowed synthetics / 205.606=allowed non-OG agricultural ingredient when OG is not available)

DISCUSSION DOCUMENTS

Subcommittee	Agenda Item	No Votes – Discussion Only
Crops	**Nonylphenol Ethoxylates (NPEs):** Discussion document on the removal on the allowance of these inert ingredients	The discussion document was presented to the full board explaining that the 3-year implementation timeline proposed by the subcommittee would go into effect once a final rule was issued by NOP. The discussion also clarified that this proposal only pertains to inerts used in crop products and would not affect NPEs that may be used in iodine teat dips used in organic livestock production. As part of this discussion, NOP provided an update on planned work that the Inerts Working Group is doing in conjunction with EPA to move inerts review for organic crop pest control products into the Safer Choice program.
Materials	**Excluded Methods Terminology**: Discussion document to clarify the definition of Excluded Methods (GMOs)	The discussion document was sent back to the subcommittee along with the proposal on Excluded Methods for further review and revisions with the understanding that that the definitions need to be more accurate and the chart needs further work. The subcommittee hopes for a vote on the updated document at the November 2016 meeting of the NOSB.
Materials	**Seed Purity Standard**: Discussion document on the next steps towards a standard	Despite extensive work to explore the feasibility of a seed purity standard, NOSB is still not to a proposal stage. However, the organic sector continues to express that this is a very important topic. Of the four options presented in the discussion document, the majority of stakeholders would like to see a task force developed to design a framework and plan for testing and collecting data on GMO contamination levels. The subcommittee will very likely come back with a recommendation to convene a task force on this topic. There was also strong support to improve the organic seed requirements in the regulations. NOSB has accordingly added this to its work agenda to explore what else can be done.

Handling	**Nutrient Vitamins and Minerals** *(Handling)*: Discussion document on an annotation change	Although the subcommittee believes this is a very important topic, it is choosing to focus on other priorities because it is not confident its work will have any impact given that the topic has already been taken up by NOP and is stalled in an interim rule that apparently will not be moving forward any time soon. Zea Sonnabend expressed frustration and said that the subcommittee would be putting this topic aside for now.
Policy Development	**Sunset Review Work Load Reorganization** *(Policy):* Discussion document to reorganize the Sunset Review timeline	NOSB received helpful comments from organic stakeholders on how to best group National List materials. The majority of commenters were supportive provided the outcome results in a thorough and fair review of all materials. The subcommittee will prepare a proposal for the fall meeting.

2018 SUNSET REVIEW

CROPS (7 CFR 205.601 & 205.602)

National List Item & Use	DISCUSSION
ALGICIDES, SANITIZERS, AND PEST, WEED, AND DISEASE CONTROL MATERIALS	
Copper Sulfate: Used as algicide and tadpole shrimp control in aquatic rice production, is limited to one application per field during any 24-month period. Application rates are limited to levels that do not increase baseline soil test values for copper over a timeframe agreed upon by the producer and accredited certifying agent. *Sunset Date*: *11/3/18*	The subcommittee indicated its intention that copper sulfate should remain allowed for use for organic rice production. There were not a substantial amount of comments but those received indicated that levels of copper in soil were not increasing and that there were no viable alternatives at this time. NOSB has identified finding alternatives to copper products is a research priority for the organic industry.
Ozone gas: Used as an irrigation system cleaner only. *Sunset Date*: *11/3/2018*	No comments were received to indicate that Ozone should be removed from the National List. The subcommittee was not concerned about adverse health effects and impacts to the environment because Ozone is only allowed as an irrigation system cleaner. The subcommittee's intention is to re-list Ozone at the fall 2016 meeting.
Peracetic acid: Used in disinfecting equipment, seed, and asexually propagated planting material. Also permitted in hydrogen peroxide formulations as allowed in § 205.601(a) at concentration of no more than 6% as indicated on the pesticide product label. *Sunset Date: 5/29/2018*	Peracetic acid remains a critical substance for reducing spoilage and ensuring food safety in post-harvest handling, and it is part of an integrated system for preventing fire blight in apples and pears without the use of antibiotics. The Crops Subcommittee indicated that it will relist this substance at the fall 2016 meeting.

FERTILIZERS, SOIL AMENDMENTS, AND CROP PRODUCTION AIDS	
Calcium chloride: brine process is natural and prohibited for use except as a foliar spray to treat a physiological disorder associated with calcium uptake. *Sunset Date: 11/3/2018*	Calcium chloride remains inappropriate for soil application but is necessary for addressing calcium deficiency concerns in certain crops. The Crops Subcommittee is concluding that its current listing as prohibited except for foliar use for calcium deficiencies remains appropriate and consistent with organic production and National List criteria, and will be remain allowed for use in these applications. The vote will occur at the fall 2016 meeting.
EPA List 3 – Inerts of Unknown Toxicity: As synthetic inert ingredients as classified by the Environmental Protection Agency (EPA), for use with non-synthetic substances or synthetic substances listed in this section and used as an active pesticide ingredient in accordance with any limitations on the use of such substances. (2) EPA List 3—Inerts of unknown toxicity—for use only in passive pheromone dispensers. *Sunset Date*: *11/3/2018*	This recommendation will be superseded by the annotation change to inerts passed by NOSB at its fall 2015 meeting, which allows any tolerance exempt inerts when used as part of a passive pheromone product. The Crops Subcommittee recognizes that if it removes List 3 inerts prior to the implementation of the new annotation proposal, it will effectively be removing pheromones from organic production, and it has no intention of doing that.

HANDLING (7 CFR 205.605 and 205.606)

National List Item & Use	DISCUSSION
NON-AGRICULTURAL (NON-SYNTHETIC) 205.605(a)	
Agar-agar: Also known as Japanese Isinglass. Used as a stabilizer and thickener and as a substitute for gelatin. Also used to clarify wines. *Sunset Date: 11/3/2018*	Comments were generally in support of relisting. All of the information received concludes that agar-agar meets the criteria to be on the National List. The subcommittee is supportive of relisting. The vote will occur at the fall 2016 meeting.
Animal enzymes: (Rennet—animals derived; Catalase—bovine liver; Animal lipase; Pancreatin; Pepsin; and Trypsin). Used to carry out naturally occurring biological processes. Rennet is used to curdle milk. *Sunset Date: 11/3/2018*	Comments were generally supportive of keeping animal enzymes on the National List. Some comments addressed the availability of organic enzymes. Research conducted by Harriet revealed that Europe is looking for organic animal enzymes as well. The subcommittee is supportive of relisting. The vote will occur at the fall 2016 meeting.
Calcium sulfate—mined: Used as a firming agent and yeast food and dough conditioner. Utilized in brewing and other fermentation industries, in Spanish-type	There was not direct comment opposed to the listing but some called for a restriction is usage or a new Technical Review to review health and human impact. Direct comment and comment through certifiers noted at least 25 operations using these products. The

sherry, as a jelling ingredient, in cereal flours, as a carrier for bleaching agent, in bread, rolls, and buns, and in blue cheese. Also used in creamed cottage cheese as an alkali. *Sunset Date: 11/3/2018*	subcommittee is supportive of relisting at this point in time. The vote will occur at the fall 2016 meeting.
Carrageenan: Also called Irish Moss. Used in a wide variety of processes and products. Functions as a bulking agent, carrier, emulsifier, gelling agent, stabilizer or thickener. Widely used in dairy products to improve function. *Sunset Date: 11/3/2018*	Comments and opinions were very diverse and mixed on this controversial material. NOSB is challenged to make a balanced decision based on sound science but that also takes into consideration consumer preference and the availability of organic alternatives. To help address environmental concerns, the subcommittee requested a separate Technical Review on the harvest of seaweed. Subcommittee members will also look into how the removal of this material will impact farmer livelihood. With respect to human health impacts of carrageenan, subcommittee members are challenged to find "unbiased" information. The subcommittee will fully evaluate all research studies but is requesting that stakeholders send the entire study and not just the abstract. The subcommittee is also encouraging more comments on the use and effectiveness of alternatives. Comments stated that carrageenan is needed in capsules and vegan marshmallows (non-Gelatin products) and in infant formula, and that alternatives are not available. The subcommittee will consider an annotation to accommodate such purposes. The NOSB scientist seat representative encouraged everyone on the board to pay attention and take the time to read at least some of the scientific literature. Most NOSB members are uncertain on how they will vote on at the fall 2016 meeting.
Glucono delta-lactone—production by the oxidation of D-glucose with bromine water is prohibited: Used as a coagulant in the production of tofu. Introduced for this purpose in the 1980s. *Sunset Date: 11/3/2018*	Tofu coagulant known for its use in Silken Tofu. Two public interest groups commented – the comments questioned the necessity of the substance as well as the possible presence of GMOs in the enzymes. 8 handlers or trade associations commented on the necessity, mostly around tofu production but we received one oral comment saying it may be used in dairy products. The vote will occur at the fall 2016 meeting.
Tartaric acid—made from grape wine: Used as an acidulant (pH control), emulsifier and flavoring agent in a wide range of products such as baked goods, dairy products, juice and meat and poultry products. Also used in combination with baking soda to make baking powder. Used in wine-making to alter acidity. *Sunset Date: 11/3/2018*	Comments were supportive of relisting tartaric acid. The subcommittee heard from several wine makers during the comment period on the importance of tartaric acid in the wine-making process with 1 commenter stating that tartaric acid is the single most important input allowed in organic wine-making. Comments from candy manufactures supporting the relisting of tartaric acid were also received. There was a question raised on whether tartaric acid from organic grape wine is available and the question will be added to the next public comment posting. The subcommittee is supportive of relisting. The vote will occur at the fall 2016 meeting.

NON-AGRICULTURAL (SYNTHETIC) 205.605(b) *NOSB expressed concern about relisting	
***Cellulose—for use in regenerative casings, as an anti-caking agent (non-chlorine bleached) and filtering aid**: Used as a filter aid. Petitioned for use in combination with diatomaceous earth for more effective juice filtering. Anticaking agent in shredded cheese; adds bulk weight to product. Used as peelable casings for hot dogs (not in final product). *Sunset Date: 11/3/2018*	Cellulose was allowed prior to OFPA and it is allowed internationally as well. Some environmental concerns associated with its source were raised in the Technical Review and in comments (growing of wood pulp trees). The subcommittee asked whether "powdered" forms are used but did not receive helpful comments. The inclusion of powdered forms was part of the recommendation in the last sunset round. It remains unclear whether "powdered" should be added. 18 written comments were received, 2 during webinar and 4 in-person. One public interest group requested an annotation change. Some commenters said that there are no natural or organic alternatives. One commenter pointed out that it is also in wine and juice production. Lisa Brines clarified that the last sunset recommendation to add "powdered" is still under consideration. The plan is to include it in a proposed rule. The board should look at the current listing but the old recommendation is still under consideration. **In general, the Board is undecided on how it will vote at the fall 2016 meeting.**
***Potassium hydroxide—prohibited for use in lye peeling of fruits and vegetables except when used for peeling peaches:** An alkali used to extract color from annatto seed, a peeling agent for tubers and fruits, also in cacao products. Used as a pH adjuster, stabilizer, thickener and poultry scald agent. Also used to make soap. *Sunset Date: 5/29/2018*	There were a limited # of commenters on potassium hydroxide but the subcommittee heard that it is used as a processing aid in buttermilk. Several certifiers wrote in and stated approximately 70 operations have potassium hydroxide listed in their OSP. It also heard from some members of the community stating their concern on potassium hydroxides hazards with several good questions asked that the subcommittee will be looking into. **In general, the Board is undecided on how it will vote at the fall 2016 meeting.**
Silicon dioxide—Permitted as a defoamer. Allowed for other uses when organic rice hulls are not commercially available. Used as an anticaking agent or grinding agent and as a defoamer. Also used as an absorbent for some Vitamin E and B in tableted foods. *Sunset Date: 11/3/2018*	Comments were generally supportive for retaining on the NL. Several said that rice hulls are not suitable for several products. One retailer expressed concern about it being produced by nanotech. One commenter wanted to revisit the language in the annotation. There is great interest in research into alternatives. Tom called attention to fruit powders and a You Tube video that shows how effective rice hulls are compared to silicon dioxide. Jean asked about human health impact. Harold responded that it has been on the NL for many years and nothing has ever come up. Some consumer questions were raised but only because of nanotech. The vote will occur in fall 2016.

AGRICULTURAL (205.606) – ORGANIC FORMS REQUIRED WHEN COMMERCIALLY AVAILABLE

***Beta-carotene extract color—derived from carrots or algae (pigment CAS#7235-40-7):** Used as a natural coloring agent. *Sunset Date: 5/29/2018*	This ingredient is listed for its use as a color and not as a vitamin A source. Originally it was being derived from non-organic carrots. However, commenters explained that stability is not there when it is from carrots. Now it is usually from algae. Comments were generally in support for keeping it on the NL. However, 3 consumer groups said it is not essential. The subcommittee asked about the kind of algae it is derived from but did not receive a response. It also questioned whether it could be a certified organic product? **The subcommittee is requesting more information from companies using it.**

IMPORTANT: NOSB is an advisory body to the Secretary of Agriculture. NOSB recommendations are not NOP policy unless NOP issues Final rules, Final guidance, Final instructions, or a policy memorandum that adopts the NOSB recommendations. They are not part of the USDA organic regulations unless such action is taken.

Plan to attend the fall 2016 Meeting! The next NOSB Meeting will take place in **November 16-18, 2016,** in St. Louis, Missouri, at the Chase Park Plaza Hotel. Mark your calendar, and plan to attend. More information to come!

NOSB Fall 2016 Work Plan: NOSB provided an overview of its work agenda between now and the fall meeting. Critical topics include but are not limited to the 2018 Sunset materials, a hydroponics report & proposal, changes to inspector evaluations, BPA in packaging, excluded methods terminology and multiple petitions for crops, livestock and handling. *View Work Agenda:* NOSB 2016 fall Work Agenda (pdf)

Organic Trade Association *NOSB Report*
As a service to its members, OTA attends National Organic Standards Board meetings. The *NOSB Report*, a member publication, summarizes the meeting and provides an overview of the agenda topics, public commentary, and key decisions made NOSB.

The items included in this report represent recommendations that NOSB developed and reviewed at its meetings. If accepted by the Board, recommendations pass to the National Organic Program, which determines the final form of the NOSB recommendations. OTA members are alerted to steps in rulemaking through OTA's *News Flash* or other member communications.

OTA's ***NOSB Report* archives** are available on OTA's website. Please contact OTA's Senior Director of Regulatory and Technical Affairs **Gwendolyn Wyard** or Nathaniel Lewis, OTA's Senior Crops and Livestock Specialist.