

Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy/regulations or NOSB recommendations. Proposals must be voted on by the full Board, to become recommendations to the USDA. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

## **Materials/GMO ad hoc Subcommittee Notes** **Tuesday, December 11, 2018 2:00 pm ET**

**Attending:** Harriet Behar (HB), Chair; Rick Greenwood (RG); Lisa de Lima (LD); Emily Oakley (EO), Vice Chair; Dan Seitz (DS)

**Absent:** Tom Chapman (TC); Dave Mortensen (DM)

**Staff:** Michelle Arsenault (MA); Clarissa Mathews (CM)

### **Agenda**

- Materials and TR update (CM)
- Discussion of marine materials (EO) - any updates?
- Discussion of moving ahead on excluded methods (HB)- committee members be included in task force calls?
- Discussion of genetic integrity transparency (HB)- requiring farmers to keep seed samples- keep or remove from proposal?
- Discussion of moving ahead on sanitizers (HB)- review of work agenda item and input from SC
- Other items
- Adjourn

### **Discussion**

- **November 13, 2018 notes** were reviewed and there were no changes.
- **Materials and TR update (CM).**
  - Collagen gel: Additional questions from the Handling Subcommittee were sent to contractor.
  - The draft TR for horticultural oils was sent to Crops last week.
  - There are two draft TRs under NOP review. One for ammonium soaps (Crops) and one for atropine (Livestock). The lead for ammonium soaps asked about the TR for soap-based algicide/demosers, which includes info about ammonium soaps. The NOP noted that the TR for soap-based algicide/demosers focuses more on use as an animal repellent than as a pesticide, although there is likely some overlap and may be helpful.
  - The TR for xylazine was sent back to the contractor for some revisions.
  - The TRs for malic acid and ascorbic acid are due back soon.,
  - TRs for chelating agents and calcium acetate were sent to the Crops Subcommittee in October and were found sufficient.
  - A member asked about the timeline for TR revisions. TR contractors are given a 30-day window to make revisions, which is written into the current contracts.
  - Materials reports. This spreadsheet is no longer being maintained, and instead the information can be found on the work agenda.
- **The new MS Subcommittee Chair** will take over in January. She will be overseas during that call and asked that the Vice Chair manage the call if she experiences difficulties dialing in.
- **Marine materials (EO).** EO spoke with NOP regarding a working group on marine materials, which has widespread support among stakeholders. NOP suggested a panel for the Fall 2019 meeting, while conversations with stakeholders continue on an informal basis. The lead will reach out to stakeholders about engaging more folks in the conversation. The NOSB Chair

offered to forward some information about protocols for harvesting rockweed that was shared with her at a recent conference by international organic industry members.

- **Excluded methods (HB).** The MS will continue to move forward with this topic, and is seeking as much feedback as possible from other Subcommittee members as well as stakeholders. Members also discussed the transfer of this project when the current lead ends her term on the NOSB. The next iteration of the Excluded Methods document will include transposons, embryo transfer in animals, and induced mutagenesis.
- **Genetic integrity transparency (HB).** NOSB received some negative feedback about requiring farmers to keep seed samples. The group discussed whether to keep this requirement or to make it an optional best practice. Members supported making it a best practice. The lead will revise the proposal and the group will discuss it at a later date.
- **Sanitizers (HB).** The group discussed the path forward for the sanitizers project. It is a complex topic and the group feels that the best approach would be to look at the group of substances in a holistic manner. A member suggested using mode of action to group the sanitizers for review. In addition to mode of action, the MS will also evaluate human health impacts.
- **Other items.**
  - HB will reach out to AB to determine if he wants to contribute to the sanitizers work even though he is not a member of the Materials Subcommittee.
  - Two previous seed documents are posted in the open docket for public comment. The NOSB Chair has reached out to stakeholders to provide feedback by January 2.
  - The January 8 call was moved to January 29.
- **The meeting was adjourned**

### [Previous MS Notes](#)

#### **Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)**

November 13, 2018

December 11, 2018

January 29, 2019

February 12, 2019

March 12, 2019

April 9, 2019

May 14, 2019

June 11, 2019

July 9, 2019

August 13, 2019

September 10, 2019

October 8, 2019

November 12, 2019

December 10, 2019

## Work agenda

| Materials Projects  | Contact    | Notes  | Discussed,<br>Voted | Meeting   |
|---|------------|--|---------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a>                     | DM         | Subcommittee reps to MS<br>DS - LS<br>DM - CS<br>LD - HS<br>RPs from Subcomm due to MS in July |                     | Fall 2019 |
| Petition and TR tracking  | HB/LB      | Ongoing  | NA                  | NA        |
| GMO Projects  | Contact    | Notes  | Discussed,<br>Voted | Meeting   |
| Protecting the Genetic Integrity of Seed Grown on Organic Land (formerly Seed Purity from GMOs) | DS, DM, HB | Proposal sent back to MS at Fall 2018 meeting. Reposted for additional comments for Spr 2019   |                     | Spr 2019  |
| Excluded Methods Determinations April 2019  | HB         | Proposal?  |                     | Spr 2019  |

## Other Projects

| Project Idea                                     | Contact    | Notes*   | Discussed,<br>Voted | Meeting                    |
|--|------------|--|---------------------|----------------------------|
| Contamination of Farm Inputs Discussion Document | HB         | Moved to Materials from Crops for continued work.  |                     | TBD                        |
| Sanitizers                                       | HB, EO, AB | Pending NOP approval. NOP approved 03 16 18  |                     | Proposal<br>Spr 2019       |
| Marine Materials                                 | EO         | Pending NOP approval. NOP approved request 01 12 16. TR request sent to NOP 02 05 16. TR expected Jul 2016. TR sent to CS and HS 08 10 16. TR suff due 10 11 16. TR found sufficient 09 06 16. Voted 09 06 16. Proposal in development 12 06 16. Voted 01 17 17. Referred back to CS and HS at Spr 2017 NOSB meeting. Moved to MS for completion 03 16 18. |                     | Discussion doc<br>Spr 2019 |

Spring 2019 Milestones

Target dates (tentative)

|   |                   |
|---|-------------------|
| NOP - Publish FRN, Open public comment                | Nov 26, 2018      |
| NOSB – Spring 2019 proposals due to NOP               | Feb 21, 2019      |
| NOP - Draft Spring 2019 NOSB meeting tentative agenda | Mar 4, 2019       |
| NOP - Post proposals                                  | Mar 6, 2019       |
| Public comment closes                                 | Apr 4, 2019       |
| Discuss/finalize work agendas on ES call              | Apr 13, 2019      |
| NOP - Send compiled public comments to NOSB           | Apr 8, 2019       |
| Public comment webinars                               | Apr 16 & 18, 2019 |
| Spring 2019 NOSB meeting - Seattle, WA                | Apr 24 - 26, 2019 |

Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy/regulations or NOSB recommendations. Proposals must be voted on by the full Board, to become recommendations to the USDA. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

## **Materials/GMO ad hoc Subcommittee Notes** **Tuesday, November 13, 2018 2:00 pm ET**

**Attending:** Harriet Behar (HB), Chair; Rick Greenwood (RG); Lisa de Lima (LD); Dan Seitz (DS); Emily Oakley (EO), Vice Chair; Dave Mortensen (DM)

**Absent:** Tom Chapman (TC)

**Staff:** Michelle Arsenault (MA); Clarissa Mathews (CM)

### **Agenda**

- Materials and TR update (CM)
- New subcommittee chair and new subcommittee members (HB)
- Discussion of marine materials (EO)
- Discussion of new lead for research priorities (EO)
- Discussion of moving ahead on excluded methods (HB)
- Discussion of genetic integrity transparency (HB)
- Discussion of moving ahead on sanitizers (HB)
- Open docket accessing public comments (MA)
- Other items?
- Adjourn
- 

### **Discussion**

- **Materials and TR update (CM).**
  - The TR for **oxalic acid** TR was returned to the contractor with some additional specific questions
  - **Ammonium citrate and ammonium glycinate** TRs pending sufficiency by the Crops Subcommittee.
  - **Calcium acetate** - TR pending sufficiency by the Crops Subcommittee.
  - **Collagen gel and casings** TR pending sufficiency by Handling Subcommittee
  - **Ammonium soaps, and horticultural oils.** TRs should be sent to Subcommittee soon
  - TRs for **atropine and xylazine** are due soon.
  - **Fatty Alcohols re-petition.** Members discussed what constitutes new information, which is the criteria that must be met for a re-petitioned substance. NOP will review the NOSB recommendation on fatty alcohols and the PPM for specific information about “new information”.
  - **Sanitizers.** The lead will continue to develop this project with the hope to bring a document to the Spring 2019 NOSB meeting.
- **New subcommittee chair and new subcommittee members (HB).** Emily Oakley will be the new Materials Subcommittee chair, and Dave Mortensen will be the Vice Chair. The updated Subcommittee lists will be circulated soon.
- **Research Priorities.** DM volunteered to lead the Research Priorities
- **Marine materials (EO).** The lead will discuss with NOP the possibility of convening an informal working group to move forward with this project. The lead noted that there is probably not time to develop a proposal for Spring 2019 meeting, but the MS would like to post a brief summary in the written comment docket to solicit feedback from the public as they develop a proposal.

- **Excluded methods (HB).** HB will work on the transposons segment that the Subcommittee voted to remove from the Fall 2018 proposal. The MS will also work on embryo transfer in livestock, and induced mutagenesis. The lead is not yet sure what form this project will take at the Spring meeting.
- **Genetic Integrity Transparency of Seed Grown on Organic Land (HB).** Members were pleased with positive feedback from commenters at the Fall NOSB meeting. The Organic Seed Alliance (OSA) commented on the clarity of the document and thought it may put undue burden on small farmers. The Subcommittee invited OSA to submit additional comments to the open docket, when it opens in a couple of weeks. Members discussed specifics of the proposal as they develop the next iteration.
- **Sanitizers (HB).** The MS Chair visited Ecolab prior to the NOSB meeting in St. Paul to tour the facilities. She relayed that she enjoyed the tour and learned a great deal about the research that Ecolab is doing and how it intersects with organic agriculture and the NOSB's work.
- **Open docket accessing public comments (MA).** The NOP anticipates that the docket will open soon and will close April 3.
- **Other items.** The MS will discuss contamination of farm inputs project at a later date
- **The meeting was adjourned**

[Previous MS Notes](#)

**Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)**

October 9, 2018  
 November 13, 2018  
 December 11, 2018  
 January 8, 2019  
 February 12, 2019  
 March 12, 2019  
 April 9, 2019  
 May 14, 2019  
 June 11, 2019  
 July 9, 2019  
 August 13, 2019  
 September 10, 2019  
 October 8, 2019  
 November 12, 2019  
 December 10, 2019

**Work agenda**

| Materials Projects  | Contact | Notes  | Discussed,<br>Voted | Meeting   |
|---|---------|--|---------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a> | DM      | Subcommittee reps to MS<br>DS - LS<br>EO - CS<br>LD - HS<br>RPs from Subcomm due to MS in July |                     | Fall 2019 |
| Petition and TR tracking  | HB/LB   | Ongoing  | NA                  | NA        |

| GMO Projects  | Contact    | Notes  | Discussed, Voted | Meeting  |
|---|------------|--|------------------|----------|
| Protecting the Genetic Integrity of Seed Grown on Organic Land (formerly Seed Purity from GMOs) | DS, DM, HB | Proposal sent back to MS at Fall 2018 meeting. |                  | Spr 2019 |
| Excluded Methods Determinations April 2019  | HB         | Proposal?                                      |                  | Spr 2019 |

### Other Projects

| Project Idea                                     | Contact        | Notes*   | Discussed, Voted | Meeting                 |
|--|----------------|--|------------------|-------------------------|
| Contamination of Farm Inputs Discussion Document | HB             | Moved to Materials from Crops for continued work.  |                  | TBD                     |
| Sanitizers                                       | HB, EO, JM, AB | Pending NOP approval. NOP approved 03 16 18  |                  | Proposal Spr 2019       |
| Marine Materials                                 | EO             | Pending NOP approval. NOP approved request 01 12 16. TR request sent to NOP 02 05 16. TR expected Jul 2016. TR sent to CS and HS 08 10 16. TR suff due 10 11 16. TR found sufficient 09 06 16. Voted 09 06 16. Proposal in development 12 06 16. Voted 01 17 17. Referred back to CS and HS at Spr 2017 NOSB meeting. Moved to MS for completion 03 16 18. |                  | Discussion doc Spr 2019 |

| Spring 2019 Milestones                                | Target dates (tentative) |
|---|--------------------------|
| NOP - Publish FRN, Open public comment                | Nov 26, 2018             |
| NOSB – Spring 2019 proposals due to NOP               | Feb 21, 2019             |
| NOP - Draft Spring 2019 NOSB meeting tentative agenda | Mar 4, 2019              |
| NOP - Post proposals                                  | Mar 6, 2019              |
| Public comment closes                                 | Apr 4, 2019              |
| Discuss/finalize work agendas on ES call              | Apr 13, 2019             |
| NOP - Send compiled public comments to NOSB           | Apr 8, 2019              |
| Public comment webinars                               | Apr 16 & 18, 2019        |
| Spring 2019 NOSB meeting - Seattle, WA                | Apr 24 - 26, 2019        |



Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy/regulations or NOSB recommendations. Proposals must be voted on by the full Board, to become recommendations to the USDA. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

## **Materials/GMO ad hoc Subcommittee Notes** **Tuesday, October 9, 2018 2:00 pm ET**

**Attending:** Harriet Behar (HB), Chair; Rick Greenwood (RG); Lisa de Lima (LD); Tom Chapman (TC)

**Absent:** Dan Seitz (DS); Emily Oakley (EO), Vice Chair; Dave Mortensen (DM)

**Staff:** Michelle Arsenault (MA); Clarissa Mathews (CM)

### **Agenda**

- Materials and TR update (CM)
- Public comments on Genetic Seed Integrity Transparency
- Public comments on Excluded Methods
- Public comments on Marine Materials
- Public comments on Research Priorities
- Tour of Ecolab's R and D facility in St. Paul
- Other items
- Adjourn

### **Discussion**

- **Materials and TR update (CM)**
  - **Ongoing work underway by NOP on petitions:**
    - Calcium acetate TR is under review by NOP.
    - Collagen gel TR is under review by NOP.
    - Ammonium citrate and glycinate. The petitioner recently sent a petition addendum, which should be posted on the website soon.
  - **4 new petitions**
    - Potassium hypochlorite
    - Anhydrous milkfat for addition to 205.606
    - Magnesium oxide for use in handling. This substance was previously petitioned for use in crops.
    - Wood ash for use in handling.
  - **TR for paper pots:** The Crops Subcommittee will draft some questions for the TR for paper pots and will send them to NOP soon.
- **Written public comments.** The members discussed the written public comments, including public comments on genetic seed integrity transparency, excluded methods, marine materials, and research priorities. With regard to genetic seed integrity transparency the group discussed possible changes based on public comment, and if those changes would be considered substantive, and would require the proposal to be sent back to Subcommittee for additional work.
- **Tour of Ecolab's R and D facility.** Harriet Behar will be visiting the lab prior to the NOSB meeting.
- **Other items.** None.
- **The meeting was adjourned**

[Previous MS Notes](#)

**Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)**

September 11, 2018

October 9, 2018

November 13, 2018

December 11, 2018

**Work agenda**

| Materials Projects  | Contact    | Notes  | Discussed,<br>Voted               | Meeting   |
|---|------------|--|-----------------------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a>                     | EO         | Subcommittee reps to MS<br>DS - LS<br>EO - CS<br>LD - HS<br>RPs from Subcomm due to MS in July                                     | 07 24 18                          | Fall 2018 |
| Petition and TR tracking  | HB/LB      | Ongoing  | NA                                | NA        |
| GMO Projects  | Contact    | Notes  | Discussed,<br>Voted               | Meeting   |
| Protecting the Genetic Integrity of Seed Grown on Organic Land (formerly Seed Purity from GMOs) | DS, DM, HB | MS submitted a request to the ES in August 2017 to convene a seed purity task force. Pending NOP approval, for future work agenda. | 06 12 18,<br>07 10 18<br>08 14 18 | Fall 2018 |
| Excluded Methods Terminology  | HB         | Proposal?  | 08 14 18                          | Fall 2018 |

**Other Projects**

| Project Idea                                     | Contact        | Notes*   | Discussed,<br>Voted | Meeting                     |
|--|----------------|--|---------------------|-----------------------------|
| Contamination of Farm Inputs Discussion Document | HB             | Moved to Materials from Crops for continued work.  |                     | TBD                         |
| Sanitizers                                       | HB, EO, JM, AB | Pending NOP approval. NOP approved 03 16 18  |                     | Proposal Spr 2018           |
| Marine Materials                                 | EO             | Pending NOP approval. NOP approved request 01 12 16. TR request sent to NOP 02 05 16. TR expected Jul 2016. TR sent to CS and HS 08 10 16. TR suff due 10 11 16. TR found sufficient 09 06 16. Voted 09 06 16. Proposal in development 12 06 16. Voted 01 17 17. Referred back to CS and HS at Spr 2017 NOSB | Jun 12              | Discussion doc<br>Fall 2018 |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  | meeting. Moved to MS for completion 03 16 18 |  |  |
|--|--|--|--|--|

| <b>Fall 2018 Milestones</b>                         | <b>Target dates (tentative)</b> |
|---|---------------------------------|
| NOP - Publish FRN, Open public comment              | Aug 9, 2018                     |
| NOSB Request for TRs for 2021 sunset materials      | Jun 6, 2018                     |
| New NOSB member training                            | July 18, 2018                   |
| NOP - Draft Fall 2018 NOSB meeting tentative agenda | Aug 9, 2018                     |
| NOSB - Fall 2018 proposals due to NOP               | Aug 23, 2018                    |
| NOP - Post proposals                                | On or before Sep 5, 2018        |
| Public comment closes                               | Oct 4, 2018                     |
| Discuss/finalize work agendas on ES call            | Oct 12, 2018                    |
| NOP - Send compiled public comments to NOSB         | Oct 8, 2018                     |
| Public comment webinars                             | Oct 16 & 18, 2018               |
| Fall 2018 NOSB meeting – St. Paul, MN               | Oct 24-26, 2018                 |

Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy or regulations. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

**Materials/GMO ad hoc Subcommittee Notes**  
**Tuesday, August 14, 2018 2:00 pm ET**

**Attending:** Harriet Behar (HB), Chair; Emily Oakley (EO), Vice Chair; Dan Seitz (DS); Rick Greenwood (RG);  
**Absent:** Lisa de Lima (LD); Tom Chapman (TC); Dave Mortensen (DM)  
**Staff:** Michelle Arsenault (MA); Clarissa Mathews (CM)

**Work agenda**

| Materials Projects  | Contact    | Notes  | Discussed,<br>Voted               | Meeting   |
|---|------------|--|-----------------------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a>                     | EO         | Subcommittee reps to MS<br>DS - LS<br>EO - CS<br>LD - HS<br>RPs from Subcomm due to MS in July                                     | 07 24 18                          | Fall 2018 |
| Petition and TR tracking  | HB/LB      | Ongoing  | NA                                | NA        |
| GMO Projects  | Contact    | Notes  | Discussed,<br>Voted               | Meeting   |
| Protecting the Genetic Integrity of Seed Grown on Organic Land (formerly Seed Purity from GMOs) | DS, DM, HB | MS submitted a request to the ES in August 2017 to convene a seed purity task force. Pending NOP approval, for future work agenda. | 06 12 18,<br>07 10 18<br>08 14 18 | Fall 2018 |
| Excluded Methods Terminology  | HB         | Proposal?  | 08 14 18                          | Fall 2018 |

**Other Projects**

| Project Idea                                     | Contact        | Notes*  | Discussed,<br>Voted | Meeting                  |
|--|----------------|---|---------------------|--------------------------|
| Contamination of Farm Inputs Discussion Document | HB             | Moved to Materials from Crops for continued work.   |                     | TBD                      |
| Sanitizers                                       | HB, EO, JM, AB | Pending NOP approval. NOP approved 03 16 18   |                     | Proposal Spr 2018        |
| Marine Materials                                 | EO             | Pending NOP approval. NOP approved request 01 12 16. TR request sent to NOP 02 05 16. TR expected Jul 2016. TR sent to CS and HS 08 10 16. TR suff due 10 11 16. TR found sufficient 09 | Jun 12              | Discussion doc Fall 2018 |

|  |  |   |  |  |
|--|--|---|--|--|
|  |  | 06 16. Voted 09 06 16. Proposal in development 12 06 16. Voted 01 17 17. Referred back to CS and HS at Spr 2017 NOSB meeting. Moved to MS for completion 03 16 18 |  |  |
|--|--|---|--|--|

**Agenda**

- Materials and TR update (CM)
- Excluded methods (HB) - discuss proposal/vote
- Protecting the Genetic Integrity of Seed Grown on Organic Land (DS, DM, HB) - discuss proposal/vote.
- Sanitizers
- Other items
- Adjourn

**Discussion**

- **Materials and TR update (CM).** The NOP updated the MS on the status of several petitions and technical reports. The NOP is currently reviewing a revised petition for paper chain pots, which was sent back to the petitioner for additional information. NOP will forward it to Crops in the next day or two. NOP recently received a repetition for potassium hypochlorite, a petition for calcium acetate, and TRs for pullulan, and collagen gel (casings). The oxalic acid TR was sent back to the TR contractor for some minor revisions, and is due back in early September. There are also four (4) other TRs in development for 2021 sunset substances.
- **Excluded methods (HB).** The group proposed some modifications to the draft document, and then proceeded to a vote.

Motion to accept the proposal on excluded methods

Motion by: HB

Seconded by: DS

Additional discussion: None

Yes: 4 No: 0 Abstain: 0 Absent: 3 Recuse: 0

- **Protecting the Genetic Integrity of Seed Grown on Organic Land (DS, DM, HB).** One of the co-leads reached out to the Organic Seed Alliance for additional information and resources for the development of this proposal. She subsequently reached out to eight (8) seed growers as well as one of the labs that many of them use to test seed. Additionally, she explored the non-GMO Seed Project standards, noting that the NOSB proposal has equivalent restrictions. The members proceeded to a vote, but will give an absent member an opportunity to review the document. All three co-leads will participate in the presentation at the Fall 2018 NOSB meeting.

Motion to accept the proposal on protecting the genetic integrity of seed grown on organic land with any non-substantive corrections by DM.

Motion by: DS  
 Seconded by: HB  
 Additional discussion: None  
 Yes: 4 No: 0 Abstain: 0 Absent: 3 Recuse: 0

- **Sanitizers.** The MS Chair suggested the Subcommittee develop a reference document for future Boards to use when reviewing new sanitizers. HB will revise the current work agenda request to and will ask for both a TR and a panel. Members thought a TR would be a useful first step, before convening a panel.
- **Other items.** None.
- **The meeting was adjourned**

[Previous MS Notes](#)

**Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)**

July 24, 2018  
 August 14, 2018  
 September 11, 2018  
 October 9, 2018  
 November 13, 2018  
 December 11, 2018

| Fall 2018 Milestones                                | Target dates (tentative) |
|---|--------------------------|
| NOP - Publish FRN, Open public comment              | Aug 9, 2018              |
| NOSB Request for TRs for 2021 sunset materials      | Jun 6, 2018              |
| New NOSB member training                            | July 18, 2018            |
| NOP - Draft Fall 2018 NOSB meeting tentative agenda | Aug 9, 2018              |
| NOSB - Fall 2018 proposals due to NOP               | Aug 23, 2018             |
| NOP - Post proposals                                | On or before Sep 5, 2018 |
| Public comment closes                               | Oct 4, 2018              |
| Discuss/finalize work agendas on ES call            | Oct 12, 2018             |
| NOP - Send compiled public comments to NOSB         | Oct 8, 2018              |
| Public comment webinars                             | Oct 16 & 18, 2018        |
| Fall 2018 NOSB meeting - Jacksonville, FL           | Oct 24-26, 2018          |

Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy or regulations. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

**Materials/GMO ad hoc Subcommittee Notes**  
**Tuesday, July 24, 2018 2:00 pm ET**

**Attending:** Harriet Behar (HB), Chair; Emily Oakley (EO), Vice Chair; Tom Chapman (TC); Dan Seitz (DS); Rick Greenwood (RG)

**Absent:** Dave Mortensen (DM); Lisa de Lima (LD)

**Staff:** Michelle Arsenault (MA); Clarissa Mathews (CM); Paul Lewis (PL)

**Work agenda**

| Materials Projects  | Contact    | Notes  | Discussed,<br>Voted   | Meeting   |
|---|------------|--|-----------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a>                     | EO         | Subcommittee reps to MS<br>DS - LS<br>EO - CS<br>LD - HS<br>RPs from Subcomm due to MS in July                                     | NA                    | Fall 2018 |
| Petition and TR tracking  | HB/LB      | Ongoing  | NA                    | NA        |
| GMO Projects  | Contact    | Notes  | Discussed,<br>Voted   | Meeting   |
| Protecting the Genetic Integrity of Seed Grown on Organic Land (formerly Seed Purity from GMOs) | DS, DM, HB | MS submitted a request to the ES in August 2017 to convene a seed purity task force. Pending NOP approval, for future work agenda. | 06 12 18,<br>07 10 18 | Fall 2018 |
| Excluded Methods Terminology  | HB         | Discussion Doc?  |                       | TBD       |

**Other Projects**

| Project Idea                                     | Contact        | Notes*   | Discussed,<br>Voted | Meeting                  |
|--|----------------|--|---------------------|--------------------------|
| Contamination of Farm Inputs Discussion Document | HB             | Moved to Materials from Crops for continued work.  |                     | TBD                      |
| Sanitizers                                       | HB, EO, JM, AB | Pending NOP approval. NOP approved 03 16 18  |                     | Proposal Spr 2018        |
| Marine Materials                                 | EO             | Pending NOP approval. NOP approved request 01 12 16. TR request sent to NOP 02 05 16. TR expected Jul 2016. TR sent to CS and HS 08 10 16. TR suff due | Jun 12              | Discussion doc Fall 2018 |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  | 10 11 16. TR found sufficient 09 06 16. Voted 09 06 16. Proposal in development 12 06 16. Voted 01 17 17. Referred back to CS and HS at Spr 2017 NOSB meeting. Moved to MS for completion 03 16 18 |  |  |
|--|--|--|--|--|

**Agenda**

- Welcome Clarissa Mathews/Introductions
- Materials and TR update (MA)
- Research priorities (EO) - discuss proposal
- Seed genetic integrity proposal (DS, DM, HB) –Discuss proposal.
- Excluded methods update
- Other items
- Adjourn

**Discussion**

- **Introductions.** The MS welcomed Clarissa Mathews, the new National List manager, and members introduced themselves.
- **Materials and TR update (MA)**
  - The NOP is reviewing four TRs and will send them to the Subcommittees as soon as they are done. Waiting for two TRs to come back; and working to contract four TRs for sunset 2021 materials.
  - The NOSB received a new petition (resubmission) for fatty alcohols, and it is under initial review by NOP.
  - The NOSB received a new petition for L - methionine for listing at §205.603, and it is under initial review by NOP.
  - The lead for oxalic acid (in Livestock) noted that it may be possible to complete a proposal for the Fall NOSB meeting if the LS receives the TR soon. The deadline to finalize proposals for the Fall meeting is August 24. The NOP will try to prioritize this review.
- **Research priorities (EO).**
  - Possible research priority for Materials: Fraud/Testing.
  - The group discussed inviting a NIFA representative to the NOSB meeting to provide an update on the prior NOSB research priorities. Currently there is an acting director and the group suggested waiting until a permanent director is appointed. The members discussed whether to invite this person to the fall or spring meeting. Most felt that Spring 2019 would be more appropriate.
  - The MS reviewed the current list of research priorities and moved to a vote on the proposal.

Motion to adopt the proposal on the 2018 research priorities document  
 Motion by: EO  
 Seconded by: TC

Additional discussion: None

Yes: 5 No: 0 Abstain: 0 Absent: 2 Recuse: 0

- **Seed genetic integrity proposal (DS, DM, HB).** The group discussed the draft proposal, including burden of testing. The leads will draft basic text to elicit feedback from the rest of the Subcommittee members. Members discussed the direction and scope for the document and are anticipating a draft proposal for discussion on the next call.
- **Excluded methods update.** The lead discussed additional language and definitions in the draft document. The proposal will include a more detailed description than what was included in previous iterations. MS asked for assistance from the NOP about mutagenesis. HB will send PL some questions, which he will forward to Fan Li Chou, the USDA biotechnology coordinator. The NOP added that a TAP may be useful as well.
- **Other items.** On the last Executive team call the topic of sanitizers was discussed, specifically a panel for the Spring NOSB meeting. The Subcommittee will continue planning and discussion on future calls.
- **The meeting was adjourned**

### [Previous MS Notes](#)

#### **Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)**

July 10, 2018

July 24, 2018

August 14, 2018

September 11, 2018

October 9, 2018

November 13, 2018

December 11, 2018

| Fall 2018 Milestones                                | Target dates (tentative) |
|---|--------------------------|
| NOP - Publish FRN, Open public comment              | TBD                      |
| NOSB Request for TRs for 2021 sunset materials      | Jun 6, 2018              |
| New NOSB member training                            | July 18, 2018            |
| NOP - Draft Fall 2018 NOSB meeting tentative agenda | Aug 9, 2018              |
| NOSB - Fall 2018 proposals due to NOP               | Aug 23, 2018             |
| NOP - Post proposals                                | On or before Sep 5, 2018 |
| Public comment closes                               | Oct 4, 2018              |
| Discuss/finalize work agendas on ES call            | Oct 12, 2018             |
| NOP - Send compiled public comments to NOSB         | Oct 8, 2018              |

|   |                   |
|---|-------------------|
| Public comment webinars                   | Oct 16 & 18, 2018 |
| Fall 2018 NOSB meeting - Jacksonville, FL | Oct 24-26, 2018   |

Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy or regulations. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

**Materials/GMO ad hoc Subcommittee Notes**  
**Tuesday, July 10, 2018 2:00 pm ET**

**Attending:** Harriet Behar (HB), Chair; Emily Oakley (EO); Vice Chair; Lisa de Lima (LD); Dan Seitz (DS); Rick Greenwood (RG); Dave Mortensen (DM)

**Absent:** Tom Chapman (TC)

**Staff:** Michelle Arsenault (MA)

**Work agenda**

| Materials Projects  | Contact    | Notes  | Discussed,<br>Voted   | Meeting   |
|---|------------|--|-----------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a>                     | EO         | Subcommittee reps to MS<br>DS - LS<br>EO - CS<br>LD - HS<br>RPs from Subcomm due to MS in July                                     | NA                    | Fall 2018 |
| Petition and TR tracking  | HB/LB      | Ongoing  | NA                    | NA        |
| GMO Projects  | Contact    | Notes  | Discussed,<br>Voted   | Meeting   |
| Protecting the Genetic Integrity of Seed Grown on Organic Land (formerly Seed Purity from GMOs) | DS, DM, HB | MS submitted a request to the ES in August 2017 to convene a seed purity task force. Pending NOP approval, for future work agenda. | 06 12 18,<br>07 10 18 | Fall 2018 |
| Excluded Methods Terminology  | HB         | Discussion Doc?  |                       | TBD       |

**Other Projects**

| Project Idea                                     | Contact        | Notes*   | Discussed,<br>Voted | Meeting                  |
|--|----------------|--|---------------------|--------------------------|
| Contamination of Farm Inputs Discussion Document | HB             | Moved to Materials from Crops for continued work.  |                     | TBD                      |
| Sanitizers                                       | HB, EO, JM, AB | Pending NOP approval. NOP approved 03 16 18  |                     | Proposal Fall 2018       |
| Marine Materials                                 | EO             | Pending NOP approval. NOP approved request 01 12 16. TR request sent to NOP 02 05 16. TR expected Jul 2016. TR sent to CS and HS 08 10 16. TR suff due | Jun 12              | Discussion doc Fall 2018 |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  | 10 11 16. TR found sufficient 09 06 16. Voted 09 06 16. Proposal in development 12 06 16. Voted 01 17 17. Referred back to CS and HS at Spr 2017 NOSB meeting. Moved to MS for completion 03 16 18 |  |  |
|--|--|--|--|--|

### Agenda

- Update on Technical Reviews - any further information on the paper pot petition?
- Paper pots update
- Update on liquid fish (EO)
- Update on seed genetic integrity (DS and HB)
- Sanitizers - short discussion - possibly a panel for the fall meeting? (HB)
- Research priorities (EO)
- Excluded methods update (HB)
- Farm input contamination - how are certifiers dealing with compost contamination?
- Fracking (HB)
- Materials and TR update (MA)
- Other items
- Adjourn

### Discussion

- **Update on Technical Reviews (MA).** NOP provided an update about the current status of TRs in development.
- **Paper pot petition.** HB will speak with MOSA about paper pots to see if they need guidance about submitting a petition.
- **Liquid fish (EO).** Liquid fish was reviewed in 2015 and is in the current sunset review cycle. Based on public comment the MS has decided to move forward with an annotation about native wild fish. NOP is currently reviewing the request and will inform the group if it is approved.
- **Seed genetic integrity (DS and HB).** The NOSB has developed several iterations of this topic. The group discussed the most effective way to bring this document forth for the fall meeting. i.e. Guidance? Instructions? Rulemaking? A member asked about the state of the problem, and emphasized that the group should scope the problem before proceeding. Several members will reach out to their communities to seek additional data about seed contamination.
- **Sanitizers (HB).** The NOSB and NOP have discussed the convening of an expert panel at the Fall NOSB meeting. HB will contact NOP with in-depth information to request that we move forward with a panel for Fall.
- **Research priorities (EO).** Deferred.
- **Excluded methods (HB).** The lead will meet with an informal ad hoc group at the end of July to discuss this topic.
- Farm input contamination (HB). Deferred to future call due to lack of time
- Fracking (HB). Deferred to future call due to lack of time
- Since we missed a May materials meeting, can we do an extra meeting at the end of July or early August?
- **Materials and TR update (MA).** Deferred to future call due to lack of time

- **Other items.** The group discussed the addition of a call in either July or August. July 24 was added to the schedule.
- **The meeting was adjourned**

[Previous MS Notes](#)

**Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)**

June 12, 2018

July 10, 2018

July 24, 2018

August 14, 2018

September 11, 2018

October 9, 2018

November 13, 2018

December 11, 2018

| Fall 2018 Milestones                                | Target dates (tentative) |
|---|--------------------------|
| NOP - Publish FRN, Open public comment              | TBD                      |
| NOSB Request for TRs for 2021 sunset materials      | Jun 6, 2018              |
| New NOSB member training                            | July 18, 2018            |
| NOP - Draft Fall 2018 NOSB meeting tentative agenda | Aug 9, 2018              |
| NOSB - Fall 2018 proposals due to NOP               | Aug 23, 2018             |
| NOP - Post proposals                                | On or before Sep 5, 2018 |
| Public comment closes                               | Oct 4, 2018              |
| Discuss/finalize work agendas on ES call            | Oct 12, 2018             |
| NOP - Send compiled public comments to NOSB         | Oct 8, 2018              |
| Public comment webinars                             | Oct 16 & 18, 2018        |
| Fall 2018 NOSB meeting - Jacksonville, FL           | Oct 24-26, 2018          |

Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy or regulations. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

**National Organic Standards Board (NOSB)  
Materials/GMO ad hoc Subcommittee Meeting Notes  
Tuesday, June 12, 2018 2:00 pm ET**

**Attending:** Harriet Behar (HB), Chair; Emily Oakley (EO); Vice Chair; Lisa de Lima (LD); Tom Chapman (TC); Dan Seitz (DS); Rick Greenwood (RG)

**Absent:** Dave Mortensen (DM)

**Staff:** Michelle Arsenault (MA), Devon Pattillo (DP)

**Work agenda**

| Materials Projects  | Contact    | Notes  | Discussed,<br>Voted | Meeting   |
|---|------------|--|---------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a>                     | EO         | Subcommittee reps to MS<br>DS - LS<br>EO - CS<br>LD - HS<br>RPs from Subcomm due to MS in July                                     | NA                  | Fall 2018 |
| Petition and TR tracking  | HB/LB      | Ongoing  | NA                  | NA        |
| GMO Projects  | Contact    | Notes  | Discussed,<br>Voted | Meeting   |
| Protecting the Genetic Integrity of Seed Grown on Organic Land (formerly Seed Purity from GMOs) | DS, DM, HB | MS submitted a request to the ES in August 2017 to convene a seed purity task force. Pending NOP approval, for future work agenda. | 06 12 18            | Fall 2018 |
| Excluded Methods Terminology  | HB         | Discussion Doc?  |                     | TBD       |

**Other Projects**

| Project Idea                                     | Contact        | Notes*   | Discussed,<br>Voted | Meeting                  |
|--|----------------|--|---------------------|--------------------------|
| Contamination of Farm Inputs Discussion Document | HB             | Moved to Materials from Crops for continued work.  |                     | TBD                      |
| Sanitizers                                       | HB, EO, JM, AB | Pending NOP approval. NOP approved 03 16 18  |                     | Proposal Fall 2018       |
| Marine Materials                                 | EO             | Pending NOP approval. NOP approved request 01 12 16. TR request sent to NOP 02 05 16. TR expected Jul 2016. TR sent to | Jun 12              | Discussion doc Fall 2018 |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  | CS and HS 08 10 16. TR suff due 10 11 16. TR found sufficient 09 06 16. Voted 09 06 16. Proposal in development 12 06 16. Voted 01 17 17. Referred back to CS and HS at Spr 2017 NOSB meeting. Moved to MS for completion 03 16 18 |  |  |
|--|--|--|--|--|

### Agenda

- Welcome new NOSB member Rick Greenwood
- Materials and TR update (DP)
- Marine materials (EO)
- Update on liquid fish (EO)
- Seed genetic integrity update- (DS)
- Sanitizers - Discuss possible panel for the fall meeting (HB)
- Research priorities update (EO)
- Excluded methods update
- Farm input contamination update is time allows. (HB)
- Add extra meeting in June and/or July?
- Other items
- Adjourn

### Discussion

- **Welcome Rick Greenwood.** Rick was recently appointed to the NOSB and gave a brief overview of his background, which includes microbiology and epidemiology, environmental health, organic farming, and faculty at UCLA. Rick noted that he saw the NOSB as opportunity to combine his interests in environmental science and agriculture.
- **Materials and TR update (DP).**
  - There are six TRs in development, and all are due in July and early August. LS has one for oxalic acid. Crops has three: ammonium glycinate, and ammonium citrate that are due back July 4, and calcium acetate as a soil amendment due back in early August. Handling is waiting for two TRs that are both due back in mid-August: One for pullulan, and one for collagen gel. The Subcommittees have requested four new TRs for 2021 sunsets – ammonium soaps (CS), horticultural oils (CS), atropine (LS) and xylazine (LS). HS did not request any TRs but is seeking to convene an expert panel for celery powder.
  - NOP has reviewed the petition for paper pots, and it is being returned to the petitioner for additional work.
- **Marine materials discussion document (EO).** The lead gave a brief history of this project and discussed the draft document. The MS is proposing certification to the wild crop standard and is seeking additional feedback from public commenters. A member mentioned that he participated in a project to build an artificial reef, and noted that the marine algae community is very complex and easily disrupted. The MS moved to a vote.

Motion to accept marine and organic crop materials discussion document

Motion by: EO

Seconded by: LD

Additional discussion: None

Yes: 5 No: 0 Abstain: 0 Absent: 2 Recuse: 0

- **Update on liquid fish (EO).** Deferred to next call.
- **Seed genetic integrity update - (DS/HB/DM).** The group discussed the draft document. A member asked about the 2016 request for a seed purity task force, which has not yet been approved by NOP. The group would like to pursue the idea, and will bring it to the next Executive call. The MS will discuss the proposal and vote on next call.
- **Sanitizers - Discuss possible panel for the fall meeting (HB).** The NOP approved the work agenda request and the group will discuss further on the next call.
- **Research priorities update (EO).** EO sent a reminder to the other Subcommittees about the research priorities due date and will follow up with the Chairs before the next MS call.
- **Excluded methods update.** The MS Chair is convening an informal group to discuss this topic.
- **Farm input contamination update is time allows. (HB).** Deferred to next call.
- **Add extra meeting in June and/or July?** Potentially June 26 or July 24. The Chair will poll members and let NOP know.
- **Other items.** None.
- **The meeting was adjourned**

### [Previous MS Notes](#)

#### **Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)**

May 8, 2018 - cancelled

June 12, 2018

July 10, 2018

August 14, 2018

September 11, 2018

October 9, 2018

November 13, 2018

December 11, 2018

| <b>Fall 2018 Milestones</b>                        | <b>Target dates (tentative)</b> |
|--|---------------------------------|
| NOP - Publish FRN, Open public comment             | May 18, 2018                    |
| NOSB Request for TRs for 2021 sunset materials     | Jun 6, 2018                     |
| New NOSB member training                           | July 18, 2018                   |
| NOP - Draft Fall 2018NOSB meeting tentative agenda | Aug 9, 2018                     |
| NOSB - Fall 2018 proposals due to NOP              | Aug 23, 2018                    |
| NOP - Post proposals                               | On or before Sep 5, 2018        |
| Public comment closes                              | Oct 4, 2018                     |
| Discuss/finalize work agendas on ES call           | Oct 12, 2018                    |

|   |                   |
|---|-------------------|
| NOP - Send compiled public comments to NOSB | Oct 8, 2018       |
| Public comment webinars                     | Oct 16 & 18, 2018 |
| Fall 2018 NOSB meeting - Jacksonville, FL   | Oct 24-26, 2018   |

Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy or regulations. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

**National Organic Standards Board (NOSB)  
Materials/GMO ad hoc Subcommittee Meeting Notes  
Tuesday, April 10, 2018 2:00 pm ET draft**

**Attending:** Harriet Behar (HB), Chair; Emily Oakley (EO); Dave Mortensen (DM); Vice Chair; Lisa de Lima (LD);

**Absent:** Tom Chapman (TC); Dan Seitz (DS)

**Guest speaker:** Dr. Fan-Li Chou, USDA Biotechnology Coordinator

**Staff:** Michelle Arsenault (MA), Paul Lewis (PL); Jenny Tucker

**Work agenda**

| Materials Projects  | Contact    | Notes  | Discussed,<br>Voted | Meeting   |
|---|------------|--|---------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a>                     | EO         | Subcommittee reps to MS<br>DS - LS<br>EO - CS<br>LD - HS<br>RPs from Subcomm due to MS in July   | NA                  | Fall 2018 |
| Petition and TR tracking  | HB/LB      | Ongoing  | NA                  | NA        |
| GMO Projects  | Contact    | Notes  | Vote                | Meeting   |
| Protecting the Genetic Integrity of Seed Grown on Organic Land (formerly Seed Purity from GMOs) | DS, DM, HB | Part of Seed purity doc will be incorporated into "Prevention Strategies for Excluded Methods in Crops and Handling" doc. MS submitted a request to the ES in August 2017 to convene a seed purity task force. Pending NOP approval, for future work agenda. | Jan 30              | Spr 2018  |
| Excluded Methods Terminology  | HB         | Proposal   | Jan 9               | TBD       |

**Other Projects**

| Project Idea                                     | Contact | Notes*  | Vote   | Meeting |
|--|---------|---|--------|---------|
| Contamination of Farm Inputs Discussion Document | HB      | Moved to Materials from Crops for continued work. | Jan 30 | TBD     |

|                  |                |   |       |           |
|------------------|----------------|---|-------|-----------|
| Sanitizers       | HB, EO, JM, AB | Pending NOP approval. NOP approved 03 16 18   | Jan 9 | Fall 2018 |
| Marine Materials | EO             | Pending NOP approval. NOP approved request 01 12 16. TR request sent to NOP 02 05 16. TR expected Jul 2016. TR sent to CS and HS 08 10 16. TR suff due 10 11 16. TR found sufficient 09 06 16. Voted 09 06 16. Proposal in development 12 06 16. Voted 01 17 17. Referred back to CS and HS at Spr 2017 NOSB meeting. Moved to MS for completion 03 16 18 |       |           |

### Agenda

- Introductions
- Guest speaker: Dr. Fan-Li Chou, USDA Biotechnology Coordinator
- Materials and TR update (MA)
- Sanitizer work agenda progress (HB)
- Other items
- Adjourn

### Discussion

- **Introductions.** Each member introduced themselves to the guest speaker.
- **Guest speaker:** Dr. Fan-Li Chou, USDA Biotechnology Coordinator for USDA writ large.
  - Coordinates biotechnology across agencies at USDA for consistency. Also coordinates with the US Trade Representative's (USTR) office. Dr. Chou offered to be a resource to the NOSB regarding excluded methods, and offered to provide additional contacts for colleagues who may be able to speak to the NOSB about biotechnology and Livestock.
  - The MS Chair provided an overview of GMOs and excluded methods as it pertains to the organic program, noting that the organic standards are process based, not product based. The definitions for excluded methods that currently exist do not cover all new technology terms, and the NOSB put forth a proposal to add additional terminology to the list of excluded methods.
  - Dr. Chou indicated that the FDA, EPA, and USDA (APHIS) all view Genetic Engineering in light of food safety, and feed safety. At the USDA they are concerned with safety for agriculture.
  - The Board is looking for clarity about moving forward. The NOSB would like to continue working on excluded methods in organic. The NOP will have further discussions with the MS regarding this topic.
- **The meeting was adjourned**

[Previous MS Notes](#)

### Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)

March 13, 2018

April 10, 2018

May 8, 2018

June 12, 2018

July 10, 2018

August 14, 2018

September 11, 2018

October 9, 2018

November 13, 2018

December 11, 2018

| Spring 2018 Milestones  | Target dates (tentative) |
|---|--------------------------|
| New NOSB member orientation                                       | TBD                      |
| NOSB - Spring 2018 proposals due to NOP                           | Feb 21, 2018             |
| NOP - Complete Spring 2018 NOSB meeting tentative agenda          | Mar 6, 2018              |
| NOP - Post proposals, "Open" public comment                       | Mar 6, 2018              |
| Discuss work agendas on ES call                                   | Mar 9, 2018              |
| Public comment closes   | Apr 4, 2018              |
| NOP - Send compiled public comments to NOSB                       | Apr 9, 2018              |
| Work agendas finalized on ES call (last call before fall meeting) | Apr 13, 2018             |
| Public comment webinar(s)   | Apr 17 & 19, 2018        |
| Spring 2018 NOSB meeting – Tucson, AZ                             | Apr 25-27, 2018          |

Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy or regulations. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

**National Organic Standards Board (NOSB)  
Materials/GMO ad hoc Subcommittee Meeting Notes  
Tuesday, March 13, 2018 2:00 pm ET**

**Attending:** Harriet Behar (HB), Chair; Emily Oakley (EO); Dave Mortensen (DM); Dan Seitz (DS), Vice Chair

**Absent:** Lisa de Lima (LD); Tom Chapman (TC)

**Staff:** Michelle Arsenault (MA); Paul Lewis (PL)

**Work agenda**

| Materials Projects  | Contact    | Notes  | Discussed,<br>Voted | Meeting   |
|---|------------|--|---------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a> | EO         | Subcommittee reps to MS<br>DS - LS<br>EO - CS<br>LD - HS<br>RPs from Subcomm due to MS in July   | NA                  | Fall 2018 |
| Petition and TR tracking  | HB/LB      | Ongoing  | NA                  | NA        |
| GMO Projects  | Contact    | Notes  | Vote                | Meeting   |
| Non-GMO organic seed integrity proposal (formerly Seed Purity from GMOs)    | DS, DM, HB | Part of Seed purity doc will be incorporated into "Prevention Strategies for Excluded Methods in Crops and Handling" doc. MS submitted a request to the ES in August 2017 to convene a seed purity task force. Pending NOP approval, for future work agenda. | Jan 30,<br>Feb 13   | Spr 2018  |
| Excluded Methods Terminology  | HB         | Proposal   | Jan 9               | TBD       |

**Other Projects**

| Project Idea                                     | Contact        | Notes*  | Vote   | Meeting   |
|--|----------------|---|--------|-----------|
| Contamination of Farm Inputs Discussion Document | HB             | Moved to Materials from Crops for continued work. | Jan 30 | TBD       |
| Sanitizers                                       | HB, EO, JM, AB | Pending NOP approval                              | Jan 9  | Fall 2018 |

## Agenda

- Approval of February 13, 2018 notes
- Update about guest speaker.
- Materials and TR update (MA)
- Sanitizer work agenda progress (HB).
- Other items
- Adjourn

## Discussion

- **The notes of February 13** were approved with no changes.
- **Update about guest speaker.** Dr. Chou, who will be a guest speaker on the April 10 MS call, is new to the role of USDA biotech coordinator. Her role is to coordinate across ARS, APHIS, and Foreign Ag, and the NOSB would like to be able to provide her a perspective from the organic space. Members asked if she had access to the public comments that were submitted as part of the USDA proposal to coordinate the framework for biotech across USDA. A member shared with the group a 2016 National Academies Press report entitled *Genetically Engineered Crops: Experiences and Prospects*. He noted that this could be very useful to the NOSB as it develops its proposal on Excluded Methods, as the terms have already been defined.
- **Materials and TR update (MA).** The NOP will eliminate the monthly Materials report as most of the information is captured in the new work agenda report, and is redundant. The NOP will continue to summarize the status of materials during the MS calls.
- **Sanitizer work agenda progress (HB).** The request to add sanitizers to the work agenda was revised, and the request was approved by the NOP. The MS Chair will update the Executive team on Friday, March 16.
- **Other items:**
  - The MS Chair discussed ways in which the NOSB can encourage petitioners to seek organic alternatives. Suggestions included adding questions to the sunset reviews, and/or to the petition template, specifically items for 205.606.
  - EO will discuss the proposal on marine materials with Handling and Crops, as the intention is to merge the two documents for the Fall meeting, and move it to the Materials Subcommittee.
- **The meeting was adjourned**

## [Previous MS Notes](#)

### Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)

February 13, 2018

March 13, 2018

April 10, 2018

May 8, 2018

June 12, 2018

July 10, 2018

August 14, 2018

September 11, 2018

October 9, 2018

November 13, 2018  
December 11, 2018

| <b>Spring 2018 Milestones</b>                                     | <b>Target dates (tentative)</b> |
|---|---------------------------------|
| New NOSB member orientation                                       | TBD                             |
| NOSB - Spring 2018 proposals due to NOP                           | Feb 21, 2018                    |
| NOP - Complete Spring 2018 NOSB meeting tentative agenda          | Mar 6, 2018                     |
| NOP - Post proposals, "Open" public comment                       | Mar 6, 2018                     |
| Discuss work agendas on ES call                                   | Mar 9, 2018                     |
| Public comment closes   | Apr 4, 2018                     |
| NOP - Send compiled public comments to NOSB                       | Apr 9, 2018                     |
| Work agendas finalized on ES call (last call before fall meeting) | Apr 13, 2018                    |
| Public comment webinar(s)   | Apr 17 & 19, 2018               |
| Spring 2018 NOSB meeting – Tucson, AZ                             | Apr 25-27, 2018                 |

Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy or regulations. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

**National Organic Standards Board (NOSB)  
Materials/GMO ad hoc Subcommittee Meeting Notes  
Tuesday, February 13, 2018 2:00 pm ET**

**Attending:** Harriet Behar (HB), Chair; Emily Oakley (EO); Dave Mortensen (DM); Tom Chapman (TC); Dan Seitz (DS), Vice Chair; Lisa de Lima (LD)

**Absent:** Tom Chapman (TC)

**Staff:** Michelle Arsenault (MA)

**Work agenda**

| Materials Projects  | Contact    | Notes  | Discussed,<br>Voted | Meeting   |
|---|------------|--|---------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a> | EO         | Subcommittee reps to MS<br>DS - LS<br>EO - CS<br>LD - HS<br>RPs from Subcomm due to MS in July   | NA                  | Fall 2018 |
| Petition and TR tracking  | HB/LB      | Ongoing  | NA                  | NA        |
| GMO Projects  | Contact    | Notes  | Vote                | Meeting   |
| Non-GMO organic seed integrity proposal (formerly Seed Purity from GMOs)    | DS, DM, HB | Part of Seed purity doc will be incorporated into "Prevention Strategies for Excluded Methods in Crops and Handling" doc. MS submitted a request to the ES in August 2017 to convene a seed purity task force. Pending NOP approval, for future work agenda. | Jan 30              | TBD       |
| Excluded Methods Terminology  | HB         | Proposal   | Jan 9               | TBD       |

**Other Projects**

| Project Idea                                     | Contact        | Notes*  | Vote   | Meeting  |
|--|----------------|---|--------|----------|
| Contamination of Farm Inputs Discussion Document | HB             | Moved to Materials from Crops for continued work. | Jan 30 | TBD      |
| Sanitizers                                       | HB, EO, JM, AB | Pending NOP approval                              | Jan 9  | Spr 2018 |

## Agenda

- Approval of January 30, 2018 notes
- Materials and TR update (MA)
- Genetic integrity of seed used on organic land (DS, DM, HB)
- Excluded methods terminology (HB)
- Contamination of farm inputs (HB)
- Sanitizer work agenda progress (HB)
- Other items
- Adjourn

## Discussion

- **The notes of January 30** were approved by the Subcommittee with no changes.
- **Materials and TR update (MA)**
  - The NOP sent the new materials' report to the NOSB Friday, February 9. The NOP asked the members to review it and send any feedback or changes.
- **Genetic integrity of seed used on organic land (DS, DM, HB).** The three co-leads will discuss this topic after an upcoming seed conference. The HS Chair will check with the NOP about posting the document for the Spring meeting.
- **Excluded methods terminology (HB).** The MS will ask the NOP for contacts from APHIS with whom they can discuss this project as APHIS is developing its guidance. The Subcommittee will continue to work on the document, but will defer it until after the Spring NOSB meeting.
- **Contamination of farm inputs (HB).** The MS won't have a document on contamination of farm inputs at the Spring meeting.
- **Sanitizers (HB).** The MS submitted a revised request to NOP to add sanitizers to its work agenda, and is awaiting feedback.
- **Other items.**
  - Natamycin. The MS Chair asked for feedback from members about how to move forward with this petition review.
- **The meeting was adjourned**

## [Previous MS Notes](#)

### Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)

January 30, 2018 - additional call

Contamination of farm inputs (HB).

Genetic integrity of seed used on organic land (DS, DM, HB).

February 13, 2018

March 13, 2018

April 10, 2018

May 8, 2018

June 12, 2018

July 10, 2018

August 14, 2018

September 11, 2018

October 9, 2018

November 13, 2018  
December 11, 2018

| <b>Spring 2018 Milestones</b>                                     | <b>Target dates (tentative)</b> |
|---|---------------------------------|
| New NOSB member orientation                                       | TBD                             |
| NOSB - Spring 2018 proposals due to NOP                           | Feb 21, 2018                    |
| NOP - Complete Spring 2018 NOSB meeting tentative agenda          | Mar 6, 2018                     |
| NOP - Post proposals, "Open" public comment                       | Mar 6, 2018                     |
| Discuss work agendas on ES call                                   | Mar 9, 2018                     |
| Public comment closes   | Apr 4, 2018                     |
| NOP - Send compiled public comments to NOSB                       | Apr 9, 2018                     |
| Work agendas finalized on ES call (last call before fall meeting) | Apr 13, 2018                    |
| Public comment webinar(s)   | Apr 17 & 19, 2018               |
| Spring 2018 NOSB meeting – Tucson, AZ                             | Apr 25-27, 2018                 |

Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy or regulations. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

**National Organic Standards Board (NOSB)  
Materials/GMO ad hoc Subcommittee Meeting Notes  
Tuesday, January 30, 2018 2:00 pm ET**

**Attending:** Harriet Behar (HB), Chair; Emily Oakley (EO); Dave Mortensen (DM); Tom Chapman (TC)

**Absent:** Dan Seitz (DS), Vice Chair; Lisa de Lima (LD)

**Staff:** Michelle Arsenault (MA); Paul Lewis (PL)

**Work agenda**

| Materials Projects  | Contact    | Notes  | Discussed,<br>Voted | Meeting   |
|---|------------|--|---------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a> | EO         | Subcommittee reps to MS<br>DS - LS<br>EO - CS<br>LD - HS<br>RPs from Subcomm due to MS in July   | NA                  | Fall 2018 |
| Petition and TR tracking  | HB/LB      | Ongoing  | NA                  | NA        |
| GMO Projects  | Contact    | Notes  | Vote                | Meeting   |
| Non-GMO organic seed integrity proposal (formerly Seed Purity from GMOs)    | DS, DM, HB | Part of Seed purity doc will be incorporated into "Prevention Strategies for Excluded Methods in Crops and Handling" doc. MS submitted a request to the ES in August 2017 to convene a seed purity task force. Pending NOP approval, for future work agenda. | Jan 30              | TBD       |
| Excluded Methods Terminology  | HB         | Proposal   | Jan 9               | TBD       |

**Other Projects**

| Project Idea                                     | Contact        | Notes*  | Vote   | Meeting  |
|--|----------------|---|--------|----------|
| Contamination of Farm Inputs Discussion Document | HB             | Moved to Materials from Crops for continued work. | Jan 30 | TBD      |
| Sanitizers                                       | HB, EO, JM, AB | Pending NOP approval                              | Jan 9  | Spr 2018 |

## Agenda

- Approval of January 9, 2018 notes
- Materials and TR update
- Genetic integrity of seed used on organic land (DS, DM, HB)
- Other items
- Adjourn

## Discussion

- **The notes** of January 9 were approved with no changes.
- **Update from program on changes to NOP operations.** The NOP has asked the Board to focus on petitions, sunset reviews, and organic integrity. The NOP will consider other items that are currently completed or nearly completed, and are ready for the Spring meeting, and respond to the MS request on the next call. The Board will further discuss the work agenda change on the February 9 Executive call.
- **Materials and TR update (MA).** The NOP forwarded two TR's to the Handling Subcommittee – one for magnesium stearate and one for calcium carbonate.
- **Genetic integrity of seed used on organic land (DS, DM, HB).** Two members discussed the draft document, including thresholds and testing.
- **Other items.** None
- **The meeting was adjourned**

### [Previous MS Notes](#)

#### **Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)**

January 23, 2018 - cancelled

January 30, 2018 - additional call

Contamination of farm inputs (HB).

Genetic integrity of seed used on organic land (DS, DM, HB).

February 13, 2018

March 13, 2018

April 10, 2018

May 8, 2018

June 12, 2018

July 10, 2018

August 14, 2018

September 11, 2018

October 9, 2018

November 13, 2018

December 11, 2018

| Spring 2018 Milestones                  | Target dates (tentative) |
|---|--------------------------|
| New NOSB member orientation             | TBD                      |
| NOSB - Spring 2018 proposals due to NOP | Feb 21, 2018             |

|   |                   |
|---|-------------------|
| NOP - Complete Spring 2018 NOSB meeting tentative agenda          | Mar 6, 2018       |
| NOP - Post proposals, "Open" public comment                       | Mar 6, 2018       |
| Discuss work agendas on ES call                                   | Mar 9, 2018       |
| Public comment closes   | Apr 4, 2018       |
| NOP - Send compiled public comments to NOSB                       | Apr 9, 2018       |
| Work agendas finalized on ES call (last call before fall meeting) | Apr 13, 2018      |
| Public comment webinar(s)   | Apr 17 & 19, 2018 |
| Spring 2018 NOSB meeting – Tucson, AZ                             | Apr 25-27, 2018   |

Note: Subcommittee notes may include preliminary discussions regarding substances considered for addition to or removal from the National List. They do not represent official National Organic Program (NOP) policy or regulations. Please see the NOP website for official NOP policy, regulations, and status of substances used in organic production and handling.

**National Organic Standards Board (NOSB)  
Materials/GMO ad hoc Subcommittee Meeting Notes  
Tuesday, January 9, 2018 2:00 pm ET draft**

**Attending:** Harriet Behar (HB), Chair; Dan Seitz (DS), Vice Chair; Lisa de Lima (LD); Dave Mortensen (DM)

**Absent:** Tom Chapman (TC); Emily Oakley (EO)

**Staff:** Michelle Arsenault (MA); Lisa Brines (LB); Paul Lewis (PL)

**Work agenda**

| Materials Projects  | Contact    | Notes   | Discussed,<br>Voted | Meeting   |
|---|------------|---|---------------------|-----------|
| Research Priorities Proposal<br><a href="#">May 2012 Framework Proposal</a> | EO         | Subcommittee reps to MS<br>DS - LS<br>EO - CS<br>LD - HS<br>RPs from Subcomm due to MS in July  | NA                  | Fall 2018 |
| Petition and TR tracking  | HB/LB      | Ongoing   | NA                  | NA        |
| GMO Projects  | Contact    | Notes   | Vote                | Meeting   |
| Non-GMO organic seed integrity proposal (formerly Seed Purity from GMOs)    | DS, DM, HB | Part of Seed purity doc will be incorporated into "Prevention Strategies for Excluded Methods in Crops and Handling" doc. MS submitted a request to the ES in August to convene a seed purity task force. Pending NOP approval, for future work agenda. | Jan 23              | Spr 2018  |
| Excluded Methods Terminology  | HB         | Proposal  | Jan 9               | Spr 2018  |

**Other Projects**

| Project Idea                                     | Contact        | Notes*  | Vote   | Meeting  |
|--|----------------|---|--------|----------|
| Contamination of Farm Inputs Discussion Document | HB             | Moved to Materials from Crops for continued work. | Jan 23 | Spr 2018 |
| Sanitizers                                       | HB, EO, JM, AB | Pending NOP approval                              | Jan 9  | Spr 2018 |

## Agenda

- Approval of December 12, 2017 notes
- Materials and TR update (LB)
- Sanitizers review update (HB and NOP)
- Genetic integrity of seed used on organic land (DS, DM, HB)
- Excluded methods terminology (HB)
- Contamination of farm inputs (HB)
- Other items
- Adjourn

## Discussion

- **The notes of December 12** were approved with no changes.
- **Materials and TR update (LB).** The NOP sent the January materials report last week, and asked for feedback or edits. LB updated the group on pending TRs, petitions (one for Livestock), and a petition addenda in progress for Polyoxin D zinc salt. LB also noted her impending departure from NOP on January 19; the NOP will provide an update on the January 12 Executive call about the transition.
- **Sanitizers review update (HB and NOP).** The MS is revising a work agenda request for sanitizers, and is seeking additional feedback from NOP about its request to refine the project, given the broad scope. The goal is to conduct a comprehensive review of sanitizers to develop a framework, which the NOSB could use to review future petitions. Currently there are a number of sanitizers in various sections on the National List, and it is difficult to determine the need for new ones based on what is currently available. The group discussed various resources in order to move this forward, including a technical report that focuses on alternatives and/or advice from academia. A member suggested adding specific questions to the TR request, and perhaps for future petitioners. The NOP reminded the group that the requested information must align with OFPA criteria.
- **Genetic integrity of seed used on organic land (DS, DM, HB).** The group discussed a preliminary draft proposal on genetic integrity of seed, including tolerance levels, testing, and who would bear the cost. A member offered that as a consumer, the regulations can be very complex, and any progress the NOSB could make in this area would be beneficial to protect consumers without necessarily requiring rulemaking. The will of the group is to develop a document for the Spring meeting to elicit public feedback. The co-leads will discuss this further and reach out to other NOSB members. The Subcommittee will discuss this again on the next call.
- **Excluded methods terminology (HB).** On the last MS call the NOP noted that the NOSB should not recommend definitions for excluded method technologies that are different than those used by others parts of USDA. The NOP suggested that the NOSB defer to APHIS, since they are the regulatory agency responsible for defining those terms. A member noted that the MS is seeking to define approximately eight (8) terms or technologies, which are not controversial, and which are already accepted by the biotechnology community. The MS could develop a draft document, then seek feedback from APHIS, on these terms. A member expressed concern about the pace of the project if the NOSB has to wait for another government agency to produce a list of technologies, when the industry is moving at a much quicker pace.
- **Contamination of farm inputs (HB).** Deferred to next call.
- **Other items.** The MS added an additional call on January 23, 2018, and may add one more.
- **The meeting was adjourned**

[Previous MS Notes](#)

**Future Call Schedule (2<sup>nd</sup> Tuesday 2:00 ET)**

December 12, 2017

January 9, 2018

January 23, 2018 - additional call

Contamination of farm inputs (HB).

Genetic integrity of seed used on organic land (DS, DM, HB).

February 13, 2018

March 13, 2018

April 10, 2018

May 8, 2018

June 12, 2018

July 10, 2018

August 14, 2018

September 11, 2018

October 9, 2018

November 13, 2018

December 11, 2018

| Spring 2018 Milestones  | Target dates (tentative) |
|---|--------------------------|
| New NOSB member orientation                                       | TBD                      |
| NOSB - Spring 2018 proposals due to NOP                           | Feb 21, 2018             |
| NOP - Complete Spring 2018 NOSB meeting tentative agenda          | Mar 6, 2018              |
| NOP - Post proposals, "Open" public comment                       | Mar 6, 2018              |
| Discuss work agendas on ES call                                   | Mar 9, 2018              |
| Public comment closes   | Apr 4, 2018              |
| NOP - Send compiled public comments to NOSB                       | Apr 9, 2018              |
| Work agendas finalized on ES call (last call before fall meeting) | Apr 13, 2018             |
| Public comment webinar(s)   | Apr 17 & 19, 2018        |
| Spring 2018 NOSB meeting – Tucson, AZ                             | Apr 25-27, 2018          |