Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, December 13, 2022 1:00 pm ET

Present: Wood Turner (WT), Chair; Brian Caldwell (BC); Mindee Jeffery (MJ); Carolyn Dimitri (CD); Nate Powell-Palm (NPP)

Absent: Logan Petrey (LP), Vice Chair; Dilip Nandwani (DN)

Staff: Michelle Arsenault (MA); Jared Clark (JC)

Agenda

- Review October 11, 2022 notes
- Review November 8, 2022 notes
- Research Priorities update (WT)
- TR templates (BC/MJ with all)
- Excluded Methods TBD list (MJ with all)
 - Review of definition work (transposons, induced mutagenesis, tilling, double haploids) since last meeting (BC, DN, LP)
 - Regulatory framework (MJ)
 - Discussion of potential TR for induced mutagenesis (BC)
- Additional Items
- Adjourn

Discussion

- October 11, 2022 notes. The Chair recommended capturing action items from the Subcommittee calls more consistently. The notes were accepted as written.
- **November 8, 2022 notes.** A member suggested a wording change for clarity, and the notes were accepted.
- Research Priorities update (WT). The Subcommittee chair is working on a list of proposed priorities, which he will send to the Subcommittee members so the liaisons can share them with the other Subcommittees.
- TR templates (BC/MJ + all). The NOP and the MS worked with OMRI to update the TR templates. The goal is to align the petition template with the TR template and eliminate redundancy, so it streamlines the process for all users. The MS is also interested in adding a question about Excluded Methods and would like to get feedback from members. The group also discussed getting feedback from stakeholders, and will discuss this at a later date. CD will lead this project with BC and MJ. MJ will send the annotated version from OMRI to CD, and she will redline and circulate it to the MS members.
- Excluded Methods TBD list (MJ/all)
 - Review of work on definitions (transposons, induced mutagenesis, tilling, double haploids) since last meeting. The lead would like to brainstorm how to address excluded methods in the TR questions, and also shared thoughts about the review process for excluded methods. Members were asked to come to the January call with some questions about excluded methods.
 - Regulatory framework (MJ). Deferred.
 - Discussion of potential TR for induced mutagenesis (BC). The group discussed language to use in a TR to request information on induced mutagenesis. The MS will discuss this again on the next call
- Additional Items. NOP staff will discuss the process for written comments and whether the NOSB technical support person could take on that task. A member suggested a uniform format, rather than the current process in which each NOSB member summarizes and analyzes comments using their own format. The NOSB Officers will discuss this on the administrative call later today.

• The meeting was adjourned

Previous MS Notes

Future call schedule (2nd Tuesday 1:00 PM ET | 10:00 AM PT, except where noted)

November 08, 2022

December 13, 2022

TR template updates (BC/MJ)

Excluded Methods (DN/LP/MJ)

Jan 10, 2023

TR template updates (BC/MJ)

Excluded Methods (DN/LP/MJ)

Feb 14, 2023

Mar 14, 2023

April 11, 2023

Work Agenda

*Highlight indicates discussion. *Highlight indicates action needed. *Highlight indicates review completion and/or vote.

Project	National List	Con- tact	Doc Type	Notes	Scheduled, Discussion, Voted	Target meeting
Research Priorities (RP)	N/A	WT	Discussion Document (Spr 2023) Proposal (Fall 2023)	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): WT Crops (CS): BC Livestock (LS): BC RPs due to MS from HS, CS, and LS by 1.20.23	12.13.22 1.10.22	Spr 2023
Petition and Technical Report (TR) tracking: Update to TR template	N/A	BC/MJ NOP	NA	Ongoing	11.08.22 12.13.22	N/A
Excluded Methods	N/A	MJ/DN /LP	Proposal		11.08.22 12.13.22	Spr 2023

Tall oil, distilled	205.601	WT	HOLD	2008 Petition (distilled tall oil). 2010 TR (tall oil). Petition sent to MS 9.4.20. Petition suff/TR request due 12.8.20. Petition found sufficient 12.8.20, and the MS requested a TR. TR due mid-Aug. TR sent to MS 8.13.21. TR suff due 10.12.21. TR found sufficient 10.12.21. Additional information from petitioner sent to MS 2.8.22 (see "AMS-NOP-21-0087-0003). Returned to Subcomm at Spr 2022 meeting. On hold pending results from ANPR/guidance.	TBD	TBD
---------------------	---------	----	------	---	-----	-----

Spring 2023 Milestones	Target dates (tentative)	Weeks PTM (prior to meeting)
NOP - Publish FRN, Open public comment	~Nov 10, 2022	
NOSB - Spring 2023 proposals due to NOP	Feb 14, 2023	10 weeks
New NOSB member training	TBD	
NOP - Draft Spring 2023 NOSB meeting tentative agenda	Feb 3, 2023	
NOP - Post proposals	Mar 6, 2023	7.5
Public comment closes	Apr 5, 2023	3.5
NOP - Send compiled public comments to NOSB	Apr 7, 2023	3
Public comment webinars	Apr 18 & 20, 2023	1 week
Spring 2023 NOSB meeting - Atlanta, GA	Apr 25 - 27, 2023	
Final recommendations due	May 25, 2023	

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, November 8, 2022 1:00 pm ET - draft

Present: Wood Turner (WT), Chair; Logan Petrey (LP), Vice Chair; Brian Caldwell (BC); Mindee Jeffery (MJ);

Carolyn Dimitri (CD); Dilip Nandwani (DN); Kim Huseman (KH)

Absent: None

Staff: Michelle Arsenault (MA)

Agenda

Review October 11, 2022 notes

- Meeting Debrief
- Research Priorities
- TR Templates
- Additional Items
- Adjourn

Discussion

- Acceptance of October 11, 2022 notes deferred to the next call.
- Debrief from meeting. The Subcommittee Chair invited feedback on the Fall meeting from the members.
 - Overall, the impression was good. Members felt that it was helpful to meet in person, liked the OFRF presentation. Members felt it was helpful to speak directly to stakeholders to get a sense of how the NOSB work impacts stakeholders. A subcommittee member indicated that they liked keeping the public comments separate from the full meeting was helpful as there was time to digest and assess them. However, there are aspects of in-person commenting that does not happen in the virtual environment. Another subcommittee member felt rushed by the in-person schedule and felt there were almost too many breaks. Members noted that due to the time zone differences and the hybrid meeting, the 90minute lunch break was helpful.
 - Members thought the Q and A session with former NOSB members was helpful. Appreciated
 insight into OFPA, the value of working on, and completing, a project you care about, and about
 interacting with other subcommittees to prepare for the meeting.
 - A Subcommittee member suggested that future NOSB technical support could be tasked with summarizing written comments.
 - Regarding public comments submitted on packaging, a Subcommittee member indicated that packaging is in OFPA, therefore the NOSB could address it.
 - The Subcommittee vice chair asked for members to weigh in on future decisions on In-person Public Comment. A subcommittee member asked if data can be pulled from the public comments, regarding who has provided written comment, who has spoken in-person, and who has spoken virtually.
- **Research Priorities.** The subcommittee chair has a list of potential proposed priorities gleaned from public comment, which he will send to the subcommittee members so the leads can take them back to the other subcommittees.
- **Technical Report templates.** The subcommittee chair asked for feedback from subcommittee members about the technical report templates. The committee would like to harmonize the decision trees and technical report and petition templates and would like to add questions about excluded methods. The lead on this project is to be determined. Dilip may lead reviewing the TBD list in the excluded methods document. Brian volunteered to look at the technical report template project.
- The meeting was adjourned.

Previous MS Notes

Future call schedule (2nd Tuesday 1:00 PM ET | 10:00 AM PT, except where noted)

November 08, 2022

December 13, 2022

TR template updates (BC)
Excluded Methods (DN/LP/MJ)

Jan 10, 2023

Feb 14, 2023

Mar 14, 2023

April 11, 2023

Work Agenda

*Highlight indicates discussion. *Highlight indicates action needed. *Highlight indicates review completion and/or vote.

Project	National List	Con- tact	Doc Type	Notes	Scheduled, Discussion, Voted	Target meeting
Research Priorities (RP)	N/A	WT	Discussion Document (Spr 2023) Proposal (Fall 2023)	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): CD Crops (CS): LP Livestock (LS): BC RPs due to MS from HS, CS, and LS by		Spr 2023
Petition and Technical Report (TR) tracking: Update to TR template	N/A	BC/NOP	NA	Ongoing	11.08.22	N/A
Excluded Methods	N/A	MJ/DN/ LP	Proposal		11.08.22	TBD

Tall oil, distilled 205.603 HOLD 2008 Petition (distilled tall oil). Petition sent to MS 9.4.20. Petition suff/TR request due 12.8.20. Petition found sufficient 12.8.20, and the MS requested a TR. TR due mid-Aug. TR sent to MS 8.13.21. TR suff due 10.12.21. TR found sufficient 10.12.21. Additional information from petitioner sent to MS 2.8.22 (see "AMSNOP-21-0087-0003). Returned to Subcomm at Spr 2022 meeting. On hold pending results from ANPR/guidance.	TBD	TBD
--	-----	-----

Spring 2023 Milestones	Target dates (tentative)	Weeks PTM (prior to meeting)
NOP - Publish FRN, Open public comment	~Nov 10, 2022	
NOSB - Spring 2023 proposals due to NOP	Feb 14, 2023	10 weeks
New NOSB member training	TBD	
NOP - Draft Spring 2023 NOSB meeting tentative agenda	Feb 3, 2023	
NOP - Post proposals	Mar 6, 2023	7.5
Public comment closes	Apr 5, 2023	3.5
NOP - Send compiled public comments to NOSB	Apr 7, 2023	3
Public comment webinars	Apr 18 & 20, 2023	1 week
Spring 2023 NOSB meeting - Atlanta, GA	Apr 25 - 27, 2023	
Final recommendations due	May 25, 2023	

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, October 11, 2022 1:00 pm ET - draft

Present: Logan Petrey (LP), Vice Chair; Brian Caldwell (BC); Mindee Jeffery (MJ); Carolyn Dimitri (CD); Dilip

Nandwani (DN); Kim Huseman (KH) Absent: Wood Turner (WT), Chair

Staff: Michelle Arsenault (MA); Jared Clark (JC)

Agenda

- Review August 9, 2022 notes
- Research Priorities
- Discuss Sacramento meeting prep
- Excluded Methods
- Additional Items
- Adjourn

Discussion

- August 9, 2022 notes were accepted as written with a minor correction.
- Excluded Methods (MJ). The lead is planning on giving a verbal update at the Fall NOSB meeting, and asked for feedback from others about bullet points to include. The MS is anticipating the response to the Spring 2022 recommendations from the NOP. A member asked about cell meat, which is not on the market yet, but they are anticipating questions about whether it would be eligible for organic.
- **Research Priorities.** A member noted that a couple of NGOs had some suggestions for additional research priorities and will compile a list for discussion.
- **Discuss Sacramento meeting prep.** The group discussed logistics for the Fall meeting, including travel planning.
- Additional Items.
 - A member asked about BBMF and plastic use in general and wondered about adding it to the work agenda in Materials. The group discussed the topic and various aspects that could either help or hinder forward movement, including social aspects.
 - A member noted alternatives such as bands on lettuce instead of plastic wrap. Plan to discuss it at the Exec call.
- The meeting was adjourned.

Previous MS Notes

Future call schedule (2nd Tuesday 1:00 PM ET | 10:00 AM PT, except where noted)

August 9, 2022

Research Priorities - discuss/vote Petition and Technical Report (TR) tracking: Update to TR template (MJ) - discuss Excluded Methods (MJ) - discuss

September 13, 2022 - cancelled October 11, 2022 November 08, 2022 December 13, 2022

Work Agenda

*Highlight indicates discussion. *Highlight indicates action needed. *Highlight indicates review completion and/or vote.

Projects

Project	National List	Con- tact	Doc Type	Notes	Scheduled, Discussion, Voted	Target meeting
Research Priorities (RP)	N/A	WT	Discussion Document (Spr 2022) Proposal (Fall 2022)	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): WT Crops (CS): TBD Livestock (LS): KH RPs due to MS from HS, CS, and LS by 7.5.22	7.12.22 8.9.22	Fall 2022
Petition and Technical Report (TR) tracking: Update to TR template	N/A	NOP	NA	Ongoing	7.12.22 8.9.22	N/A
Excluded Methods	N/A	MJ/DN	Proposal		7.12.22 8.9.22	TBD
Tall oil, distilled	205.601 205.603	WT	HOLD	2008 Petition (distilled tall oil). 2010 TR (tall oil). Petition sent to MS 9.4.20. Petition suff/TR request due 12.8.20. Petition found sufficient 12.8.20, and the MS requested a TR. TR due mid-Aug. TR sent to MS 8.13.21. TR suff due 10.12.21. TR found sufficient 10.12.21. Additional information from petitioner sent to MS 2.8.22 (see "AMS-NOP-21-0087-0003). Returned to Subcomm at Spr 2022 meeting. On hold pending results from ANPR/guidance.	TBD	TBD

Fall 2022 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	~May 20, 2022
NOP - Draft Fall 2022 NOSB meeting agenda	Aug 5, 2022
NOSB - Fall 2022 proposals due to NOP	Aug 11, 2022
NOP - Post proposals	Aug 31, 2022
Public comment closes	Sep 29, 2022

NOP - Send compiled public comments to NOSB	~Oct 3, 2022
Public comment webinars	Oct 18 & 20, 2022
Fall 2022 NOSB meeting - Sacramento, CA	Oct 25 - 27, 2022
Final recommendations due	Nov 25, 2022

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, August 9, 2022 1:00 pm ET

Present: Wood Turner (WT), Chair; Brian Caldwell (BC); Mindee Jeffery (MJ); Carolyn Dimitri (CD); Dilip

Nandwani (DN)

Absent: Kim Huseman (KH); Logan Petrey (LP), Vice Chair

Staff: Michelle Arsenault (MA); Jared Clark (JC)

Agenda

Review July 12, 2022 notes

- Research Priorities discuss/vote
- Excluded Methods (MJ) discuss
- Additional Items
- Adjourn

Discussion

- July 12, 2022 notes were accepted as written
- Research Priorities (WT). The group discussed the updates to the Spring version of the research priorities document. The Crops Subcommittee made some modifications to its priorities to remove some redundancy. One of the updates involved the use of the term "problem insect", instead of "invasive species". The MS Chair asked the CACS to initiate a discussion at the Fall meeting about the distinction between "problem" and "invasive". The Materials Subcommittee moved to a vote:

Motion to accept the proposal on the 2022 Research Priorities

Motion by: Wood Turner Seconded by: Brian Caldwell

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

- Excluded Methods (MJ/DN). The MS discussed requesting a TR on induced mutagenesis, as commenters indicated that mutagenesis is ubiquitous and might be difficult to assess without a TR. The co-leads will review the remaining terms on the TBD list, and determine which ones are linked to mutagenesis as they move forward. Members discussed questions to add to the TR given that the typical TR focuses on substances and not processes, and will decide what format is best a modified TR or a white paper. For now, the MS will not have a document on excluded methods and will wait for the NOP response to recommendations from the Spring meeting.
- The project on excluded methods also relates to the project to update the TR templates, to add questions about excluded methods, which the MS will discuss at a future call.
- Additional Items. None.
- The meeting was adjourned

Previous MS Notes

Future call schedule (2nd Tuesday 1:00 PM ET | 10:00 AM PT, except where noted)

July 12, 2022

Research Priorities - discuss
Petition and Technical Report (TR) tracking: Update to TR template
Excluded Methods

Research Priorities - discuss/vote Petition and Technical Report (TR) tracking: Update to TR template (MJ) - discuss Excluded Methods (MJ) - discuss

September 13, 2022 October 11, 2022 November 08, 2022 December 13, 2022

Work Agenda

*Highlight indicates discussion. *Highlight indicates action needed. *Highlight indicates review completion and/or vote.

Project	National List	Con- tact	Doc Type	Notes	Scheduled, Discussion, Voted	Target meeting
Research Priorities (RP)	N/A	WT	Discussion Document (Spr 2022) Proposal (Fall 2022)	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): WT Crops (CS): TBD Livestock (LS): KH RPs due to MS from HS, CS, and LS by 7.5.22	7.12.22 8.9.22	Fall 2022
Petition and Technical Report (TR) tracking: Update to TR template	N/A	NOP	NA	Ongoing	7.12.22 8.9.22	N/A
Excluded Methods	N/A	MJ/DN	Proposal		7.12.22 8.9.22	TBD
Tall oil, distilled	205.601 205.603	WT	HOLD	2008 Petition (distilled tall oil). 2010 TR (tall oil). Petition sent to MS 9.4.20. Petition suff/TR request due 12.8.20. Petition found sufficient 12.8.20, and the MS requested a TR. TR due mid-Aug. TR sent to MS 8.13.21. TR suff due 10.12.21. TR found sufficient 10.12.21. Additional information from petitioner sent to MS 2.8.22 (see "AMS-NOP-21-0087-0003). Returned to Subcomm at Spr 2022 meeting. On hold pending results from ANPR/guidance.	TBD	TBD

Fall 2022 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	~May 20, 2022
NOP - Draft Fall 2022 NOSB meeting agenda	Aug 5, 2022
NOSB - Fall 2022 proposals due to NOP	Aug 11, 2022
NOP - Post proposals	Aug 31, 2022
Public comment closes	Sep 29, 2022
NOP - Send compiled public comments to NOSB	~Oct 3, 2022
Public comment webinars	Oct 18 & 20, 2022
Fall 2022 NOSB meeting - Sacramento, CA	Oct 25 - 27, 2022
Final recommendations due	Nov 25, 2022

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, July 12, 2022 1:00 pm ET

Present: Wood Turner (WT), Chair; Brian Caldwell (BC); Mindee Jeffery (MJ); Kim Huseman (KH); Carolyn Dimitri

(CD); Logan Petrey (LP), Vice Chair; Dilip Nandwani (DN)

Absent: None

Staff: Michelle Arsenault (MA); Jared Clark (JC)

Agenda

- Review June 14, 2022 notes
- Tall oil, distilled
- Research Priorities (RP) discuss
- Excluded Methods Fall 2022 discuss
- Additional Items
- Adjourn

Discussion

- June 14, 2022 notes were accepted as written.
- **Tall oil, distilled.** On hold until the NOSB has a path forward in which to review inerts. The NOP will be publishing an advance notice of proposed rulemaking (ANPR), which seeks feedback from the industry. The MS will provide a verbal update at the Fall NOSB meeting.
- Research Priorities (RP). Handling and Livestock had no updates to the Spring version of the research priorities, and the Crops Subcommittee did make modifications on its last call. The MS Chair will contact the Crops Chair about the final version. MS Chair will finalize the list and the MS will vote on the final document on the August 9 call.
- Excluded Methods (MJ).
 - The MS is waiting for the response to the NOSB's Spring 2022 recommendations. Once the NOP responds, the MS would like to work on the to-be-determined (TBD) list of definitions.
 - There are several substances currently on the National List that dovetail with the excluded methods project, such as L malic acid (in Handling), fermentation, and synthetic/non synthetic determinations. The lead suggests starting with revisions of the TR template to include questions about excluded methods. She acknowledged this will be a large project, and may involve collaboration with the Accredited Certifiers Association (ACA) and the Organic Materials Research Institute (OMRI). A member suggested that in the short term, the NOSB can include questions in TR requests include some additional questions. Given that the TR template update will be a large project, the group may split it into sections, so more than one person can work on it. There are several items the MS would like to update/modify including eliminating some duplication and redundancy, adding questions about excluded methods, and aligning the document with the petition template because they are not currently in the same order. This will help the NOSB when writing proposals. The NOP will send the petition template to the MS. The Chair asked that MJ be the project manager for this work agenda item.
- Additional Items. None.
- The meeting was adjourned

Previous MS Notes

Future call schedule (2nd Tuesday 1:00 PM ET | 10:00 AM PT, except where noted)

June 14, 2022

July 12, 2022

Research Priorities - discuss

Petition and Technical Report (TR) tracking: Update to TR template

Excluded Methods

August 9, 2022

Research Priorities - discuss/vote

Petition and Technical Report (TR) tracking: Update to TR template - discuss

Excluded Methods - discuss

September 13, 2022

October 11, 2022

November 08, 2022

December 13, 2022

Work Agenda

*Highlight indicates discussion. *Highlight indicates action needed. *Highlight indicates review completion and/or vote.

Project	National List	Con- tact	Doc Type	Notes	Scheduled, Discussion, Voted	Target meeting
Research Priorities (RP)	N/A	WT	Discussion Document (Spr 2022) Proposal (Fall 2022)	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): WT Crops (CS): TBD Livestock (LS): KH RPs due to MS from HS, CS, and LS by 7.5.22	7.12.22 8.9.22	Fall 2022
Petition and Technical Report (TR) tracking: Update to TR template	N/A	NOP	NA	Ongoing	7.12.22 8.9.22	N/A
Excluded Methods	N/A	MJ	Proposal		7.12.22 8.9.22	TBD
Tall oil, distilled	205.601 205.603	WT	HOLD	2008 Petition (distilled tall oil). 2010 TR (tall oil). Petition sent to MS 9.4.20. Petition suff/TR request due 12.8.20. Petition found sufficient 12.8.20, and the MS requested a TR. TR due mid-Aug. TR sent to MS 8.13.21. TR suff due 10.12.21. TR found sufficient 10.12.21. Addendum sent to MS 2.8.22. Returned to Subcomm at Spr 2022 meeting. On hold pending results from ANPR/guidance.	TBD	TBD

Fall 2022 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	~May 20, 2022
NOP - Draft Fall 2022 NOSB meeting agenda	Aug 5, 2022
NOSB - Fall 2022 proposals due to NOP	Aug 11, 2022
NOP - Post proposals	Aug 31, 2022
Public comment closes	Sep 29, 2022
NOP - Send compiled public comments to NOSB	~Oct 3, 2022
Public comment webinars	Oct 18 & 20, 2022
Fall 2022 NOSB meeting - Sacramento, CA	Oct 25 - 27, 2022
Final recommendations due	Nov 25, 2022

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, June 14, 2022 1:00 pm ET

Present: Wood Turner (WT), Chair; Brian Caldwell (BC); Mindee Jeffery (MJ); Kim Huseman (KH); Carolyn Dimitri

Absent: Logan Petrey (LP), Vice Chair; Dilip Nandwani (DN)

Staff: Michelle Arsenault (MA); Jared Clark (JC)

Agenda

- Review May 10, 2022 notes
- Discuss work agenda
 - o Tall oil, distilled
 - Research Priorities (RP)
 - Excluded Methods Fall 2022?
- Additional Items
 - TR templates (Mindee)
- Adjourn

Discussion

- May 10, 2022 notes were accepted as written.
- Discuss work agenda
 - Tall oil, distilled (DTO) (WT). Members discussed the tall oil project. The petitioner has chosen to hold the petition until the NOP provides guidance about reviewing inerts (see update to table below). The NOP will publish an Advance Notice of Proposed Rulemaking (ANPR). The ANPR is a vehicle for the community to provide input and feedback to the NOP that then could inform the NOP and NOSB how to move forward with a proposed rule. Members discussed active versus inert ingredients, and how EPA classifies substances.
 - Research Priorities (RPs). The Materials Subcommittee discussed the Organic Farming & Research Foundation (OFRF) research priorities, and how they may align with the NOSB priorities. A member indicated that the Livestock priorities align well, but hasn't had a chance to review the other scopes (Crops and Handling). Another member, who is on the Board for OFRF, suggested inviting OFRF to a future MS call. The MS will not make any major changes to the format of the Fall 2022 document but will consider changes for 2023. A member added that given the timing of Farm Bill negotiations, it could be helpful to do some outreach to stakeholders about including research priorities in potential requests to Congress.
 - Excluded Methods (MJ). The lead presented a summary of outstanding issues and asked for feedback from members. The goal is to document the status of the Excluded Methods project to make sure there is continuity for future boards. The MS has collectively decided to not develop a proposal for the Fall meeting, and will wait for the response from the NOP on the Spring 2022 recommendation.

Additional Items

- TR templates (MJ). The MS is working with the NOP and the Organic Materials Review Institute (OMRI) to update the Technical Report templates. The lead asked if someone wanted to compile comments, and perhaps reach out to those that commented for more feedback.
- The meeting was adjourned

Previous MS Notes

Future call schedule (2nd Tuesday 1:00 PM ET | 10:00 AM PT, except where noted)

June 14, 2022

July 12, 2022

Research Priorities - discuss

August 9, 2022

September 13, 2022

October 11, 2022

November 08, 2022

December 13, 2022

Work Agenda

*Highlight indicates discussion. *Highlight indicates action needed. *Highlight indicates review completion and/or vote.

Project	National List	Con- tact	Doc Type	Notes	Scheduled, Discussion, Voted	Target meeting
Research Priorities (RP)	N/A	WT	Discussion Document (Spr 2022) Proposal (Fall 2022)	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): WT Crops (CS): TBD Livestock (LS): KH RPs due to MS from HS, CS, and LS by 7.5.22	7.12.22 8.9.22	Fall 2022
Petition and Technical Report (TR) tracking: Update to TR template	N/A	NOP	NA	Ongoing	7.12.22 8.9.22	N/A
Excluded Methods	N/A	MJ	Proposal		7.12.22 8.9.22	TBD
Tall oil, distilled	205.601 205.603	WT	HOLD	2008 Petition (distilled tall oil). 2010 TR (tall oil). Petition sent to MS 9.4.20. Petition suff/TR request due 12.8.20. Petition found sufficient 12.8.20, and the MS requested a TR. TR due mid-Aug. TR sent to MS 8.13.21. TR suff due 10.12.21. TR found sufficient 10.12.21. Addendum sent to MS 2.8.22. Returned to Subcomm at Spr 2022 meeting. On hold pending results from ANPR/guidance.	7.12.22	TBD

Fall 2022 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	~May 20, 2022
NOP - Draft Fall 2022 NOSB meeting agenda	Aug 5, 2022
NOSB - Fall 2022 proposals due to NOP	Aug 11, 2022
NOP - Post proposals	Aug 31, 2022
Public comment closes	Sep 29, 2022
NOP - Send compiled public comments to NOSB	~Oct 3, 2022
Public comment webinars	Oct 18 & 20, 2022
Fall 2022 NOSB meeting - Sacramento, CA	Oct 25 - 27, 2022
Final recommendations due	Nov 25, 2022

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, May 10, 2022 1:00 pm ET

Present: Wood Turner (WT), Chair; Brian Caldwell (BC); Carolyn Dimitri (CD); Mindee Jeffery (MJ); Logan Petrey

(LP), Vice Chair; Dilip Nandwani (DN)

Absent: Kim Huseman (KH)

Staff: Michelle Arsenault (MA); Jared Clark (JC)

Agenda

Review April 12, 2022 notes

- Debrief from April 2022 NOSB meeting
- Discuss work agenda
 - o Tall oil, distilled
 - Research Priorities (RP)
 - Excluded Methods Fall 2022?
- Additional Items
- Adjourn

Discussion

- April 12, 2022 notes were accepted as written.
- Debrief from April 2022 NOSB meeting.
 - Members discussed the Spring meeting, and described it using phrases like "good teamwork",
 "democracy in action", and "makes one feel good about public service".
 - Of the current research priorities (RPs) recommendations being funded by NIFA, there is only one that is specific to the NOSB RPs. The take-away from the presentation is that they may not be making a big enough impact within the research community. Members discussed ways to improve the impact. A member added that academics work on research they want to, so perhaps the NOSB should reach out to other audiences, such as land grant institutions, regional organic organizations like MOSES, etc. The MS will discuss this more on the Executive call.

Discuss work agenda

- Tall oil, distilled. Members discussed the status of the petition, and the path forward. At this time the NOSB is waiting for feedback from the NOP about reviewing inerts. The NOP is working on an Advance Notice of Proposed Rulemaking (ANPR) on inerts to explore ways in which to replace the now obsolete EPA List 3 and List 4 Inerts. The goal of the ANPR is to get a clearer understanding of viable replacements for the current system. Members briefly discussed the history from the previous sunset reviews on List 3 and 4, and the NOSB Vice Chair would like to compile the history of the inerts issue as they move forward with this project. As for the DTO petition, which is an inert, the Materials Chair will discuss the possible options on the next Executive Committee call.
- Research Priorities (RPs). The lead will incorporate the comments and feedback from the Spring meeting into the document for the Fall 2022 meeting.
- Excluded Methods. The lead will complete the coversheet for the Spring 2022 recommendation.
- Additional Items. The CACS is considering adding 30 minutes to its calls, and is working with the Materials Subcommittee to perhaps swap meeting times.
- The meeting was adjourned

Future call schedule (2nd Tuesday 1:00 PM ET | 10:00 AM PT, except where noted)

May 10, 2022

June 14, 2022

July 12, 2022

Research Priorities - discuss

August 9, 2022

September 13, 2022

October 11, 2022

November 08, 2022

December 13, 2022

Work Agenda

*Highlight indicates discussion. *Highlight indicates action needed. *Highlight indicates review completion and/or vote.

Projects

Project	National List	Con- tact	Doc Type	Notes	Scheduled, Discussion, Voted	Target meeting
Research Priorities (RP)	N/A	WT	Discussion Document (Spr 2022) Proposal (Fall 2022)	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): WT Crops (CS): TBD Livestock (LS): KH RPs due to MS from HS, CS, and LS by 7.5.22	7.12.22	Fall 2022
Petition and Technical Report (TR) tracking: Update to TR template	N/A	NOP	NA	Ongoing	NA	N/A
Excluded Methods	N/A	MJ	Proposal		TBD	TBD
Tall oil, distilled	205.601 205.603	WT	Discussion Document	2008 Petition (distilled tall oil). 2010 TR (tall oil). Petition sent to MS 9.4.20. Petition suff/TR request due 12.8.20. Petition found sufficient 12.8.20, and the MS requested a TR. TR due mid-Aug. TR sent to MS 8.13.21. TR suff due 10.12.21. TR found sufficient 10.12.21. Addendum sent to MS 2.8.22. Returned to Subcomm at Spr 2022 meeting		Fall 2022

Fall 2022 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	~May 20, 2022
NOP - Draft Fall 2022 NOSB meeting agenda	Aug 5, 2022
NOSB - Fall 2022 proposals due to NOP	Aug 11, 2022
NOP - Post proposals	Aug 31, 2022
Public comment closes	Sep 29, 2022
NOP - Send compiled public comments to NOSB	~Oct 3, 2022
Public comment webinars	Oct 18 & 20, 2022
Fall 2022 NOSB meeting - Sacramento, CA	Oct 25 - 27, 2022
Final recommendations due	Nov 25, 2022

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, April 12, 2022 1:00 pm ET

Present: Wood Turner (WT), Chair; Brian Caldwell (BC); Carolyn Dimitri (CD); Mindee Jeffery (MJ); Logan Petrey

(LP), Vice Chair; Dilip Nandwani (DN); Kim Huseman (KH); Nate Powell-Palm - observer

Absent: None

Staff: Michelle Arsenault (MA); Jared Clark (JC)

Agenda

- Review March 8, 2022 notes
- Excluded Methods: discussion of public comments (MJ)
- Discuss questions for NIFA
- Additional Items
- Adjourn

Discussion

- March 8, 2022 notes were accepted as written.
- Excluded Methods: discuss public comments (MJ). The lead noted that there was unanimous support from commenters for this document, and there was a suggestion for some updated terminology. The MS discussed whether the new terminology would be a substantive change, which would mean that the proposal would be returned to subcommittee. MJ will discuss it at the Executive Committee meeting to let NOP know, and NOP will make the final decision at the NOSB meeting.
- **Discuss questions for NIFA (WT).** The MS did not have any additional specific questions for NIFA, outside of the general asks about current status of NOSB research priorities.
- Additional Items. MS members offered to assist with comment summaries on Distilled Tall Oil and CPC (Handling).
- The meeting was adjourned

Previous MS Notes

Future call schedule (2nd Tuesday 1:00 PM ET | 10:00 AM PT, except where noted)

March 8, 2022

April 12, 2022

May 10, 2022

June 14, 2022

July 12, 2022

August 09, 2022

September 13, 2022

October 11, 2022

November 08, 2022

December 13, 2022

Work Agenda

*Highlight indicates discussion. *Highlight indicates action needed. *Highlight indicates review completion and/or vote.

Projects

Project	National List	Con- tact	Doc Type	Notes	Scheduled, Discussion, Voted	Target meeting
Research Priorities (RP)	N/A	WT	Discussion Document (Spr 2022) Proposal (Fall 2022)	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): WT Crops (CS): SE Livestock (LS): KH RPs due to MS from HS, CS, and LS on 1.25.22	11.9.21 1.11.22 2.8.22	Spr 2022
Petition and Technical Report (TR) tracking: Update to TR template	N/A	NOP	NA	Ongoing	11.9.21	N/A
Excluded Methods Spring 2022	N/A	MJ	Proposal		11.9.21 12.14.21 1.11.22 2.8.22	Spr 2022
Tall oil, distilled	205.601 205.603	WT	Discussion Document	2008 Petition (distilled tall oil). 2010 TR (tall oil). Petition sent to MS 9.4.20. Petition suff/TR request due 12.8.20. Petition found sufficient 12.8.20, and the MS requested a TR. TR due mid-Aug. TR sent to MS 8.13.21. TR suff due 10.12.21. TR found sufficient 10.12.21. Addendum sent to MS 2.8.22	11.10.20 12.8.20 10.12.21 12.14.21 1.11.22 2.8.22	Spr 2022

Spring 2022 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Mar 3, 2022
NOSB - Spring 2022 proposals due to NOP	Feb 16, 2022
New NOSB member training	Mar 16-18, 2022
NOP - Draft Spring 2022 NOSB meeting tentative agenda	Feb 2, 2022
NOP - Post proposals	Mar 3, 2022
Public comment closes	Apr 1, 2022
NOP - Send compiled public comments to NOSB	Apr 4, 2022
Public comment webinars	Apr 19 & 21, 2022

Spring 2022 NOSB meeting - Crystal City, VA	Apr 26 - 28, 2022
Final recommendations due	May 27, 2022

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, March 8, 2022 1:00 pm ET

Present: Wood Turner (WT), Chair; Brian Caldwell (BC); Carolyn Dimitri (CD); Mindee Jeffery (MJ); Dilip

Nandwani (DN)

Absent: Kim Huseman (KH); Logan Petrey (LP), Vice Chair

Staff: Michelle Arsenault (MA); Jared Clark (JC)

Agenda

- Review February 8, 2022 notes
- Discuss agenda items for Spring 2022 NOSB meeting
 - NIFA update questions to NIFA, who will introduce speaker
 - OSA update specific questions, who will introduce speaker
- Additional Items.
- Adjourn

Discussion

- February 8, 2022 notes were accepted as written
- Discuss agenda items for Spring 2022 NOSB meeting
 - NIFA update questions to NIFA. The MS will compile a list of potential questions for NIFA including an update on the status of NOSB research priorities (RPs) i.e., what is being funded? What isn't? The MS is looking for specific feedback and not necessarily an overview of the proposal process. The NOP will forward the list along with the official speaker invitation. CD will introduce NIFA at the NOSB meeting.
 - Members also discussed how to disseminate the RPs more broadly to entities outside of USDA in an effort to highlight important questions to excite the community. A member suggested extension services.
 - OSA update specific questions? The MS doesn't have specific questions and is looking forward to an update about the State of Organic Seed. MJ will introduce OSA.
- Additional Items.
 - Climate Change agenda item in CACS.
 - Excluded Methods cell and protoplast topic is in the current iteration. Other items on the TBD list are still on the work agenda. The MS will discuss a high-level overview on the April call.
- The meeting was adjourned

Previous MS Notes

Future call schedule (2nd Tuesday 1:00 PM ET | 10:00 AM PT, except where noted)

February 8, 2022

Research Priorities DD (WT) - Discuss/vote
Tall oil, distilled DD(WT) - Discuss/vote
Excluded Methods Spring 2022 Proposal (MJ/LP) - Discuss/vote

March 8, 2022

April 12, 2022

May 10, 2022

June 14, 2022

July 12, 2022

August 09, 2022 September 13, 2022 October 11, 2022 November 08, 2022 December 13, 2022

Work Agenda

*Highlight indicates discussion. *Highlight indicates action needed. *Highlight indicates review completion and/or vote.

Projects

Project	National List	Con- tact	Doc Type	Notes	Scheduled, Discussion, Voted	Target meeting
Research Priorities (RP)	N/A	WT	Discussion Document (Spr 2022) Proposal (Fall 2022)	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): WT Crops (CS): SE Livestock (LS): KH RPs due to MS from HS, CS, and LS on 1.25.22	11.9.21 1.11.22 2.8.22	Spr 2022
Petition and Technical Report (TR) tracking: Update to TR template	N/A	NOP	NA	Ongoing	11.9.21	N/A
Excluded Methods Spring 2022	N/A	MJ	Proposal		11.9.21 12.14.21 1.11.22 2.8.22	Spr 2022
Tall oil, distilled	205.601 205.603	WT	Discussion Document	2008 Petition (distilled tall oil). 2010 TR (tall oil). Petition sent to MS 9.4.20. Petition suff/TR request due 12.8.20. Petition found sufficient 12.8.20, and the MS requested a TR. TR due mid-Aug. TR sent to MS 8.13.21. TR suff due 10.12.21. TR found sufficient 10.12.21. Addendum sent to MS 2.8.22	11.10.20 12.8.20 10.12.21 12.14.21 1.11.22 2.8.22	Spr 2022

Spring 2022 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Mar 3, 2022
NOSB - Spring 2022 proposals due to NOP	Feb 16, 2022
New NOSB member training	Mar 16-18, 2022

NOP - Draft Spring 2022 NOSB meeting tentative agenda	Feb 2, 2022
NOP - Post proposals	Mar 3, 2022
Public comment closes	Apr 1, 2022
NOP - Send compiled public comments to NOSB	Apr 4, 2022
Public comment webinars	Apr 19 & 21, 2022
Spring 2022 NOSB meeting - Crystal City, VA	Apr 26 - 28, 2022
Final recommendations due	May 27, 2022

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, February 8, 2022 1:00 pm ET

Present: Wood Turner (WT), Chair; Logan Petrey (LP), Vice Chair; Carolyn Dimitri (CD); Kim Huseman (KH);

Mindee Jeffery (MJ)

Absent: Brian Caldwell (BC) (jury duty)

Staff: Michelle Arsenault (MA); Jared Clark (JC)

Agenda

- January 11, 2022 notes
- Research Priorities discussion document (WT) Discuss/vote
 Tall oil, distilled discussion document (WT) Discuss/vote
- Excluded Methods Spring 2022 Proposal (MJ/LP) Discuss/vote
- Additional Items
- Adjourn

Discussion

- January 11, 2022 notes were accepted as written.
- Research Priorities discussion document (WT). The lead highlighted the changes to the previous list of
 Research Priorities and the MS discussed several items. The LS Chair will make some minor changes to
 the Livestock list based on today's conversation and the MS will forward this to the NOP for the Spring
 2022 NOSB meeting.

Motion to accept the 2022 research priorities discussion document

Motion by: WT Seconded by: KH

Further Discussion: none

Yes: 5 No: 0 Abstain: 0 Absent: 1 Recuse: 0

• Tall oil, distilled discussion document (WT). The lead summarized the draft document and the group discussed various pieces. The lead made some proofreading modifications and the MS voted. One member, absent on today's call, cast a yes vote via email, which is reflected in the vote below. The Subcommittee will submit the document for the Spring 2022 NOSB meeting.

Motion to accept the discussion document on tall oil, distilled.

Motion by: WT Seconded by: MJ

Further Discussion: None

Yes: 6 No: 0 Abstain: 0 Absent: 0 Recuse: 0

 Excluded Methods Spring 2022 Proposal (MJ/LP). The lead summarized modifications that were suggested since the last call and the MS moved to a vote. The Proposal will be presented at the Spring 2022 NOSB meeting.

Motion to accept the Excluded Methods Spring 2022 Proposal Motion by: MJ

Seconded by: LP

Further Discussion: None

Yes: 5 No: 0 Abstain: 0 Absent: 1 Recuse: 0

Additional Items. None.

• The meeting was adjourned

Previous MS Notes

Future call schedule (2nd Tuesday 1:00 PM ET | 10:00 AM PT, except where noted)

January 11, 2022 - last call before RPs from HS, CS, LS are due to MS

Tall oil, distilled (WT) - Discuss/vote

Excluded Methods Spring 2022 (MJ/LP) - Discuss

February 8, 2022

Research Priorities DD (WT) - Discuss/vote

Tall oil, distilled DD(WT) - Discuss/vote

Excluded Methods Spring 2022 Proposal (MJ/LP) - Discuss/vote

March 8, 2022

April 12, 2022

May 10, 2022

June 14, 2022

July 12, 2022

August 09, 2022

September 13, 2022

October 11, 2022

November 08, 2022

December 13, 2022

Work Agenda

*Highlight indicates discussion. *Highlight indicates action needed. *Highlight indicates review completion and/or vote.

Project	National List	Con- tact	Doc Type	Notes	Scheduled, Discussion, Voted	Target meeting
Research Priorities (RP)	N/A	WT	Discussion Document (Spr 2022) Proposal (Fall 2022)	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): WT Crops (CS): SE Livestock (LS): KH RPs due to MS from HS, CS, and LS on 1.25.22	11.9.21 1.11.22 2.8.22	Spr 2022
Petition and Technical Report (TR) tracking: Update to TR template	N/A	NOP	NA	Ongoing	11.9.21	N/A
Excluded Methods Spring 2022	N/A	MJ	Proposal		11.9.21 12.14.21	Spr 2022

					1.11.22 2.8.22	
Tall oil, distilled	205.601 205.603	WT	Discussion Document	2008 Petition (distilled tall oil). 2010 TR (tall oil). Petition sent to MS 9.4.20. Petition suff/TR request due 12.8.20. Petition found sufficient 12.8.20, and the MS requested a TR. TR due mid-Aug. TR sent to MS 8.13.21. TR suff due 10.12.21. TR found sufficient 10.12.21. Addendum sent to MS 2.8.22	11.10.20 12.8.20 10.12.21 12.14.21 1.11.22 2.8.22	Spr 2022

Spring 2022 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	~Nov 12, 2021
NOSB - Spring 2022 proposals due to NOP	Feb 16, 2022
New NOSB member training	TBD
NOP - Draft Spring 2022 NOSB meeting tentative agenda	Feb 2, 2022
NOP - Post proposals	Mar 3, 2022
Public comment closes	Apr 1, 2022
NOP - Send compiled public comments to NOSB	Apr 4, 2022
Public comment webinars	Apr 19 & 21, 2022
Spring 2022 NOSB meeting - Crystal City, VA	Apr 26 - 28, 2022
Final recommendations due	May 27, 2022

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, January 11, 2022 1:00 pm ET

Present: Wood Turner (WT), Chair; Logan Petrey (LP), Vice Chair; Brian Caldwell (BC); Carolyn Dimitri (CD); Steve

Ela (SE); Kim Huseman (KH); Mindee Jeffery (MJ)

Absent: None

Staff: Michelle Arsenault (MA); Jared Clark (JC)

Agenda

December 14, 2021 notes

- Tall oil, distilled (WT) Discuss/vote on proposal
- Excluded Methods Spring 2022 (MJ/LP) Discuss
- Research Priorities
- Additional Items
- Adjourn

Discussion

- December 14, 2021 notes were approved as written.
- Tall oil, distilled (WT). The lead summarized the petitioned uses of tall oil, which is a synthetic substance, and the group reviewed the draft proposal/checklist for petitioned materials. The lead also highlighted the lingering issues about inerts, and the difference between an inert and active ingredient. The group also discussed an upcoming Advance Notice of Proposed Rulemaking (ANPR), which the NOP is drafting to seek information about inerts. This ANPR focuses specifically on alternatives to EPA List 3 and List 4 inerts, which are referenced in the organic regulations, but which the EPA no longer maintains. The MS may choose to put forth a discussion document for the Spring 2022 meeting to glean more community feedback.
- Excluded Methods Spring 2022 (MJ/LP). The lead asked for more feedback and contributions for language. The lead also proposed reformatting the tables from previous documents, so they are clearer.
- Research Priorities. Members discussed the research priorities and proposed suggestions for getting some of the priorities funded through cooperative agreements rather than just sending them to research organizations such as the National Institute of Food and Agriculture (NIFA) and the Agricultural Research Service (ARS). Members will work on changes for future iterations.
- Additional Items. None.
- The meeting was adjourned

Previous MS Notes

Future call schedule (2nd Tuesday 1:00 PM ET | 10:00 AM PT, except where noted)

December 14, 2021

Excluded Methods Spring 2022 (MJ/LP) - Discuss review Tall oil, distilled (WT) - Discuss review

January 11, 2022 - last call before RPs from HS, CS, LS are due to MS

Tall oil, distilled (WT) - Discuss/vote

Excluded Methods Spring 2022 (MJ/LP) - Discuss

February 8, 2022

Research Priorities DD (WT) - Discuss/vote Tall oil, distilled DD(WT) - Discuss/vote

Excluded Methods Spring 2022 Proposal (MJ/LP) - Discuss/vote

March 8, 2022

April 12, 2022

May 10, 2022

June 14, 2022

July 12, 2022

August 09, 2022

September 13, 2022

October 11, 2022

November 08, 2022

December 13, 2022

Work Agenda

*Highlight indicates discussion. *Highlight indicates action needed. *Highlight indicates review completion and/or vote.

Project	National List	Con- tact	Doc Type	Notes	Scheduled, Discussion, Voted	Target meeting
Research Priorities (RP)	N/A	WT	Discussion Document (Spr 2022) Proposal (Fall 2022)	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): WT Crops (CS): SE Livestock (LS): KH RPs due to MS from HS, CS, and LS on 1.25.22	11.9.21 1.11.22 2.8.22	Spr 2022
Petition and Technical Report (TR) tracking: Update to TR template	N/A	NOP	NA	Ongoing	11.9.21	N/A
Excluded Methods Spring 2022	N/A	MJ/LP	Proposal		11.9.21 12.14.21 1.11.22 2.8.22	Spr 2022
Tall oil, distilled	205.601 205.603	WT	Discussion Document	2008 Petition (distilled tall oil). 2010 TR (tall oil). Petition sent to MS 9.4.20. Petition suff/TR request due 12.8.20. Petition found sufficient 12.8.20, and the MS requested a TR. TR due mid-Aug. TR sent to MS 8.13.21. TR suff due 10.12.21. TR found sufficient 10.12.21.	11.10.20 12.8.20 10.12.21 12.14.21 1.11.22 2.8.22	Spr 2022

Spring 2022 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	~Nov 12, 2021
NOSB - Spring 2022 proposals due to NOP	Feb 16, 2022
New NOSB member training	TBD
NOP - Draft Spring 2022 NOSB meeting tentative agenda	Feb 2, 2022
NOP - Post proposals	Mar 3, 2022
Public comment closes	Apr 1, 2022
NOP - Send compiled public comments to NOSB	Apr 4, 2022
Public comment webinars	Apr 19 & 21, 2022
Spring 2022 NOSB meeting - Crystal City, VA	Apr 26 - 28, 2022
Final recommendations due	May 27, 2022