Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, March 11, 2025 1:00 pm ET

Present: Franklin Quarcoo (FQ), Chair; Brian Caldwell (BC), Vice Chair; Andrea Hatziyannis (AH); Cat McCluskey (CM); Kyla Smith (KS); Logan Petrey (LP); Nate Lewis (NL); Dilip Nandwani (DN); Allison Johnson (AJ) - observer

Absent: None

Staff: Heather Kumar (HK); Jo Mirenda (JM); Michelle Arsenault (MA)

Agenda

- Review February 11, 2025 notes
- NOSB Chair update
- Food Technologist update (HK)
- Additional Items
- Adjourn

Discussion

- **February 11, 2025** notes were accepted as written.
- NOSB Chair update.
 - The NOSB Chair updated members on the status of the Spring meeting. The meeting will be rescheduled but the date is uncertain at this time.
 - The NOSB will continue work on its projects in the interim. NOP will draft the next iteration of the 2027 sunset templates, so members can prep them for the Fall meeting. NOP will also develop the list of 2028 sunsets, so members can assign leads and determine the need for TRs.
 - Several members shared stories of what they are experiencing as a result of federal funding disruptions. Members in academia indicated that both state and federal funding is frozen, research is on hold, and some research grants have been cancelled altogether. Members in other organizations have also experienced freezing and/or canceling grants. Members expressed concern about negative impacts on future research and the next generation of students.
 - o The PDS agenda includes discussion about how to explore engagement with stakeholders.
- **Food Technologist update (HK).** No specific updates for Materials. The Food Technologist has two active requests for other Subcommittees. The project on mined substances is nearly done.
- 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)

February 11, 2025

March 11, 2025
April 8, 2025 - Cancelled
May 2025
June 2025
July 2025
August 2025
September 2025

October 2025

November 2025

December 2025

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/ status	Target meeting
Research Priorities (RPs)	N/A	FQ	Discussion Doc	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): KS/DN Crops (CS): LP Livestock (LS): BC RPs due to MS from HS, CS, and LS by 01.9.25	1.14.25 2.11.25	Spr 2025
Excluded Methods - Induced mutagenesis - Fermentation (TBD)	N/A	DN/B C/CM	Discussion document	MS requested TR on induced mutagenesis 1.10.23. TR due to NOP end-June. TR sent to MS 7.6.23. TR sufficiency due 9.4.23. TR found sufficient 8.8.23.	11.19.24 12.10.24 1.14.25 2.11.25	Fall 2025
Tall oil, distilled	205.601 205.603	TBD	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 on inerts.	12.12.23	TBD

Spring 2025 Milestones	Target dates (tentative)	Weeks PTM (prior to meeting)
NOP - Publish FRN, Open public comment	March 28, 2025	16 -20
NOP - Draft Spring 2025 NOSB meeting tentative agenda	Feb 7, 2025	~ 10
NOSB - Spring 2025 proposals due to NOP	Feb 13, 2025	~ 9
NOP - Post proposals	March 28, 2025	7.5
Public comment closes	April 28, 2025	3.5

NOP - Send compiled public comments to NOSB	April 29, 2025	3
The send complied public comments to most	7.pr. 13, 1013	
Public comment webinars	Apr 22 & 24, 2025	1
	<u>,</u>	
Spring 2025 NOSB meeting - Virtual	Apr 29 - May 1, 2025	0
Final recommendations due	May 29, 2025	30 days post
		meeting
		8

Fall 2025 Milestones	Target dates (tentative)	Weeks PTM (prior to meeting)
NOP - Publish FRN, Open public comment	~May 15, 2025	24
NOP - Draft Fall 2025 NOSB meeting agenda	Aug 8, 2025	~11
NOSB - Fall 2025 proposals due to NOP	Aug 20, 2025	~9
NOP - Post proposals	Sept 9, 2025	~8
Public comment closes	Oct 8, 2025	~4
NOP - Send compiled public comments to NOSB	Oct 14, 2025	~3
Public comment webinars	Oct 28 & 30, 2025	1
Fall 2025 NOSB meeting - Omaha, NE	Nov 4 - 6, 2025	0
Final recommendations due	Nov 28, 2025	~30 days post

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, March 11, 2025 1:00 pm ET

Present: Franklin Quarcoo (FQ), Chair; Brian Caldwell (BC), Vice Chair; Andrea Hatziyannis (AH); Cat McCluskey (CM); Kyla Smith (KS); Logan Petrey (LP); Nate Lewis (NL); Dilip Nandwani (DN); Allison Johnson (AJ) - observer

Absent: None

Staff: Heather Kumar (HK); Jo Mirenda (JM); Michelle Arsenault (MA)

Agenda

- Review February 11, 2025 notes
- NOSB Chair update
- Food Technologist update (HK)
- Additional Items
- Adjourn

Discussion

- **February 11, 2025** notes were accepted as written.
- NOSB Chair update.
 - The NOSB Chair updated members on the status of the Spring meeting. The meeting will be rescheduled but the date is uncertain at this time.
 - The NOSB will continue work on its projects in the interim. NOP will draft the next iteration of the 2027 sunset templates, so members can prep them for the Fall meeting. NOP will also develop the list of 2028 sunsets, so members can assign leads and determine the need for TRs.
 - Several members shared stories of what they are experiencing as a result of federal funding disruptions. Members in academia indicated that both state and federal funding is frozen, research is on hold, and some research grants have been cancelled altogether. Members in other organizations have also experienced freezing and/or canceling grants. Members expressed concern about negative impacts on future research and the next generation of students.
 - o The PDS agenda includes discussion about how to explore engagement with stakeholders.
- **Food Technologist update (HK).** No specific updates for Materials. The Food Technologist has two active requests for other Subcommittees. The project on mined substances is nearly done.
- 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)

February 11, 2025

March 11, 2025
April 8, 2025 - Cancelled
May 2025
June 2025
July 2025
August 2025
September 2025

October 2025

November 2025

December 2025

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/ status	Target meeting
Research Priorities (RPs)	N/A	FQ	Discussion Doc	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): KS/DN Crops (CS): LP Livestock (LS): BC RPs due to MS from HS, CS, and LS by 01.9.25	1.14.25 2.11.25	Spr 2025
Excluded Methods - Induced mutagenesis - Fermentation (TBD)	N/A	DN/B C/CM	Discussion document	MS requested TR on induced mutagenesis 1.10.23. TR due to NOP end-June. TR sent to MS 7.6.23. TR sufficiency due 9.4.23. TR found sufficient 8.8.23.	11.19.24 12.10.24 1.14.25 2.11.25	Fall 2025
Tall oil, distilled	205.601 205.603	TBD	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 on inerts.	12.12.23	TBD

Spring 2025 Milestones	Target dates (tentative)	Weeks PTM (prior to meeting)
NOP - Publish FRN, Open public comment	March 28, 2025	16 -20
NOP - Draft Spring 2025 NOSB meeting tentative agenda	Feb 7, 2025	~ 10
NOSB - Spring 2025 proposals due to NOP	Feb 13, 2025	~ 9
NOP - Post proposals	March 28, 2025	7.5
Public comment closes	April 28, 2025	3.5

NOP - Send compiled public comments to NOSB	April 29, 2025	3
The send complied public comments to most	7.pr. 13, 1013	
Public comment webinars	Apr 22 & 24, 2025	1
	<u>,</u>	
Spring 2025 NOSB meeting - Virtual	Apr 29 - May 1, 2025	0
Final recommendations due	May 29, 2025	30 days post
		meeting
		8

Fall 2025 Milestones	Target dates (tentative)	Weeks PTM (prior to meeting)
NOP - Publish FRN, Open public comment	~May 15, 2025	24
NOP - Draft Fall 2025 NOSB meeting agenda	Aug 8, 2025	~11
NOSB - Fall 2025 proposals due to NOP	Aug 20, 2025	~9
NOP - Post proposals	Sept 9, 2025	~8
Public comment closes	Oct 8, 2025	~4
NOP - Send compiled public comments to NOSB	Oct 14, 2025	~3
Public comment webinars	Oct 28 & 30, 2025	1
Fall 2025 NOSB meeting - Omaha, NE	Nov 4 - 6, 2025	0
Final recommendations due	Nov 28, 2025	~30 days post

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, February 11, 2025 1:00 pm ET

Present: Franklin Quarcoo (FQ), Chair; Brian Caldwell (BC), Vice Chair; Andrea Hatziyannis (AH); Cat McCluskey

(CM); Dilip Nandwani (DN); Nate Lewis (NL); Allison Johnson (AJ) - observer

Absent: Kyla Smith (KS); Logan Petrey (LP)

Staff: Heather Kumar (HK); Jo Mirenda (JM); Michelle Arsenault (MA)

Agenda

- Review January 14, 2025 notes
- Introductions.
- Research Priorities (RPs) discuss/vote
- Induced mutagenesis (MJ/DN/BC) discuss/vote
- Updates/comments from Food Technologist (HK)
- Additional Items
- Adjourn

Discussion

- January 14, 2025 notes were approved as written with a correction to the roll.
- Introductions. Members introduced themselves and welcomed the new members
- **Research Priorities (RPs) discussion document.** The group reviewed the list of research priorities submitted by the other Subcommittees, and moved to a vote on the final document.

Motion to accept the discussion document on research priorities

Motion by: FQ Seconded by: BC

Yes: 6 No: 0 Abstain: 0 Recuse: 0 Absent: 2

- Induced mutagenesis (IM) discussion document (DN/BC). The co-lead summarized the draft document, and the group discussed plant genetics and seed specifically. Members reviewed the amended questions and upon further comment and discussion, decided to continue work on this document and present it at the Fall 2025 meeting. A member added that currently IM is on the excluded methods TBD list, and it's unclear whether it is considered a traditional breeding technique, so the first step would be to determine if it should be excluded.
- Food Technologist update (HK). No update at this time.
- 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 14, 2025

February 11, 2025 March 11, 2025 April 8, 2025 May 2025 June 2025 July 2025 August 2025 September 2025 October 2025 November 2025 December 2025

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/ status	Target meeting
Research Priorities (RPs)	N/A	FQ	Discussion Doc	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): KS/DN Crops (CS): LP Livestock (LS): BC RPs due to MS from HS, CS, and LS by 01.9.25	1.14.25 2.11.25	Spr 2025
Excluded Methods - Induced mutagenesis - Fermentation (TBD)	N/A	DN/B C/CM	Discussion document	MS requested TR on induced mutagenesis 1.10.23. TR due to NOP end-June. TR sent to MS 7.6.23. TR sufficiency due 9.4.23. TR found sufficient 8.8.23.	11.19.24 12.10.24 1.14.25 2.11.25	Fall 2025
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 on inerts.	12.12.23	TBD

Spring 2025 Milestones	, ,	Weeks PTM (prior to meeting)
NOP - Publish FRN, Open public comment	~Jan 24, 2025	16 -20

NOP - Draft Spring 2025 NOSB meeting tentative agenda	Feb 7, 2025	~ 10
NOSB - Spring 2025 proposals due to NOP	Feb 13, 2025	~ 9
NOP - Post proposals	Mar 3, 2025	7.5
Public comment closes	Apr 2, 2025	3.5
NOP - Send compiled public comments to NOSB	Apr 5, 2025	3
Public comment webinars	Apr 22 & 24, 2025	1
Spring 2025 NOSB meeting - Tempe, AZ	Apr 29 - May 1, 2025	0
Final recommendations due	May 29, 2025	30 days post meeting

Fall 2025 Milestones	Target dates (tentative)	Weeks PTM (prior to meeting)
NOP - Publish FRN, Open public comment	~May 15, 2025	24
NOP - Draft Fall 2025 NOSB meeting agenda	Aug 8, 2025	~11
NOSB - Fall 2025 proposals due to NOP	Aug 20, 2025	~9
NOP - Post proposals	Sept 9, 2025	~8
Public comment closes	Oct 8, 2025	~4
NOP - Send compiled public comments to NOSB	Oct 14, 2025	~3
Public comment webinars	Oct 28 & 30, 2025	1
Fall 2025 NOSB meeting - Omaha, NE	Nov 4 - 6, 2025	0
Final recommendations due	Nov 28, 2025	~30 days post

Materials (MS) (GMO ad hoc) Subcommittee Notes Tuesday, January 14, 2025 1:00 pm ET

Present: Franklin Quarcoo (FQ), Chair; Brian Caldwell (BC), Vice Chair; Mindee Jeffery (MJ); Logan Petrey (LP);

Dilip Nandwani (DN); Kyla Smith (KS); Nate Lewis (NL); Allison Johnson (AJ) - observer

Absent: Wood Turner (WT)

Staff: Heather Kumar (HK); Jo Mirenda (JM); Michelle Arsenault (MA)

Agenda

- Review December 10, 2024 notes
- Research Priorities (RPs) discuss
- Induced mutagenesis (MJ/DN/BC) discuss
- Updates/comments from Food Technologist (HK)
- Additional Items
- Adjourn

Discussion

- December 10, 2024 notes were approved as written
- Research Priorities (RPs)(All). The group discussed the research priorities from Livestock and Crops. Handling will complete its list on the next call and send it to the MS.
- Induced mutagenesis (IM) (BC/MJ/DN). Members discussed various sections of the draft document, specifically organic seed use and propagation. A member suggested that it would be helpful to have more clarity on the ultimate goal of this document, given that the topic of organic seed is not specific to the National List. There is a section in the regulations regarding seed, so that may be an option. A member asked about intellectual property (IP) rights and how that works for products of IM v. classic GE seeds/traits. The lead added that IFOAM has an informative position paper, which he linked in the draft document. In Europe, they maintain a positive list, which he noted has pros and cons and may not be the best way forward for the U.S. Several members added feedback about the document, and the lead will modify so the MS can finalize the document at the February call. A member added that the first step might be to determine whether IM is or is not an excluded method, and the path they take would then depend on that. MJ expressed parting thoughts about the fact that there are several NOSB members who have seed breeding expertise, and expressed gratefulness as people courageously move ahead.
- Food Technologist (HK). No update at this time.
- 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 14, 2025

February 11, 2025 March 11, 2025 April 8, 2025 May 2025 June 2025 July 2025 August 2025 September 2025

October 2025

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/ status	Target meeting
Research Priorities (RPs)	N/A	FQ	Discussion Doc	May 2012 Framework Proposal Subcommittee reps to MS: Handling (HS): KS/DN Crops (CS): LP Livestock (LS): BC RPs due to MS from HS, CS, and LS by 01.9.25	1.14.25 2.11.25	Spr 2025
Excluded Methods - Induced mutagenesis - Fermentation (TBD)	N/A	MJ/D N/BC	Discussion document	MS requested TR on induced mutagenesis 1.10.23. TR due to NOP end-June. TR sent to MS 7.6.23. TR sufficiency due 9.4.23. TR found sufficient 8.8.23.	11.19.24 12.10.24 1.14.25 2.11.25	Spr 2025
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 on inerts.	12.12.23	TBD

Spring 2025 Milestones	Target dates (tentative)	Weeks PTM	
		(prior to meeting)	
NOP - Publish FRN, Open public comment	~Jan 24, 2025	16 -20	
NOP - Draft Spring 2025 NOSB meeting tentative agenda	Feb 7, 2025	~ 10	
NOSB - Spring 2025 proposals due to NOP	Feb 13, 2025	~ 9	

NOP - Post proposals	Mar 3, 2025	7.5
Public comment closes	Apr 2, 2025	3.5
NOP - Send compiled public comments to NOSB	Apr 5, 2025	3
Public comment webinars	Apr 22 & 24, 2025	1
Spring 2025 NOSB meeting - Tempe, AZ	Apr 29 - May 1, 2025	0
Final recommendations due	May 29, 2025	30 days post meeting

Fall 2025 Milestones	Target dates (tentative)	Weeks PTM (prior to meeting)
NOP - Publish FRN, Open public comment	~May 15, 2025	24
NOP - Draft Fall 2025 NOSB meeting agenda	Aug 8, 2025	~11
NOSB - Fall 2025 proposals due to NOP	Aug 20, 2025	~9
NOP - Post proposals	Sept 9, 2025	~8
Public comment closes	Oct 8, 2025	~4
NOP - Send compiled public comments to NOSB	Oct 14, 2025	~3
Public comment webinars	Oct 28 & 30, 2025	1
Fall 2025 NOSB meeting - Omaha, NE	Nov 4 - 6, 2025	0
Final recommendations due	Nov 28, 2025	~30 days post