

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.

**Crops Subcommittee (CS) Notes**  
**Tuesday, December 21, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Amy Bruch (ADB), Vice Chair; Asa Bradman (AB); Brian Caldwell (BC); Jerry D'Amore (JD); Steve Ela (SE), Vice Chair Emeritus; Logan Petrey (LP); Wood Turner (WT); Nate Powell-Palm (NPP) - observer

**Absent:** None

**Staff:** Jared Clark (JC); Andrea Holm (AH)

**Agenda**

- Review December 7<sup>th</sup>, 2021 notes
- 2024 Sunsets
  - Lead salts (AB) - Discuss review
- Petitions
  - Ammonia Extract (Highly soluble fertilizers) (ADB/SE) - Discuss proposal
- Additional Items
- Adjourn

**Discussion**

- **December 7<sup>th</sup>, 2021 notes** were accepted as written
- **2024 Sunsets**
  - **Lead salts (AB) - Discuss review** - The lead emailed CS the review prior to the call. Not much to add since the last sunset. The CS Vice Chair Emeritus gave an overview of the lead's email.
- **Petitions**
  - **Ammonia Extract (Highly soluble fertilizers) (ADB/SE)** - The leads gave an overview of stakeholder comments received and the different concerns included therein. The leads gave an overview of the options for listing a use restriction, within the National List (§205.602) or the crops practice standards (§205.203), and are open to discussion regarding the proposed location for the material. The leads outlined the similarities of ammonia extract to other materials such as feather meal and bloodmeal, and additional language to be included in the proposal. Additional work on the proposal is advancing, more to come at a future call.
- **Additional Items**
  - **Schedule remaining work agenda items** - See updated table below.
- **The meeting was adjourned**

[Previous CS Notes](#)

**Future call schedule (1<sup>st</sup> and 3<sup>rd</sup> Tuesdays 2:00 PM ET | 11:00 AM PT, except where noted)**

December 7, 2021

2024 Sunsets

Coppers, fixed (JD) - Discuss review

Copper sulfate (JD) - Discuss review

Micronutrients: Sulfates, carbonates, etc. (LP) - Discuss review

Lead salts (AB) - Discuss review

Petitions

Potassium hydroxide - Discuss petition

Potassium sorbate - Discuss petition

Additional Items

Schedule remaining work agenda items and reassign substances as needed  
Revisit status of 12.21.21 meeting

December 21, 2021

2024 Sunsets

Lead salts (AB) - Discuss review

Petitions

Ammonia Extract (Highly soluble fertilizers) (ADB/SE) - Discuss proposal

January 4, 2022

2024 Sunsets

Vitamins C and E (WT) - Discuss review

Coppers, fixed (JD) - Discuss review

Copper sulfate (JD) - Discuss review

Biodegradable Biobased Mulch Film (AB) - Discuss review

Petitions

Carbon Dioxide (LP) - Discuss proposal/vote?

Research Priorities (RG/All) - Discuss

January 18, 2022 - Last call before Research Priorities are due to MS (01.25.22)

2024 Sunsets

Elemental sulfur (BC) - Discuss review

Humic Acids (ADB) - Discuss review

Squid byproducts (LP) - Discuss review

Tobacco dust (nicotine sulfate) (LP)

Petitions

Ammonia Extract (Highly soluble fertilizers) (ADB/SE) - Discuss proposal and vote

February 1, 2022

2024 Sunsets

Polyoxin D zinc salt (BC) - Discuss review

Micronutrients: Soluble boron products (ADB) - Discuss review

February 15, 2022 - Last call before proposal deadline (02.16.22)

March 1, 2022

March 15, 2022

April 5, 2022

April 19, 2022

May 3, 2022

May 17, 2022

June 7, 2022

June 21, 2022

July 5, 2022

July 19, 2022

August 2, 2022

August 16, 2022

September 6, 2022

September 20, 2022

October 4, 2022

October 18, 2022

November 1, 2022

November 15, 2022

December 6, 2022  
 December 20, 2022

### Work Agenda

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

### Petitioned Substances

Substance	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Ammonia Extract (Highly soluble fertilizers)	SE/ADB	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21. <a href="#">2021 TR</a> (Handling). Classified as nonsynthetic and two of three motions passed at Fall 2021 meeting.	12.21.21 1.18.22	Spr 2022
Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 03.2.21 and will not request a TR for now. Returned to CS for additional work at Fall 2021 NOSB meeting.	1.4.22	Spr 2022
Potassium Hydroxide	RG	Proposal	Petition sent to CS 11.22.21. Petition suff/TR request due 01.21.22.	12.7.21 TBD	TBD
Potassium Sorbate	TBD (ADB?)	Proposal	Petition sent to CS 11.22.21. Petition suff/TR request due 01.21.22.	12.7.21 TBD	TBD

### Other Projects

Project	Contact	Notes*	Scheduled, Discussed, Voted	Target meeting
Research Priorities	RG/All	Due to MS by 1.25.22	1.4.22	Spr 2022

### 2024 Sunset Review

TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR?	Notes*	Scheduled, Discussed, Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	Summary: Spr 2022 Review: Fall 2022

Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB	N	Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 1.4.22	“ “
Boric acid	205.601(e)(3)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	“ “
Sticky traps/barriers	205.601(e)(9)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	“ “
Elemental sulfur	205.601(h)(2)	BC	N	Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21 1.18.22	“ “
Coppers, fixed	205.601(i)(2)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a> CS requested a TR on 12.20.21.	5.18.21 6.1.21 12.7.21 1.4.22	“ “
Copper sulfate	205.601(i)(3)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a> CS requested a TR on 12.20.21.	5.18.21 6.1.21 12.7.21 1.4.22	“ “
Polyoxin D zinc salt	205.601(i)(11)	BC	Y Limite Scope	Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a> CS requested a Limited Scope TR on 6.1.21. TR due to NOP early November. TR sent to CS 11.29.21. TR suff due 01.28.22	5.18.21 6.1.21 2.1.22	“ “
Humic acids	205.601(j)(3)	ADB	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 1.18.22	“ “
Micronutrients: Soluble boron products	205.601(j)(7)(i)	ADB	Y Limite Scope	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a> CS requested a Limited Scope TR on 7.23.21. TR due to NOP 12.22.21	5.18.21 6.1.21 2.1.22	“ “
Micronutrients: Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese,	205.601(j)(7)(ii)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “

molybdenum, selenium, and cobalt						
Vitamins C, and E	205.601(j)(9)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew C&amp;E/REMOVE B1</a>	5.18.21 6.1.21 1.4.22	“ “
Squid byproducts	205.601(j)(10)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21 1.18.22	“ “
Lead salts	205.602(d)	AB	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21 12.21.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 1.18.22	“ “

### Milestones

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 20 & 21, 2022
Spring 2022 NOSB meeting - Crystal City, VA	Apr 26 - 28, 2022
Final recommendations due	May 27, 2022

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.

**Crops Subcommittee (CS) Notes**  
**Tuesday, December 7, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Amy Bruch (ADB), Vice Chair; Brian Caldwell (BC); Jerry D'Amore (JD); Steve Ela (SE), Vice Chair Emeritus; Logan Petrey (LP); Wood Turner (WT); Mindee Jeffery (MJ) - observer; Nate Powell-Palm (NPP) - observer

**Absent:** Asa Bradman (AB)

**Staff:** Jared Clark (JC); Andrea Holm (AH)

**Agenda**

- Review November 16, 2021 notes
- Discuss 2024 Sunsets
  - Coppers, fixed (JD) - Discuss review
  - Copper sulfate (JD) - Discuss review
  - Micronutrients: Sulfates, carbonates, etc. (LP) - Discuss review
  - Lead salts (AB) - Discuss review
- Petitions
  - Potassium hydroxide - Discuss petition
  - Potassium sorbate - Discuss petition
- Additional Items
  - Schedule remaining work agenda items and reassign substances as needed
  - Revisit status of 12.21.21 meeting
- Adjourn

**Discussion**

- **November 16, 2021 notes** were accepted as written
- **Discuss 2024 Sunsets**
  - **Coppers, fixed and Copper sulfate (JD)** - The lead discussed the uses and last NOSB sunset review of, and 2011 Technical Report on, fixed coppers and copper sulfate. The lead summarized additional language proposed for inclusion in the document, including language on human health concerns and environmental implications. The lead summarized copper sulfate public comments submitted during the last NOSB sunset review. The lead called for the consideration of adding a new work agenda item to discuss an annotation for copper sulfate, and for the addition of copper sulfate to the Research Priorities. Members discussed requesting an additional Technical Report for copper. Members discussed uses of copper sulfate and fixed copper products (including copper soap) in organic production and questions on environmental issues related to their use. Members will submit questions on copper to include in the request for a Technical Report to the lead.
  - **Micronutrients: Sulfates, carbonates, etc. (LP)** - The lead discussed uses and international acceptance of, and recent annotation change to, micronutrients. The lead discussed environmental issues and has no specific questions for stakeholders. Members discussed the types of micronutrients commercially available, i.e., chelated micronutrients, in relation to the annotation restriction.
  - **Lead salts (AB)** - The CS Chair briefly summarized the lead's review. Members will discuss lead salts during the next call.

- **Petitions**
  - **Potassium hydroxide** - The CS Chair indicated that a Technical Report may not be needed for this substance. The petition will be discussed, and sufficiency may be determined, on a later call. Members will review the petition in the meantime. A lead was assigned, see table below.
  - **Potassium sorbate** - The CS Chair believes a Technical Report may be needed for this substance. The petition will be discussed, and sufficiency may be determined, on a later call. Members will review the petition in the meantime. A tentative lead was assigned, see table below.
- **Additional Items**
  - **Schedule remaining work agenda items and reassign substances as needed** - See table below. New leads will be assigned as needed after new members are announced.
  - **Revisit status of 12.21.21 meeting** - Not canceled
- **The meeting was adjourned**

[Previous CS Notes](#)

**Future call schedule (1<sup>st</sup> and 3<sup>rd</sup> Tuesdays 2:00 PM ET | 11:00 AM PT, except where noted)**

November 16, 2021

2024 Sunsets

- Herbicides, soap-based (RG) - Discuss review
- Boric acid (WT) - Discuss review
- Sticky traps/barriers (RG) - Discuss review

December 7, 2021

2024 Sunsets

- Coppers, fixed (JD) - Discuss review
- Copper sulfate (JD) - Discuss review
- Micronutrients: Sulfates, carbonates, etc. (LP) - Discuss review
- Lead salts (AB) - Discuss review

Petitions

- Potassium hydroxide - Discuss petition
- Potassium sorbate - Discuss petition

Additional Items

- Schedule remaining work agenda items and reassign substances as needed
- Revisit status of 12.21.21 meeting

December 21, 2021

2024 Sunsets

- Lead salts (AB) - Discuss review

Petitions

- Ammonia Extract (Highly soluble fertilizers) (ADB/SE) - Discuss proposal

January 4, 2022

2024 Sunsets

- Vitamins C and E (WT) - Discuss review
- Coppers, fixed (JD) - Discuss review
- Copper sulfate (JD) - Discuss review

Petitions

- Carbon Dioxide (LP)

Additional Items

- Research Priorities

January 18, 2022 - Last call before Research Priorities are due to MS (01.25.22)

2024 Sunsets

Elemental sulfur (BC) - Discuss review

Humic Acids (ADB) - Discuss review

Squid byproducts (LP) - Discuss review

Tobacco dust (nicotine sulfate) (LP)

February 1, 2022

2024 Sunsets

Polyoxin D zinc salt (BC) - Discuss review

Micronutrients: Soluble boron products (ADB) - Discuss review

February 15, 2022 - Last call before proposal deadline (02.16.22)

March 1, 2022

March 15, 2022

April 5, 2022

April 19, 2022

May 3, 2022

May 17, 2022

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September 20, 2022

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October 18, 2022

November 1, 2022

November 15, 2022

December 6, 2022

December 20, 2022



## Work Agenda

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

### Petitioned Substances

Substance	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Ammonia Extract (Highly soluble fertilizers)	SE/ADB	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21. <a href="#">2021 TR</a> (Handling). Classified as nonsynthetic and two of three motions passed at Fall 2021 meeting.	12.21.21	Spr 2022
Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 03.2.21 and will not request a TR for now. Returned to CS for additional work at Fall 2021 NOSB meeting.	1.4.22	Spr 2022
Potassium Hydroxide	RG	Proposal	Petition sent to CS 11.22.21. Petition suff/TR request due 01.21.22.	12.7.21 TBD	TBD
Potassium Sorbate	TBD (ADB?)	Proposal	Petition sent to CS 11.22.21. Petition suff/TR request due 01.21.22.	12.7.21 TBD	TBD

### Other Projects

Project	Contact	Notes*	Scheduled, Discussed, Voted	Target meeting
Research Priorities	RG/All	Due to MS by 1.25.22	TBD	Spr 2022

## 2024 Sunset Review

TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR?	Notes*	Scheduled, Discussed, Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB	N	Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 TBD	“ “
Boric acid	205.601(e)(3)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	“ “
Sticky traps/barriers	205.601(e)(9)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	“ “
Elemental sulfur	205.601(h)(2)	BC	N	Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21 1.18.22	“ “
Coppers, fixed	205.601(i)(2)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21 1.4.22	“ “
Copper sulfate	205.601(i)(3)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21 1.4.22	“ “
Polyoxin D zinc salt	205.601(i)(11)	BC	Y Limite Scope	Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a> CS requested a Limited Scope TR on 6.1.21. TR due to NOP early November. TR sent to CS 11.29.21. TR suff due 01.28.22	5.18.21 6.1.21 2.1.22	“ “
Humic acids	205.601(j)(3)	ADB	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 1.18.22	“ “

Micronutrients: Soluble boron products	205.601(j)(7)(i)	ADB	Y Limite Scope	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a> CS requested a Limited Scope TR on 7.23.21. TR due to NOP 12.22.21	5.18.21 6.1.21 2.1.22	“ “
Micronutrients: Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “
Vitamins C, and E	205.601(j)(9)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a> <a href="#">C&amp;E/REMOVE B1</a>	5.18.21 6.1.21 1.4.22	“ “
Squid byproducts	205.601(j)(10)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21 1.18.22	“ “
Lead salts	205.602(d)	AB	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21 12.21.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 1.18.22	“ “

## Milestones

Spring 2022 Milestones	Target dates (tentative)
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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
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Spring 2022 NOSB meeting - Crystal City, VA	Apr 26 - 28, 2022
Final recommendations due	May 27, 2022

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## **Crops Subcommittee (CS) Notes** **Tuesday, November 16, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Amy Bruch (ADB), Vice Chair; Brian Caldwell (BC); Jerry D'Amore (JD); Steve Ela (SE), Vice Chair Emeritus; Logan Petrey (LP); Wood Turner (WT); Nate Powell-Palm (NPP) - observer

**Absent:** Asa Bradman (AB);

**Staff:** Michelle Arsenault (MA); Jared Clark (JC); Andrea Holm (AH)

### **Agenda**

- November 2<sup>nd</sup>, 2021 notes
- Discuss Sunsets:
  - 2024 Sunset: Herbicides, soap-based (RG) - Discuss review
  - 2024 Sunset: Boric acid (WT) - Discuss review
  - 2024 Sunset: Sticky traps/barriers (RG) - Discuss review
- Additional Items
- Adjourn

### **Discussion**

- **November 2, 2021 notes** were accepted as written.
- **Discuss Sunsets:**
  - **2024 Sunset: Herbicides, soap-based (RG)** - The lead summarized the uses of soap-based herbicides and its last sunset review. Members discussed uses of soap-based herbicides in organic production. The lead will submit the document for the Spring 2022 NOSB meeting.
  - **2024 Sunset: Boric acid (WT)** - The lead summarized the uses of boric acid, its last sunset review, its source, international acceptance, and environmental and human health implications. Members discussed the uses of boric acid in organic production and potential additional questions to stakeholders. The lead will edit the review and circulate it to the CS members before submitting to the NOP for the Spring meeting.
  - **2024 Sunset: Sticky traps/barriers (RG)** - The lead summarized the uses of sticky traps and barriers, the last sunset review, and their manufacture. Members discussed the uses of sticky traps and barriers in organic production. The lead will edit the review to include international acceptance information and recirculate the document to the CS members before submitting to the NOP for the Spring meeting.
- **Additional Items** - None
- **The meeting was adjourned**

### [Previous CS Notes](#)

#### **Future call schedule (1<sup>st</sup> and 3<sup>rd</sup> Tuesdays 2:00 PM ET | 11:00 AM PT, except where noted)**

November 2, 2021

Assign discussion dates for remaining work agenda items

Discuss Lithothamnion recommendation cover letter and background

November 16, 2021

2024 Sunset: Herbicides, soap-based (RG) - Discuss review

2024 Sunset: Boric acid (WT) - Discuss review

2024 Sunset: Sticky traps/barriers (RG) - Discuss review

December 7, 2021

2024 Sunset: Coppers, fixed (JD) - Discuss review  
2024 Sunset: Copper sulfate (JD) - Discuss review  
2024 Sunset: Micronutrients: Sulfates, carbonates, etc. (LP) - Discuss review  
2024 Sunset: Lead salts (AB) - Discuss review  
Ammonia Extract (Highly soluble fertilizers) (ADB/SE) - Discuss proposal  
Schedule remaining work agenda items and reassign substances as needed  
Revisit status of 12.21.21 meeting

December 21, 2021 - cancelled?

January 4, 2022

2024 Sunset: Vitamins C and E (WT) - Discuss review  
Carbon Dioxide (LP)  
Research Priorities

January 18, 2022

2024 Sunset: Elemental sulfur (BC) - Discuss review  
2024 Sunset: Humic Acids (ADB) - Discuss review  
2024 Sunset: Squid byproducts (LP) - Discuss review  
2024 Sunset: Tobacco dust (nicotine sulfate) (LP)

February 1, 2022

2024 Sunset: Polyoxin D zinc salt (BC) - Discuss review  
2024 Sunset: Micronutrients: Soluble boron products (ADB) - Discuss review

February 15, 2022 - Last call before proposal deadline

March 1, 2022

March 15, 2022

April 5, 2022

April 19, 2022

May 3, 2022

May 17, 2022

June 7, 2022

June 21, 2022

July 5, 2022

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August 2, 2022

August 16, 2022

September 6, 2022

September 20, 2022

October 4, 2022

October 18, 2022

November 1, 2022

November 15, 2022

December 6, 2022

December 20, 2022

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Ammonia Extract (Highly soluble fertilizers)	SE/ADB	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21. <a href="#">2021 TR</a> (Handling). Classified as nonsynthetic and two of three motions passed at Fall 2021 meeting.	12.7.21	Spr 2022
Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now. Returned to CS for additional work at Fall 2021 NOSB meeting.	1.4.22	Spr 2022

### Other Projects

Project	Contact	Notes*	Scheduled, Discussed, Voted	Target meeting
Research Priorities	All	Due to MS by 1.25.22	TBD	Spr 2022

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

### 2024 Sunset Review

TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR?	Notes*	Scheduled, Discussed, Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB	N	Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 TBD	“ “
Boric acid	205.601(e)(3)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	“ “

Sticky traps/barriers	205.601(e)(9)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	“ “
Elemental sulfur	205.601(h)(2)	BC	N	Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21 1.18.22	“ “
Coppers, fixed	205.601(i)(2)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “
Copper sulfate	205.601(i)(3)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “
Polyoxin D zinc salt	205.601(i)(11)	BC	Y Limite Scope	Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a> CS requested a Limited Scope TR on 6.1.21. TR due to NOP early November.	5.18.21 6.1.21 2.1.22	“ “
Humic acids	205.601(j)(3)	ADB	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 1.18.22	“ “
Micronutrients: Soluble boron products	205.601(j)(7)(i)	ADB	Y Limite Scope	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a> CS requested a Limited Scope TR on 7.23.21. TR due to NOP 12.22.21	5.18.21 6.1.21 2.1.22	“ “
Micronutrients: Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “
Vitamins C, and E	205.601(j)(9)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a> <a href="#">C&amp;E/REMOVE B1</a>	5.18.21 6.1.21 1.4.22	“ “
Squid byproducts	205.601(j)(10)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21 1.18.22	“ “

Lead salts	205.602(d)	AB	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 1.18.22	“ “

### Milestones

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 20 & 21, 2022
Spring 2022 NOSB meeting - Crystal City, VA	Apr 26 - 28, 2022
Final recommendations due	May 27, 2022



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.

## **Crops Subcommittee (CS) Notes** **Tuesday, November 2, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Jerry D'Amore (JD); Amy Bruch (ADB); Wood Turner (WT); Brian Caldwell (BC); Logan Petrey (LP); Nate Powell-Palm (NPP)

**Absent:** Asa Bradman (AB)

**Staff:** Michelle Arsenault (MA); Jared Clark (JC); Andrea Holm

### **Agenda**

- Review October 5 notes
- Assign discussion dates for remaining work agenda items
- Discuss Lithothamnion recommendation cover letter and background
- Additional Items
- Adjourn

### **Discussion**

- **October 5 notes** were accepted as written.
- **Assign discussion dates for remaining work agenda items.** See tables below.
- **Discuss Lithothamnion recommendation cover letter and background.** The lead summarized the review and comments they received from the October 2021 NOSB meeting. To help provide NOP with flexibility in implementing this recommendation, the lead will outline the Board discussion and decision-making process in the cover letter.
- **Additional Items.** None.
- **The meeting was adjourned**

### [Previous CS Notes](#)

#### **Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

October 5, 2021

Discuss public comments/process for presenting

Assign discussion dates for work agenda items/2024 sunset reviews

October 19, 2021 Cancelled (Conflicts with NOSB meeting)

November 2, 2021

November 16, 2021

2024 Sunset: Herbicides, soap-based (RG) - Discuss review

2024 Sunset: Boric acid (WT) - Discuss review

2024 Sunset: Sticky traps/barriers (RG) - Discuss review

December 7, 2021

2024 Sunset: Coppers, fixed (JD) - Discuss review

2024 Sunset: Copper sulfate (JD) - Discuss review

2024 Sunset: Micronutrients: Sulfates, carbonates, etc. (LP) - Discuss review

2024 Sunset: Lead salts (AB) - Discuss review

Ammonia Extract (Highly soluble fertilizers) (ADB/SE) - Discuss proposal

December 21, 2021

January 4, 2022

2024 Sunset: Vitamins C, and E (WT) - Discuss review  
 Carbon Dioxide (LP)  
 Research Priorities

January 18, 2022

2024 Sunset: Elemental sulfur (BC) - Discuss review  
 2024 Sunset: Humic Acids (ADB) - Discuss review  
 2024 Sunset: Squid byproducts (LP) - Discuss review  
 2024 Sunset: Tobacco dust (nicotine sulfate) (LP)

February 1, 2022

2024 Sunset: Polyoxin D zinc salt (BC) - Discuss review  
 2024 Sunset: Micronutrients: Soluble boron products (ADB) - Discuss review

February 15, 2022 - Last call before proposal deadline

March 1, 2022

March 15, 2022

**Work Agenda**  
**Petitioned Substances**

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Ammonia Extract (Highly soluble fertilizers)	SE/ADB	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21. Classified as non-synth and two of three motions passed at Fall 2021 meeting.	12.7.21	Spr 2022
Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now. Returned to CS for additional work at Fall 2021 NOSB meeting.	1.4.22	Spr 2022

## Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Research Priorities	All	N/A	Due to MS by 1.25.22	TBD	Spr 2022

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

## 2024 Sunset Review: TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List §	Contact	TR Request ?	Notes*	Schedule d, Discussed, Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB	N	Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 TBD	" "
Boric acid	205.601(e)(3)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	" "
Sticky traps/barriers	205.601(e)(9)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	" "
Elemental sulfur	205.601(h)(2)	BC	N	Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21 1.18.22	" "
Coppers, fixed	205.601(i)(2)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	" "
Copper sulfate	205.601(i)(3)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	" "
Polyoxin D zinc salt	205.601(i)(11)	BC	Y Limited Scope	Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a> TR requested 6.1.21	5.18.21 6.1.21 2.1.22	" "
Humic acids	205.601(j)(3)	ADB	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 1.18.22	" "

Micronutrients: Soluble boron products	205.601(j)(7)(i)	ADB	Y	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a> TR requested 6.1.21	5.18.21 6.1.21 2.1.22	“ “
Micronutrients: Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “
Vitamins C, and E	205.601(j)(9)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a> <a href="#">C&amp;E/REMOVE B1</a>	5.18.21 6.1.21 1.4.22	“ “
Squid byproducts	205.601(j)(10)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21 1.18.22	“ “
Lead salts	205.602(d)	AB	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 1.18.22	“ “

### Milestones

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 20 & 21, 2022
Spring 2022 NOSB meeting - Crystal City, VA	Apr 26 - 28, 2022
Final recommendations due	May 27, 2022

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.

**Crops Subcommittee (CS) Notes**  
**Tuesday, October 5, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Jerry D'Amore (JD); Amy Bruch (ADB); Wood Turner (WT); Brian Caldwell (BC); Logan Petrey (LP)

**Absent:** Asa Bradman (AB)

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

**Agenda**

- August 3 notes were approved via email August 17, 2021
- Discuss public comments/process for presenting
- Assign discussion dates for work agenda items/2024 sunset reviews
- Additional Items
- Adjourn

**Discussion**

- **August 3 notes** were approved via email August 17, 2021.
- **Discuss public comments/process for presenting.** The group briefly discussed best practices for analyzing and summarizing public comments at the NOSB meeting.
- **Assign discussion dates for work agenda items/2024 sunset reviews.** See tables below.
- **Additional Items.** None.
- **The meeting was adjourned**

[Previous CS Notes](#)

**Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

September 21, 2021 - Cancelled

October 5, 2021

Discuss public comments/process for presenting

Assign discussion dates for work agenda items/2024 sunset reviews

October 19, 2021 Cancelled (Conflicts with NOSB meeting)

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

January 4, 2022

January 18, 2022

February 1, 2022

February 15, 2022 - Last call before proposal deadline

March 1, 2022

March 15, 2022

**Work Agenda  
Petitioned Substances**

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	6.1.21	Fall 2021
Biochar (Cow manure Derived Biochar (CMDDB))	WT	Proposal	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor. TR addendum sent to CS 3.5.21. TR suff due 5.4.21. TR found sufficient 4.13.21	8.3.21	Fall 2021
Ammonia Extract	SE	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21.	7.6.21 7.27.21 8.3.21	Fall 2021
Kasugamycin	RG	Proposal	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	7.20.21	Fall 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20. CS revisited and determined that a TR was not needed.	7.20.21 7.27.21	Fall 2021
Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now.	6.15.21 7.6.21 8.3.21	Fall 2021
Lithothamnion	BC	Proposal	NOP memo sent to NOSB 3.12.21.	7.6.21 7.27.21 8.3.21	Fall 2021
Sodium Nitrate	SE	Proposal	Work agenda request approved by NOP 6.17.21	7.27.21	Fall 2021

**Other Topics**

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	7.6.21 7.20.21	Fall 2021
Research Priorities	All	N/A	Due to MS by 7.20.21	7.6.21	Fall 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

**2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)**

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21 7.20.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21 7.20.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. Due May/early June. TR sent to CS 6.24.21. TR suff due 8.23.21. TR found suff 7.20.21.	6.15.21 7.20.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	6.1.21	"

Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	7.20.21	“
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in May/early June. TR sent to CS 6.24.21. TR suff due 8.23.21. TR found sufficient 7.27.21	7.27.21	“
Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. TR due to CS late March. TR sent to CS 3.30.21. TR suff due 5.29.21. TR found sufficient 6.1.21	5.18.21 7.20.21	“
Rotenone (CAS # 83-79-4)	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	6.1.21	“

#### 2024 Sunset Review: TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR Request ?	Notes*	Schedule d, Discussed Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB	N	Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 TBD	“ “
Boric acid	205.601(e)(3)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	“ “



Sticky traps/barriers	205.601(e)(9)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 11.16.21	“ “
Elemental sulfur	205.601(h)(2)	BC	N	Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21 1.18.22	“ “
Coppers, fixed	205.601(i)(2)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “
Copper sulfate	205.601(i)(3)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “
Polyoxin D zinc salt	205.601(i)(11)	BC	Y Limited Scope	Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a> TR requested 6.1.21	5.18.21 6.1.21 2.1.22	“ “
Humic acids	205.601(j)(3)	ADB	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 1.18.22	“ “
Soluble boron products	205.601(j)(7)(i)	ADB	Y	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a> TR requested 6.1.21	5.18.21 6.1.21 2.1.22	“ “
Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “
Vitamins, B <sub>1</sub> , C, and E	205.601(j)(9)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a> <a href="#">C&amp;E/REMOVE B1</a>	5.18.21 6.1.21 1.4.22	“ “
Squid byproducts	205.601(j)(10)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21 1.18.22	“ “
Lead salts	205.602(d)	AB	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 12.7.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21 1.18.22	“ “

## Milestones

Fall 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Jun 3, 2021
NOSB Request for TRs for 2024 sunset materials	Jun 18, 2021
NOP - Draft Fall 2020 NOSB meeting tentative agenda	Jul 30, 2021
NOSB - Fall 2021 proposals due to NOP	Aug 13, 2021
NOP - Post proposals	On or before Sep 1, 2021
Discuss/finalize work agendas on ES call	Sep 21, 2021
Public comment closes	Sep 30, 2021
NOP - Send compiled public comments to NOSB	~Oct 4, 2021
Public comment webinars	Oct 13 & 14, 2021
Fall 2021 NOSB meeting - Virtual	Oct 19 - 21, 2021

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 20 & 21, 2022
Spring 2022 NOSB meeting - Crystal City, VA	Apr 26 - 28, 2022
Final recommendations due	May 27, 2022

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.

**Crops Subcommittee (CS) Notes**  
**Tuesday, August 3, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Jerry D’Amore (JD); Amy Bruch (ADB); Wood Turner (WT); Brian Caldwell (BC); Logan Petrey (LP); Asa Bradman (AB)

**Absent:** None

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

**Agenda**

- Review July 27 notes
- Ammonia Extract (SE) - Discuss proposal/vote
- Lithothamnion (BC) - Discuss proposal/vote
- Carbon Dioxide (LP) - Discuss proposal/vote
- Biochar (WT) - Discuss proposal/vote
- Additional Items
- Adjourn

**Discussion**

- **July 27 notes** were accepted as written.
- **Ammonia Extract (SE).** The Subcommittee discussed the remainder of the proposal they did not vote on during the last call, specifically the definitions for ammonia. The lead motioned to rescind the previous vote (made on the July 27 call) in light of the new definitions, and the Subcommittee completed the votes.

The motion to classify ammonia extract as non-synthetic was completed at the July 27 call.

Motion to remove the previous motion to add ammonia extract at 205.602 Nonsynthetic substances prohibited for use in organic crop production.

Motion by: SE

Seconded by: WT

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

Motion to prohibit stripped Ammonia – created by separating, isolating and/or capturing ammonia or ammonium from an agricultural feedstock or other natural source using methods such as, but not limited to, steam stripping, pressurized air, heat, condensation, and/or distillation.

Motion by: SE

Seconded by: JD

Yes: 8 No: 0 Abstain: 0 Absent: 0 Recuse: 0

Motion to prohibit concentrated ammonia – contains greater than 3% ammoniacal nitrogen and the total nitrogen content is predominately (i.e., >50%) in the ammonia or ammonium form.

Motion by: SE

Seconded by: ADB

Yes: 7 No: 1 Abstain: 0 Absent: 0 Recuse: 0

Motion to add to 205.3(f): Nitrogen products with a C:N ratio of 3:1 or less, including those that are components of a blended fertilizer formulation, are limited to a cumulative total use of 20% of crop needs.

Motion by: SE

Seconded by: LP

Additional discussion: A member commented that he was not comfortable with the arbitrary 20% limit, although is supportive of the proposal at this time.

Yes: 7 No: 1 Abstain: 0 Absent: 0 Recuse: 0

- **Lithothamnion (BC).** The lead briefly summarized the proposal and the CS moved to a vote.

Motion to classify lithothamnion as non-agricultural

Motion by: BC

Seconded by: ADB

Yes: 8 No: 0 Abstain: 0 Absent: 0 Recuse: 0

Motion that lithothamnion does not meet the criteria for a wild crop and therefore cannot be certified to that standard.

Motion by: BC

Seconded by: SE

Yes: 8 No: 0 Abstain: 0 Absent: 0 Recuse: 0

- **Carbon Dioxide (LP).** The lead summarized the petition requesting the addition of carbon dioxide to the National List and the Subcommittee moved to a vote.

Motion to classify carbon dioxide as synthetic

Motion by: LP

Seconded by: RG

Yes: 7 No: 0 Abstain: 0 Absent: 1 Recuse: 0

Motion to add carbon dioxide at § 205.601

Motion by: LP

Seconded by: BC

Yes: 7 No: 0 Abstain: 0 Absent: 1 Recuse: 0

- **Biochar (WT).** The lead summarized the draft document on cow manure derived biochar (CMDB) and gave a brief history of the listing of ash from manure burning. The petitioner is seeking to add an annotation/exemption to the listing of ash from manure burning, which is listed at § 205.602 and prohibited for use. Members discussed the production of nitrogen and ammonia from the production of CMDB, noting that it is minimal. The group also discussed the addition of the definition of cow manure derived biochar. The lead will make some minor modifications to the document and recirculate. The CS proceeded to a vote based on the verbal acknowledgement of the edits to be made.

Motion to classify cow manure derived biochar (CMDB) as non-synthetic.

Motion by: WT

Seconded by: RG

Yes: 8 No: 0 Abstain: 0 Absent: 0 Recuse: 0

Motion to annotate the listing of ash for manure burning at § 205.602 to read: “Ash from manure burning – **unless derived as part of the production of biochar from pyrolysis of cow manure.**”

Motion by: WT

Seconded by: SE

Yes: 5 No: 3 Abstain: 0 Absent: 0 Recuse: 0

- **Additional Items.**
- **The meeting was adjourned**

[Previous CS Notes](#)

**Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

July 27, 2021 @ 4:00 ET/1:00 PT

Ammonia Extract (SE) - Discuss proposal

2023 Sunset: Magnesium oxide (ADB) - TR sufficiency, Discuss review/vote

Lithothamnion (BC) - Discuss proposal/vote

Sodium Nitrate (SE) - Discuss proposal/vote

Hydronium (RG) - Discuss proposal/vote

August 3, 2021

Ammonia Extract (SE) - Discuss proposal/vote

Lithothamnion (BC) - Discuss proposal/vote

Carbon Dioxide (LP) - Discuss proposal/vote

Biochar (WT) - Discuss proposal/vote

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

**Work Agenda**

**Petitioned Substances**

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	6.1.21	Fall 2021

Biochar (Cow manure Derived Biochar (CMDDB))	WT	Proposal	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor. TR addendum sent to CS 3.5.21. TR suff due 5.4.21. TR found sufficient 4.13.21	8.3.21	Fall 2021
Ammonia Extract	SE	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21.	7.6.21 7.27.21 8.3.21	Fall 2021
Kasugamycin	RG	Proposal	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	7.20.21	Fall 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20. CS revisited and determined that a TR was not necessary.	7.20.21 7.27.21	Fall 2021
Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now.	6.15.21 7.6.21 8.3.21	Fall 2021
Lithothamnion	BC	Proposal	NOP memo sent to NOSB 3.12.21.	7.6.21 7.27.21 8.3.21	Fall 2021
Sodium Nitrate	SE	Proposal	Work agenda request approved by NOP 6.17.21	7.27.21	Fall 2021

### Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further	7.6.21 7.20.21	Fall 2021

			research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19		
Research Priorities	All	N/A	Due to MS by 7.20.21	7.6.21	Fall 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

### 2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21 7.20.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21 7.20.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. Due May/early June. TR sent to CS 6.24.21. TR suff due 8.23.21. TR found suff 7.20.21.	6.15.21 7.20.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	6.1.21	"

Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	7.20.21	“
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in May/early June. TR sent to CS 6.24.21. TR suff due 8.23.21. TR found sufficient 7.27.21	7.27.21	“
Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. TR due to CS late March. TR sent to CS 3.30.21. TR suff due 5.29.21. TR found sufficient 6.1.21	5.18.21 7.20.21	“
Rotenone (CAS # 83-79-4)	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	6.1.21	“

### 2024 Sunset Review: TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR Request ?	Notes*	Schedule d, Discussed Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB	N	Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “



Boric acid	205.601(e)(3)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Sticky traps/barriers	205.601(e)(9)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Elemental sulfur	205.601(h)(2)	BC	N	Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Coppers, fixed	205.601(i)(2)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Copper sulfate	205.601(i)(3)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Polyoxin D zinc salt	205.601(i)(11)	BC	Y Limited Scope	Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Humic acids	205.601(j)(3)	ADB	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Soluble boron products	205.601(j)(7)(i)	ADB	Y Lmt'd Scope	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Vitamins, B <sub>1</sub> , C, and E	205.601(j)(9)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a> <a href="#">C&amp;E/REMOVE B1</a>	5.18.21 6.1.21	“ “
Squid byproducts	205.601(j)(10)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Lead salts	205.602(d)	AB	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “

## Milestones

Fall 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Jun 3, 2021
NOSB Request for TRs for 2024 sunset materials	Jun 18, 2021
NOP - Draft Fall 2020 NOSB meeting tentative agenda	Jul 30, 2021
NOSB - Fall 2021 proposals due to NOP	Aug 13, 2021
NOP - Post proposals	On or before Sep 1, 2021
Discuss/finalize work agendas on ES call	Sep 21, 2021
Public comment closes	Sep 30, 2021
NOP - Send compiled public comments to NOSB	~Oct 4, 2021
Public comment webinars	Oct 12 & 14, 2021
Fall 2021 NOSB meeting - Sacramento, CA	Oct 19 - 21, 2021

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.

## **Crops Subcommittee (CS) Notes** **Tuesday, July 27, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Jerry D'Amore (JD); Amy Bruch (ADB); Wood Turner (WT); Logan Petrey (LP); Brian Caldwell (BC); Asa Bradman (AB); Mindee Jeffery (MJ) - observer

**Absent:** None

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

### **Agenda**

- Review July 20 notes
- Ammonia Extract (SE) - Discuss proposal
- 2023 Sunset: Magnesium oxide (ADB) - TR sufficiency, Discuss review/vote
- Lithothamnion (BC) - Discuss proposal/vote
- Sodium Nitrate (SE) - Discuss proposal/vote
- Hydronium (RG) - Discuss proposal/vote
- Additional Items
- Adjourn

### **Discussion**

- **July 20 notes** were approved as written
- **Ammonia extract (SE).** The lead summarized the draft proposal for ammonia extract and also discussed the sodium nitrate listing in the context of nitrate use in organic agriculture. Members discussed the broader topic of nitrogen use, the potential for fraud, and the ability for certifiers to test for nitrogen levels. A member also mentioned input of nitrogen in hydroponic systems. The conversation also included discussion of the 20% cap for sodium nitrate and what that percentage was based on. The CS moved to a vote on two of the motions and will vote on the definition on the next call.

Motion to classify ammonia extract as non-synthetic.

Motion by: SE

Seconded by: JD

Yes: 8 No: 0 Abstain: 0 Absent: 0 Recuse: 0

Motion to add ammonia extract at 205.602 Nonsynthetic substances prohibited for use in organic crop production.

Motion by: SE

Seconded by: RG

Yes: 7 No: 1 Abstain: 0 Absent: Recuse: 0

- **2023 Sunset: Magnesium oxide (ADB).** The CS found the TR sufficient and the Chair will send an email to the NOP to confirm. The lead summarized the uses of magnesium oxide and noted that the TR did not identify any detrimental environmental effects. The Subcommittee moved to a vote.

Motion to remove magnesium oxide from the NL

Motion by: ADB

Seconded by: LP

Yes: 0 No: 8 Abstain: 0 Absent: 0 Recuse: 0

- **Lithothamnion (BC).** The lead discussed the process he used to determine the classification for lithothamnion. Based on the materials classification decision trees ([NOP 5033](#), [NOP 5033-2](#)) and the guidance on wild crops ([NOP-5022](#)) the Subcommittee determined that lithothamnion is non-agricultural and therefore cannot be certified to the wild crop standard. This determination also aligns with what a previous Board recommended. The NOP suggested changes to the wording of the motions to separate the classification motion from the NL motion and the Subcommittee will vote on the next call.
- **Sodium Nitrate (SE).** The lead summarized the history of the sodium nitrate listing, noting that it is non-synthetic and was listed at 205.602, prohibited for use, with an annotation to allow for up to 20%. In 2012 the NOSB voted to remove the annotation and prohibit its use altogether. The NOP did not complete rulemaking, and therefore sodium nitrate “sunsetting” but was not removed from the list (based on the previous sunset process) and therefore is considered an invalid listing. The NOSB submitted a proposal for the Fall 2021 meeting to relist sodium nitrate at 205.602 with annotation.

Motion to reinstate sodium nitrate at 205.602 with the following annotation: Sodium nitrate – unless use is restricted to no more than 20 percent of the crop’s total nitrogen requirement; use in spirulina production is unrestricted until October 21, 2005.

Motion by: SE

Seconded by: BC

Yes: 8 No: 0 Abstain: 0 Absent: 0 Recuse: 0

- **Hydronium (RG).** The lead summarized the uses of hydronium, noting that the petitioner has also submitted it to EPA as a biocide, and its registration is pending. The NOSB typically does not list substances without EPA registration. The CS moved to a vote.

Motion to classify hydronium as synthetic

Motion by: RG

Seconded by: ADB

Yes: 8 No: 0 Abstain: 0 Absent: 0 Recuse: 0

Motion to add hydronium at 205.601(j)(7) as an organic processing aid

Motion by: RG

Seconded by: SE

Yes: 0 No: 8 Abstain: 0 Absent: 0 Recuse: 0

- **Additional Items.** None.
- **The meeting was adjourned**

## [Previous CS Notes](#)

### **Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

July 20, 2021

2023 Sunset: Copper sulfate (JD) - Discuss/vote

2023 Sunset: Peracetic acid (WT) - Discuss review/vote

2023 Sunset: Chlorine materials (WT) - Discuss review/vote

2023 Sunset: Calcium chloride (LP) - Discuss review/vote  
 2023 Sunset: Ozone gas (RG) - TR sufficiency/revote if necessary  
 Kasugamycin (RG) - Discuss proposal/vote  
 Hydronium (RG) - Discuss proposal/vote  
 Biodegradable Biobased mulch annotation change (AB) - Discuss proposal/vote

July 27, 2021 @ 4:00 ET/1:00 PT

Ammonia Extract (SE) - Discuss proposal  
 2023 Sunset: Magnesium oxide (ADB) - TR sufficiency, Discuss review/vote  
 Lithothamnion (BC) - Discuss proposal/vote  
 Sodium Nitrate (SE) - Discuss proposal/vote  
 Hydronium (RG) - Discuss proposal/vote

August 3, 2021

Ammonia Extract (SE) - Discuss proposal/vote  
 Lithothamnion (BC) - Discuss proposal/vote  
 Carbon Dioxide (LP) - Discuss proposal/vote  
 Biochar (WT) - Discuss proposal/vote

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	6.1.21	Fall 2021
Biochar	WT	Proposal	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor. TR addendum sent to CS 3.5.21. TR suff due 5.4.21. TR found sufficient 4.13.21	8.3.21	Fall 2021

Ammonia Extract	SE	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21.	7.6.21 7.27.21 8.3.21	Fall 2021
Kasugamycin	RG	Proposal	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	7.20.21	Fall 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20. CS revisited and determined that a TR was not necessary.	7.20.21 7.27.21	Fall 2021
Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now.	6.15.21 7.6.21 8.3.21	Fall 2021
Lithothamnion	BC	Proposal	NOP memo sent to NOSB 3.12.21.	7.6.21 7.27.21 8.3.21	Fall 2021
Sodium Nitrate	SE	Proposal	Work agenda request approved by NOP 6.17.21	7.27.21	Fall 2021

### Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	7.6.21 7.20.21	Fall 2021
Research Priorities	All	N/A	Due to MS by 7.20.21	7.6.21	Fall 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

**2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)**

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21 7.20.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21 7.20.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. Due May/early June. TR sent to CS 6.24.21. TR suff due 8.23.21. TR found suff 7.20.21.	6.15.21 7.20.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	6.1.21	"
Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	7.20.21	"

Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in May/early June. TR sent to CS 6.24.21. TR suff due 8.23.21. TR found sufficient 7.27.21	7.27.21	“
Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. TR due to CS late March. TR sent to CS 3.30.21. TR suff due 5.29.21. TR found sufficient 6.1.21	5.18.21 7.20.21	“
Rotenone (CAS # 83-79-4)	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	6.1.21	“

#### 2024 Sunset Review: TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR Request ?	Notes*	Schedule d, Discussed Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB	N	Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Boric acid	205.601(e)(3)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Sticky traps/barriers	205.601(e)(9)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Elemental sulfur	205.601(h)(2)	BC	N	Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Coppers, fixed	205.601(i)(2)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “



Copper sulfate	205.601(i)(3)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Polyoxin D zinc salt	205.601(i)(11)	BC	Y Limited Scope	Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Humic acids	205.601(j)(3)	ADB	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Soluble boron products	205.601(j)(7)(i)	ADB	Y Lmt'd Scope	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Vitamins, B <sub>1</sub> , C, and E	205.601(j)(9)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew C&amp;E/REMOVE B1</a>	5.18.21 6.1.21	“ “
Squid byproducts	205.601(j)(10)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Lead salts	205.602(d)	AB	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “

## Milestones

Fall 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Jun 3, 2021
NOSB Request for TRs for 2024 sunset materials	Jun 18, 2021
NOP - Draft Fall 2020 NOSB meeting tentative agenda	Jul 30, 2021
NOSB - Fall 2021 proposals due to NOP	Aug 13, 2021
NOP - Post proposals	On or before Sep 1, 2021
Discuss/finalize work agendas on ES call	Sep 21, 2021
Public comment closes	Sep 30, 2021
NOP - Send compiled public comments to NOSB	~Oct 4, 2021
Public comment webinars	Oct 12 & 14, 2021
Fall 2021 NOSB meeting - Sacramento, CA	Oct 19 - 21, 2021

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**Crops Subcommittee (CS) Notes**  
**Tuesday, July 20, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Jerry D'Amore (JD); Amy Bruch (ADB); Wood Turner (WT); Logan Petrey (LP); Asa Bradman (AB); Brian Caldwell (BC)

**Absent:** None

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

**Agenda**

- Review July 6 notes
- 2023 Sunset: Copper sulfate (JD) - Discuss/vote
- 2023 Sunset: Peracetic acid (WT) - Discuss review/vote
- 2023 Sunset: Chlorine materials (WT) - Discuss review/vote
- 2023 Sunset: Calcium chloride (LP) - Discuss review/vote
- 2023 Sunset: Ozone gas (RG) - TR sufficiency/revote if necessary
- Kasugamycin (RG) - Discuss proposal/vote
- Hydronium (RG) - Discuss proposal/vote
- Biodegradable Biobased mulch annotation change (AB) - Discuss proposal/vote
- Additional Items - Extra call scheduled for July 27 @ 4 ET/1 PT
- Adjourn

**Discussion**

- **July 6 notes** were accepted as written.
  
- **2023 Sunset: Copper sulfate (JD).** The lead summarized the public comment and feedback from various stakeholder groups from the Spring 2021 meeting. Two stakeholders voiced opposition to use of copper sulfate and advocated for continuous improvement. The CS will add a research priority (RP) on alternatives to copper and send that to the MS lead for incorporation into the Fall RPs.

Motion to remove copper sulfate from the NL at 205.601(a)(3) and 205.601(e)(4)

Motion by: JD

Seconded by: RG

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

- **2023 Sunset: Peracetic acid (WT).** The lead summarized the substance and noted there is wide support from the community for relisting.

Motion to remove peracetic acid from the NL

Motion by: WT

Seconded by: JD

Yes: 0 No: 8 Abstain: 0 Absent: 0 Recuse: 0

- **2023 Sunset: Chlorine materials (WT).** The lead introduced the uses for chlorine materials and made the distinction between them and peracetic acid, which is relatively benign. Both substances are essential for meeting food safety requirements although some members voiced concerns about the use of chlorine materials on produce.

Motion to remove chlorine materials from the NL

Motion by: WT

Seconded by: LP

Yes: 0 No: 8 Abstain: 0 Absent: 0 Recuse: 0

- **2023 Sunset: Calcium chloride (LP).** The lead summarized the uses of calcium chloride, particularly as a foliar spray on crops, and noted that it is an important product for growers. The CS is supportive of relisting and moved to a vote.

Motion to remove calcium chloride from the NL

Motion by: LP

Seconded by: BC

Yes: 0 No: 8 Abstain: 0 Absent: 0 Recuse: 0

- **2023 Sunset: Ozone gas (RG).** The CS recently received the TR for ozone and the CS found it sufficient. The Chair will send an email to the NOP confirming that. The lead felt that the information in the TR would not change the tenor of the proposal, and the Subcommittee would not need to revote. The lead will add citations from the TR to the document, and will submit the document to the NOP for posting for the fall meeting
- **Kasugamycin (RG).** The lead summarized the uses of kasugamycin, and the members discussed antibiotic use in agriculture, antibiotic resistance, and potential detrimental soil effects. It was noted that most stakeholders, with the exception of some fruit tree growers, are not supportive of antibiotics being on the National List. A member mentioned that there are alternatives for fire blight, although they may be difficult to use and may not be as effective in certain climates and regions. The group feels that kasugamycin does not meet the OFPA criteria for compatibility with a system of sustainable agriculture, and moved to a vote.

Motion to classify kasugamycin as synthetic

Motion by: RG

Seconded by: SE

Yes: 8 No: 0 Abstain: 0 Absent: 0 Recuse: 0

Motion to add kasugamycin to the NL at §205.601

Motion by: RG

Seconded by: ADB

Yes: 0 No: 8 Abstain: 0 Absent: 0 Recuse: 0

- **Hydronium (RG). Hydronium is classified as synthetic and is being petitioned** for use in manure to control odor control and lower pH. The petitioners have also submitted a petition to the EPA to classify hydronium as a biopesticide, but it has not been approved yet. The lead will write a proposal and the CS will complete its review and vote on the August 3 call.
- **Biodegradable Biobased mulch film (BBMF) annotation change (AB).** The lead summarized the draft document, pointing out modifications that were made since the last meeting. He noted support from a wide array of organic organizations. Members discussed the potential use of BBMF and whether it would displace the use of polyethylene films (PE). A member suggested the inclusion of restrictions for non-continuous use, which the lead will incorporate into the document. The CS moved to a vote based on the proposed changes.

Motion to accept the proposed annotation for Biodegradable Biobased Mulch Film (BBMF)

Motion by: AB

Seconded by: BC

Yes: 7 No: 1 Abstain: 0 Absent: 0 Recuse: 0

- **Additional Items.** The CS scheduled an extra call for July 27 @ 4 ET/1 PT

### Previous CS Notes

#### **Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

July 6, 2021

2023 Sunset: Copper sulfate (JD) - Discuss review/vote

Research Priorities - Discuss/Send to MS

Ammonia Extract (SE) - Discuss proposal

Lithothamnion (BC) - Discuss proposal/vote

Carbon Dioxide (LP) - Discuss discussion document/vote

July 20, 2021

2023 Sunset: Copper sulfate (JD) - Discuss/vote

2023 Sunset: Peracetic acid (WT) - Discuss review/vote

2023 Sunset: Chlorine materials (WT) - Discuss review/vote

2023 Sunset: Calcium chloride (LP) - Discuss review/vote

2023 Sunset: Ozone gas (RG) - TR sufficiency/revote if necessary

Kasugamycin (RG) - Discuss proposal/vote

Hydronium (RG) - Discuss proposal/vote

Biodegradable Biobased mulch annotation change (AB) - Discuss proposal/vote

July 27, 2021 @ 4:00 ET/1:00 PT

Ammonia Extract (SE) - Discuss proposal

2023 Sunset: Magnesium oxide (ADB) - TR sufficiency, Discuss review/vote

Lithothamnion (BC) - Discuss proposal/vote

Carbon Dioxide (LP) - Discuss proposal/vote

Sodium Nitrate (SE) - Discuss proposal/vote

Hydronium (RG) - Discuss proposal/vote

August 3, 2021

Biochar (WT) - Discuss proposal/vote

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

**Work Agenda  
Petitioned Substances**

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	6.1.21	Fall 2021
Biochar	WT	Proposal	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor. TR addendum sent to CS 3.5.21. TR suff due 5.4.21. TR found sufficient 4.13.21	8.3.21	Fall 2021
Ammonia Extract	SE	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21.	7.6.21 7.27.21	Fall 2021
Kasugamycin	RG	Proposal	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	7.20.21	Fall 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20. CS revisited and determined that a TR was not necessary.	7.20.21 7.27.21	Fall 2021
Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now.	6.15.21 7.6.21 7.27.21	Fall 2021
Lithothamnion	BC	Proposal	NOP memo sent to NOSB 3.12.21.	7.6.21 7.27.21	Fall 2021

Sodium Nitrate	SE	Proposal	Work agenda request approved by NOP 6.17.21	7.27.21	Fall 2021
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### Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	7.6.21 7.20.21	Fall 2021
Research Priorities	All	N/A	Due to MS by 7.20.21	7.6.21	Fall 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

### 2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21 7.20.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21 7.20.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. Due May/early June. TR sent to CS 6.24.21. TR suff due 8.23.21. TR found suff 7.20.21.	6.15.21 7.20.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"

EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	6.1.21	“
Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	7.20.21	“
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in May/early June. TR sent to CS 6.24.21. <b>TR suff due 8.23.21</b>	7.27.21	“
Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. TR due to CS late March. TR sent to CS 3.30.21. TR suff due 5.29.21. TR found sufficient 6.1.21	5.18.21 7.20.21	“
Rotenone (CAS # 83-79-4)	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	6.1.21	“

### 2024 Sunset Review: TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR Request ?	Notes*	Schedule d, Discussed Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB	N	Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “



Boric acid	205.601(e)(3)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Sticky traps/barriers	205.601(e)(9)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Elemental sulfur	205.601(h)(2)	BC	N	Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Coppers, fixed	205.601(i)(2)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Copper sulfate	205.601(i)(3)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Polyoxin D zinc salt	205.601(i)(11)	BC	Y Limited Scope	Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Humic acids	205.601(j)(3)	ADB	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Soluble boron products	205.601(j)(7)(i)	ADB	Y Lmt'd Scope	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Vitamins, B <sub>1</sub> , C, and E	205.601(j)(9)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a> <a href="#">C&amp;E/REMOVE B1</a>	5.18.21 6.1.21	“ “
Squid byproducts	205.601(j)(10)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Lead salts	205.602(d)	AB	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “

## Milestones

Fall 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Jun 3, 2021
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Fall 2021 NOSB meeting - Sacramento, CA	Oct 19 - 21, 2021

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.

## **Crops Subcommittee (CS) Notes** **Tuesday, July 6, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Jerry D'Amore (JD); Amy Bruch (ADB); Wood Turner (WT); Logan Petrey (LP); Asa Bradman (AB); Brian Caldwell (BC)

**Absent:** None

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

### **Agenda**

- Review June 15 notes
- 2023 Sunset: Copper sulfate (JD) - Discuss review/vote
- Research Priorities - Discuss/Send to MS
- Ammonia Extract (SE) - Discuss proposal/vote
- Lithothamnion (BC) - Discuss proposal/vote
- Carbon Dioxide (LP) - Discuss discussion document/vote
- Additional Items
- Adjourn

### **Discussion**

- **June 15 notes** were accepted as written.  
**2023 Sunset: Copper sulfate (JD).** The lead summarized both listings for copper sulfate, including uses and international standards. Public comments at the Spring meeting were mixed. Rice growers were supportive of listing, and those commenters opposed cited possible accumulation of copper in the soil and lack of continuous improvement. The group discussed both the positive environmental benefits and identified negative impacts to aquatic species. The group also discussed specific application rates and its impact on soil. The CS recommends re-listing copper sulfate but emphasized the need identify a better solution such as cultural practices, alternative materials, or a combination of both. The CS deferred the vote to the next call.
- **Research Priorities (ALL).** The Crops Subcommittee will add a research priority on copper. JD will forward to the CS Chair for incorporation in the document that they will then send to the Materials Subcommittee.  
**Ammonia Extract (SE).** The lead summarized the petitioned uses of ammonia extract, noting public comments from the Spring meeting. To help inform the proposal, the lead has engaged with stakeholders including the Organic Trade Association's ammonia extracts task force. The CS discussed the OFPA criteria for compatibility with a system of sustainable agriculture, a holistic systems approach, and alternatives, including crop rotation. The lead will complete the proposal and the CS will vote on a future call.
- **Lithothamnion (BC).** The Board received a memo from the NOP asking them to determine classification of lithothamnion and if it can be certified to the wild-crop standard. The group discussed the synthetic vs. non synthetic decision tree for and based on the conversation, the lead will modify the document and discuss it on the next call. The group also discussed whether to develop a discussion document or proposal, and decided to write a proposal, and also pose questions for public comment regarding definitions in the wild crop standard. The vote was deferred.

- **Biodegradable Biobased mulch annotation change.** Members discussed how to move forward with the proposal. The lead noted that the crux of the proposal relies on a comparative risk assessment: using a petroleum based product that must be removed from the land each year and ends up in a landfill, versus one that is not 100% biobased at the moment, but biodegrades into the soil. A member asked about cumulative effects, from using the mulch film every year versus intermittently. Members acknowledged the fact that there are currently no products on the market that would meet the standard, which is aspirational, and discussed how to incentivize the industry to move towards the ideal of 100%. The lead will modify the current draft based on public comment from the Spring meeting and today's conversation and the CS will vote on a proposal on a future call for the Fall meeting.
- **Carbon Dioxide (LP).** The lead summarized the current draft document. The CS did not request a TR, as they felt that they had enough information to move forward. The group discussed whether to bring a petition discussion document or a proposal to the Fall meeting and chose to write a proposal with questions to solicit community feedback. The CS will vote during the August 3 call.
- **Additional Items.** None.
- **The meeting was adjourned.**

### [Previous CS Notes](#)

#### **Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

June 15, 2021

Carbon Dioxide (LP) - Discuss proposal  
2023 Sunset: Ozone gas (RG) - Discuss review/vote

July 6, 2021

2023 Sunset: Copper sulfate (JD) - Discuss review/vote  
Research Priorities - Discuss/Send to MS  
Ammonia Extract (SE) - Discuss proposal  
Lithothamnion (BC) - Discuss proposal/vote  
Carbon Dioxide (LP) - Discuss discussion document/vote

July 20, 2021

2023 Sunset: Copper sulfate (JD) - Discuss/vote  
2023 Sunset: Peracetic acid (WT) - Discuss review/vote  
2023 Sunset: Chlorine materials (WT) - Discuss review/vote  
2023 Sunset: Calcium chloride (LP) - Discuss review/vote  
2023 Sunset: Ozone gas (RG) - TR sufficiency/revote if necessary  
Kasugamycin (RG) - Discuss proposal/vote  
Hydronium (RG) - Discuss proposal/vote  
Biodegradable Biobased mulch annotation change (AB) - Discuss proposal/vote  
Ammonia Extract (SE) - Discuss proposal/vote

August 3, 2021

2023 Sunset: Magnesium oxide (ADB) - TR sufficiency, Discuss review/vote  
Lithothamnion (BC) - Discuss proposal/vote  
Biochar (WT) - Discuss proposal/vote  
Carbon Dioxide (LP) - Discuss proposal/vote

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021  
 December 7, 2021  
 December 21, 2021

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	6.1.21	Fall 2021
Biochar	WT	Proposal	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor. TR addendum sent to CS 3.5.21. TR suff due 5.4.21. TR found sufficient 4.13.21	8.3.21	Fall 2021
Ammonia Extract	SE	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21.	7.6.21 7.20.21	Fall 2021
Kasugamycin	RG	Proposal	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	7.20.21	Fall 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20. CS revisited and determined that a TR was not necessary.	7.20.21	Fall 2021

Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now.	6.15.21 7.6.21 8.3.21	Fall 2021
Lithothamnion	BC	Proposal	NOP memo sent to NOSB 3.12.21.	7.6.21 8.3.21	Fall 2021
Sodium Nitrate	SE	Proposal	Work agenda request approved by NOP 6.17.21	TBD	Fall 2021

### Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	7.6.21 7.20.21	Fall 2021
Research Priorities	All	N/A	Due to MS by 7.20.21	7.6.21	Fall 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

### 2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21 7.20.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21 7.20.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. Due May/early June. TR sent to CS 6.24.21. TR suff due 8.23.21	6.15.21 7.20.21	"

Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	“
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	“
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	6.1.21	“
Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	7.20.21	“
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in May/early June. TR sent to CS 6.24.21. TR suff due 8.23.21	8.3.21	“
Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. TR due to CS late March. TR sent to CS 3.30.21. TR suff due 5.29.21. TR found sufficient 6.1.21	5.18.21 7.20.21	“
Rotenone (CAS # 83-79-4)	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	6.1.21	“

2024 Sunset Review: TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR Request ?	Notes*	Schedule, Discussed Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB	N	Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	" "
Boric acid	205.601(e)(3)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	" "
Sticky traps/barriers	205.601(e)(9)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	" "
Elemental sulfur	205.601(h)(2)	BC	N	Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	" "
Coppers, fixed	205.601(i)(2)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	" "
Copper sulfate	205.601(i)(3)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	" "
Polyoxin D zinc salt	205.601(i)(11)	BC	Y Limited Scope	Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	" "
Humic acids	205.601(j)(3)	ADB	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	" "
Soluble boron products	205.601(j)(7)(i)	ADB	Y Lmt'd Scope	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	" "
Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	" "



Vitamins, B <sub>1</sub> , C, and E	205.601(j)(9)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew C&amp;E/REMOVE B1</a>	5.18.21 6.1.21	“ “
Squid byproducts	205.601(j)(10)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Lead salts	205.602(d)	AB	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “

### Milestones

Fall 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Jun 3, 2021
NOSB Request for TRs for 2024 sunset materials	Jun 18, 2021
NOP - Draft Fall 2020 NOSB meeting tentative agenda	Jul 30, 2021
NOSB - Fall 2021 proposals due to NOP	Aug 13, 2021
NOP - Post proposals	On or before Sep 1, 2021
Discuss/finalize work agendas on ES call	Sep 21, 2021
Public comment closes	Sep 30, 2021
NOP - Send compiled public comments to NOSB	~Oct 4, 2021
Public comment webinars	Oct 12 & 14, 2021
Fall 2021 NOSB meeting - Sacramento, CA	Oct 19 - 21, 2021

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.

**Crops Subcommittee (CS) Notes**  
**Tuesday, June 15, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Jerry D'Amore (JD); Amy Bruch (ADB); Wood Turner (WT); Logan Petrey (LP); Asa Bradman (AB)

**Absent:** Steve Ela (SE), Vice Chair; Brian Caldwell (BC)

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

**Agenda**

- Review June 1 notes
- Carbon Dioxide (LP) - Discuss proposal/vote
- 2023 Sunset: Ozone gas (RG) - Discuss review/vote
- Sodium Nitrate (RG) - Request to add to work agenda
- Additional Items
- Adjourn

**Discussion**

- **June 1 notes** were accepted as written
- **Carbon Dioxide (LP).** The lead summarized the petitioned use for carbon dioxide to lower pH levels in irrigation water. She noted questions about the release of CO<sub>2</sub> and its potential effect on climate change, as well as environmental benefits for carbon capture. The CS also discussed alternatives used in organic production such as sulfur “burners” and citric acid. Initial feedback from a stakeholder was that transitioning from sulfur burners is expensive, and the CS is interested in hearing from other stakeholders about alternatives. The CS did not request a TR as they felt all the questions were answered in the petition and could be gleaned from public comment. The CS will put forth a discussion document rather than a proposal at the Fall 2021 meeting in order to solicit more feedback. The lead will complete the document and the CS will discuss and vote on the next call.
- **2023 Sunset: Ozone gas (RG).** The lead summarized the uses of ozone in organic agriculture. There are no environmental concerns with the breakdown products, it's in wide use, and public commenters were nearly unanimous in favor of re-listing.

Motion to remove ozone from the National List

Motion by: RG

Seconded by: ADB

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

- **Sodium Nitrate (RG) - Request to add to work agenda.** The group discussed the request for a work agenda item to add sodium nitrate to the National List again, where it was previously listed at 205.602. The 2012 NOSB recommendation was not implemented, and therefore the sodium nitrate listing is considered invalid, but was never removed from the list. The CS will send the request to the Executive team, who will meet later today. The group also discussed the relationship between ammonia extract, which was petitioned for addition and is currently under review, and sodium nitrate, specifically solubility. Several members highlighted the broader issue of nitrogen use in agriculture and the use of imported nitrogen versus cover crops and crop rotation.

- **Additional Items.** None.
- **The meeting was adjourned.**

### [Previous CS Notes](#)

#### **Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

June 1, 2021

- 2024 Sunsets - TR requests
- Chitosan - plant disease control (RG) - Discuss draft proposal
- Chitosan - coagulant for fertilizer (RG) - Discuss draft proposal
- 2023 Sunset: EPA List 3 - Inerts of unknown toxicity (SE/AB) - Discuss review/vote
- 2023 Sunset: Rotenone (RG) - Discuss review/vote

June 15, 2021

- Carbon Dioxide (LP) - Discuss proposal
- 2023 Sunset: Ozone gas (RG) - Discuss review/vote

July 6, 2021

- 2023 Sunset: Copper sulfate (JD) - Discuss review/vote
- Research Priorities - Discuss/Send to MS
- Ammonia Extract (SE) - Discuss proposal/vote
- Lithothamnion (BC) - Discuss proposal/vote
- Biodegradable Biobased mulch annotation change (AB) - Discuss proposal/vote
- Carbon Dioxide (LP) - Discuss discussion document/vote

July 20, 2021

- Kasugamycin (RG) - Discuss proposal/vote
- Hydronium (RG) - Discuss proposal/vote
- 2023 Sunset: Peracetic acid (WT) - Discuss review/vote
- 2023 Sunset: Chlorine materials (WT) - Discuss review/vote
- 2023 Sunset: Calcium chloride (LP) - Discuss review/vote

August 3, 2021

- Biochar (WT) - Discuss proposal/vote
- 2023 Sunset: Magnesium oxide (ADB) - Discuss review/vote

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	6.1.21	Fall 2021
Biochar	WT	Proposal	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor. TR addendum sent to CS 3.5.21. TR suff due 5.4.21. TR found sufficient 4.13.21	8.3.21	Fall 2021
Ammonia Extract	SE	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21.	7.6.21	Fall 2021
Kasugamycin	RG	Proposal	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	7.20.21	Fall 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20. CS revisited and determined that a TR was not necessary.	7.20.21	Fall 2021
Carbon Dioxide	LP	Disc Doc	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now.	6.15.21 7.6.21	Fall 2021
Lithothamnion	BC	Proposal	NOP memo sent to NOSB 3.12.21.	7.6.21	Fall 2021

## Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	7.6.21	Fall 2021
Research Priorities	All	N/A	Due to MS by 7.20.21	7.6.21	Fall 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

## 2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.6.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. Due May/early June	6.15.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	6.1.21	"

Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	7.20.21	“
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in May/early June.	8.3.21	“
Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. TR due to CS late March. TR sent to CS 3.30.21. TR suff due 5.29.21. TR found sufficient 6.1.21	5.18.21 7.20.21	“
Rotenone (CAS # 83-79-4)	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	6.1.21	“

#### 2024 Sunset Review: TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR Request ?	Notes*	Schedule d, Discussed Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB	N	Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Boric acid	205.601(e)(3)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “

Sticky traps/barriers	205.601(e)(9)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Elemental sulfur	205.601(h)(2)	BC	N	Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Coppers, fixed	205.601(i)(2)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Copper sulfate	205.601(i)(3)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Polyoxin D zinc salt	205.601(i)(11)	BC	Y Limited Scope	Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Humic acids	205.601(j)(3)	ADB	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Soluble boron products	205.601(j)(7)(i)	ADB	Y Lmt'd Scope	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Vitamins, B <sub>1</sub> , C, and E	205.601(j)(9)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew C&amp;E/REMOVE B1</a>	5.18.21 6.1.21	“ “
Squid byproducts	205.601(j)(10)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Lead salts	205.602(d)	AB	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “

## Milestones

Fall 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Jun 3, 2021
NOSB Request for TRs for 2024 sunset materials	Jun 18, 2021
NOP - Draft Fall 2020 NOSB meeting tentative agenda	Jul 30, 2021
NOSB - Fall 2021 proposals due to NOP	Aug 13, 2021
NOP - Post proposals	On or before Sep 1, 2021
Discuss/finalize work agendas on ES call	Sep 21, 2021
Public comment closes	Sep 30, 2021
NOP - Send compiled public comments to NOSB	~Oct 4, 2021
Public comment webinars	Oct 12 & 14, 2021
Fall 2021 NOSB meeting - Sacramento, CA	Oct 19 - 21, 2021



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.

### **Crops Subcommittee (CS) Notes** **Tuesday, June 1, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Jerry D'Amore (JD); Amy Bruch (ADB); Brian Caldwell (BC); Wood Turner (WT); Logan Petrey (LP); Asa Bradman (AB)

**Absent:** None

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

#### **Agenda**

- Review May 18 notes
- 2024 Sunsets - TR requests
- Chitosan - plant disease control (RG) - Discuss draft proposal
- Chitosan - coagulant for fertilizer (RG) - Discuss draft proposal
- 2023 Sunset: EPA List 3 - Inerts of unknown toxicity (SE/AB) - Discuss review/vote
- 2023 Sunset: Rotenone (RG) - Discuss review/vote
- Additional Items
- Adjourn

#### **Discussion**

- **May 18 notes** were accepted as written.
- **2024 Sunsets - TR requests.** The CS determined the need for TRs for the 2024 sunsets and only requested one limited scope TR for polyoxin D zinc salt.
- **Chitosan - plant disease control (RG).** The lead summarized the draft review, noting that chitosan is synthetic and considered a benign compound derived from shellfish. It is being petitioned for use for broad-spectrum plant disease control. The lead noted that there are over 200 compounds already listed in the Organic Materials Review Institute (OMRI) Database for the same use that are non-synthetic. The group discussed efficacy and alternatives, including chitosan as an alternative for other substances such as sulfur. A member asked about information in the petition indicating that chitosan could be used as a plant growth regulator. The Subcommittee moved to a vote, which was divided.

Motion to classify chitosan as synthetic

Motion by: RG

Seconded by: BC

Yes: 8 No: 0 Abstain: 0 Absent: 0 Recuse: 0

Motion to add chitosan at § 205.601 (j)(4)

Motion by: RG

Seconded by: SE

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

- **Chitosan - coagulant for fertilizer (RG).** The lead summarized the substance, which is being petitioned as a value-added product. The CS sent follow-up questions to the petitioner in September 2020 and got no response. Without responses to its questions, the CS deemed the petition insufficient at this time and will send the it back without review. The NOP will transmit the information to the petitioner.

- **2023 Sunset: EPA List 3 - Inerts of unknown toxicity (SE/AB).** The lead summarized the draft review and noted that for now, without a better process in place for inerts, they should be relisted as they do not have contact with crops, and it would be disruptive to growers. He added that the list 3 inerts will likely be considered as part of the work the NOP is undertaking on EPA List 4 inerts. The group discussed some additional language to add to the review and moved to a vote.

Motion to remove EPA List 3 - Inerts of unknown toxicity at § 205.601(m)(2)

Motion by: SE

Seconded by: AB

Yes: 1 No: 7 Abstain: 0 Absent: 0 Recuse: 0

- **2023 Sunset: Rotenone (RG).** The lead noted that rotenone is a non-synthetic substance used for pest control, and due to human health implications is a prohibited natural. Rotenone it is prohibited from use in the US, however, other countries allow it, and the Subcommittee voted unanimously to continue its prohibition.

Motion to remove rotenone from the National List at § 205.606

Motion by: RG

Seconded by: ADB

Yes: 0 No: 8 Abstain: 0 Absent: 0 Recuse: 0

- **Additional Items.** None.
- **The meeting was adjourned.**

## [Previous CS Notes](#)

### **Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

May 18, 2021

Assign 2024 Sunsets (for TR determination)

Schedule discussions for work agenda items

Calcium chloride (LP) - TR sufficiency due 5.29.21

June 1, 2021

2024 Sunsets - TR requests

Chitosan - plant disease control (RG) - Discuss draft proposal

Chitosan - coagulant for fertilizer (RG) - Discuss draft proposal

2023 Sunset: EPA List 3 - Inerts of unknown toxicity (SE/AB) - Discuss review/vote

2023 Sunset: Rotenone (RG) - Discuss review/vote

June 15, 2021

Carbon Dioxide (LP) - Discuss proposal/vote

2023 Sunset: Copper sulfate (JD) - Discuss review/vote

2023 Sunset: Ozone gas (RG) - Discuss review/vote

July 6, 2021

Research Priorities - Discuss/Send to MS

Ammonia Extract (SE) - Discuss proposal/vote

Lithothamnion (BC) - Discuss proposal/vote

Biodegradable Biobased mulch annotation change (AB) - Discuss proposal/vote

July 20, 2021

Kasugamycin (RG) - Discuss proposal/vote

Hydronium (RG) - Discuss proposal/vote  
 2023 Sunset: Peracetic acid (WT) - Discuss review/vote  
 2023 Sunset: Chlorine materials (WT) - Discuss review/vote  
 2023 Sunset: Calcium chloride (LP) - Discuss review/vote

August 3, 2021

Biochar (WT) - Discuss proposal/vote  
 2023 Sunset: Magnesium oxide (ADB) - Discuss review/vote

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	6.1.21	Fall 2021
Chitosan - coagulant for fertilizer	RG	Proposal	Petition sent to CS 07.31.20. Petition sufficiency due 09.29.20. CS sent additional questions back to petitioner. CS received no response. Petition found insufficient.	6.1.21	Fall 2021
Biochar	WT	Proposal	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor. TR addendum sent to CS 3.5.21. TR suff due 5.4.21. TR found sufficient 4.13.21	8.3.21	Fall 2021

Ammonia Extract	SE	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21.	7.6.21	Fall 2021
Kasugamycin	RG	Proposal	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	7.20.21	Fall 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20. CS revisited and determined that a TR was not necessary.	7.20.21	Fall 2021
Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now.	6.15.21	Fall 2021
Lithothamnion	BC	Proposal	NOP memo sent to NOSB 3.12.21.	7.6.21	Fall 2021

### Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	7.6.21	Fall 2021
Research Priorities	All	N/A	Due to MS by 7.20.21	7.6.21	Fall 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	6.15.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	6.15.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. Due May/early June	6.15.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	6.1.21	"
Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	7.20.21	"
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in May/early June.	8.3.21	"

Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. TR due to CS late March. TR sent to CS 3.30.21. TR suff due 5.29.21. TR found sufficient 6.1.21	5.18.21 7.20.21	“
Rotenone (CAS # 83-79-4)	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	6.1.21	“

### 2024 Sunset Review: TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR Request ?	Notes*	Schedule d, Discussed Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB	N	Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Boric acid	205.601(e)(3)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Sticky traps/barriers	205.601(e)(9)	RG	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Elemental sulfur	205.601(h)(2)	BC	N	Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Coppers, fixed	205.601(i)(2)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Copper sulfate	205.601(i)(3)	JD	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Polyoxin D zinc salt	205.601(i)(11)	BC	Y Limited Scope	Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “

Humic acids	205.601(j)(3)	ADB	N	Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Soluble boron products	205.601(j)(7)(i)	ADB	Y Lmt'd Scope	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Vitamins, B <sub>1</sub> , C, and E	205.601(j)(9)	WT	N	Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew C&amp;E/REMOVE B1</a>	5.18.21 6.1.21	“ “
Squid byproducts	205.601(j)(10)	LP	N	Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Lead salts	205.602(d)	AB	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP	N	Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “

## Milestones

Fall 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Jun 3, 2021
NOSB Request for TRs for 2024 sunset materials	Jun 18, 2021
NOP - Draft Fall 2020 NOSB meeting tentative agenda	Jul 30, 2021
NOSB - Fall 2021 proposals due to NOP	Aug 13, 2021
NOP - Post proposals	On or before Sep 1, 2021
Discuss/finalize work agendas on ES call	Sep 21, 2021
Public comment closes	Sep 30, 2021
NOP - Send compiled public comments to NOSB	~Oct 4, 2021
Public comment webinars	Oct 12 & 14, 2021
Fall 2021 NOSB meeting - Sacramento, CA	Oct 19 - 21, 2021

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.

**Crops Subcommittee (CS) Notes**  
**Tuesday, May 18, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Jerry D'Amore (JD); Amy Bruch (ADB); Brian Caldwell (BC); Wood Turner (WT); Logan Petrey (LP); Asa Bradman (AB); Mindee Jeffery (MJ)

**Absent:** None

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

**Agenda**

- Review April 13 notes
- Debrief from April 2021 NOSB Meeting
- Assign 2024 Sunsets (for TR determination)
- Schedule discussion dates for work agenda items
- Calcium chloride (LP) - TR sufficiency
- Chitosan - plant disease control (RG) - Discuss draft proposal
- Chitosan - coagulant for fertilizer (RG) - Discuss draft proposal
- Additional Items
- Adjourn

**Discussion**

- **April 13 notes** were accepted as written.
- **Debrief from April 2021 NOSB Meeting**
  - The Chair had positive feedback from the Spring meeting. He noted that the PDS is going to discuss the public comment process to see if they have suggestions for process improvements.
  - Paper based crop planting aids. The NOSB passed a recommendation at the Spring meeting, and the work agenda item is completed and removed from the table below.
- **Assign 2024 Sunsets (for TR determination).** See table below.
- **Schedule discussion dates for work agenda items.** See table below.
- **Calcium chloride (LP).** TR sufficiency will be completed on the next call. Comments from the Spring meeting indicated support for this substance.
- **Chitosan - plant disease control (RG).** The lead summarized the use and manufacture of chitosan noting that it is a broad-spectrum insecticide. He noted that it is non-toxic but the chemicals they use to extract are not, and there appear to be botanical alternatives.
- **Chitosan - coagulant for fertilizer (RG).** The CS sent additional questions to the petitioner and did not receive a response. The CS will move ahead with a proposal for the Fall meeting.
- **Additional Items.** None.
- **The meeting was adjourned.**

[Previous CS Notes](#)

**Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

May 4, 2021 - Cancelled

May 18, 2021

Assign 2024 Sunsets (for TR determination)  
Schedule discussions for work agenda items  
Calcium chloride (LP) - TR sufficiency due 5.29.21



June 1, 2021

2024 Sunsets - TR requests

Chitosan - plant disease control (RG) - Discuss draft proposal

Chitosan - coagulant for fertilizer (RG) - Discuss draft proposal

2023 Sunset: EPA List 3 - Inerts of unknown toxicity (SE/AB) - Discuss review/vote

2023 Sunset: Rotenone (RG) - Discuss review/vote

June 15, 2021

Carbon Dioxide (LP) - Discuss proposal/vote

2023 Sunset: Copper sulfate (JD) - Discuss review/vote

2023 Sunset: Ozone gas (RG) - Discuss review/vote

July 6, 2021

Research Priorities - Discuss/Send to MS

Ammonia Extract (SE) - Discuss proposal/vote

Lithothamnion (BC) - Discuss proposal/vote

Biodegradable Biobased mulch annotation change (AB) - Discuss proposal/vote

July 20, 2021

Kasugamycin (RG) - Discuss proposal/vote

Hydronium (RG) - Discuss proposal/vote

2023 Sunset: Peracetic acid (WT) - Discuss review/vote

2023 Sunset: Chlorine materials (WT) - Discuss review/vote

2023 Sunset: Calcium chloride (LP) - Discuss review/vote

August 3, 2021

Biochar (WT) - Discuss proposal/vote

2023 Sunset: Magnesium oxide (ADB) - Discuss review/vote

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	6.1.21	Fall 2021
Chitosan - coagulant for fertilizer	RG	Proposal	Petition sent to CS 07.31.20. Petition sufficiency due 09.29.20. CS sent additional questions back to petitioner.	6.1.21	Fall 2021

Biochar	WT	Proposal	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor. TR addendum sent to CS 3.5.21. TR suff due 5.4.21. TR found sufficient 4.13.21	8.3.21	Fall 2021
Ammonia Extract	SE	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21.	7.6.21	Fall 2021
Kasugamycin	RG	Proposal	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	7.20.21	Fall 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20. CS revisited and determined that a TR was not necessary.	7.20.21	Fall 2021
Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now.	6.15.21	Fall 2021
Lithothamnion	BC	Proposal	NOP memo sent to NOSB 3.12.21.	7.6.21	Fall 2021

## Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	7.6.21	Fall 2021
Research Priorities	All	N/A	Due to MS by 7.20.21	7.6.21	Fall 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

## 2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	6.15.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	6.15.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. Due May/early June	6.15.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	7.20.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	6.1.21	"

Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	7.20.21	“
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in May/early June.	8.3.21	“
Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. TR due to CS late March. TR sent to CS 3.30.21. <b>TR suff due 5.29.21</b>	5.18.21 7.20.21	“
Rotenone (CAS # 83-79-4)	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	6.1.21	“

#### 2024 Sunset Review: TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR Request ?	Notes*	Schedule d, Discussed Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)	RG		Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)	AB		Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Boric acid	205.601(e)(3)	WT		Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Sticky traps/barriers	205.601(e)(9)	RG		Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “

Elemental sulfur	205.601(h)(2)	BC		Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Coppers, fixed	205.601(i)(2)	JD		Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Copper sulfate	205.601(i)(3)	JD		Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Polyoxin D zinc salt	205.601(i)(11)	BC		Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Humic acids	205.601(j)(3)	ADB		Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Soluble boron products	205.601(j)(7)(i)	ADB		Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)	LP		Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Vitamins, B <sub>1</sub> , C, and E	205.601(j)(9)	WT		Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew C&amp;E/REMOVE B1</a>	5.18.21 6.1.21	“ “
Squid byproducts	205.601(j)(10)	LP		Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21 6.1.21	“ “
Lead salts	205.602(d)	AB		Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)	LP		Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21 6.1.21	“ “

## Milestones

Fall 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	~May 14, 2021
NOSB Request for TRs for 2024 sunset materials	Jun 18, 2021
NOP - Draft Fall 2020 NOSB meeting tentative agenda	Jul 30, 2021
NOSB - Fall 2021 proposals due to NOP	Aug 13, 2021
NOP - Post proposals	On or before Sep 1, 2021
Discuss/finalize work agendas on ES call	Sep 21, 2021
Public comment closes	Sep 30, 2021
NOP - Send compiled public comments to NOSB	~Oct 4, 2021
Public comment webinars	Oct 12 & 14, 2021
Fall 2021 NOSB meeting - Sacramento, CA	Oct 19 - 21, 2021

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.

**Crops Subcommittee (CS) Notes**  
**Tuesday, April 13, 2021 12:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Jerry D'Amore (JD); Amy Bruch (ADB); Brian Caldwell (BC); Wood Turner (WT); Logan Petrey (LP)

**Absent:** Asa Bradman (AB)

**Staff:** Michelle Arsenault (MA)

**Agenda**

- Review April 6 notes
- Biochar (WT) - TR sufficiency due 5.4.21
- Additional Items
- Adjourn

**Discussion**

- **April 6 notes** were accepted as written
- **Biochar (WT).** The lead summarized the TR addendum, which was a response to the Crops Subcommittee's additional questions. The group discussed residues and source materials. It appears that biochar is created from waste byproducts. Crops found the TR sufficient and will proceed to a proposal for the Fall 2021 meeting.
- **Additional Items.** None.
- **The meeting was adjourned.**

[Previous CS Notes](#)

**Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

April 6, 2021

Carbon Dioxide petition (LP) - determined need for TR

Review public comments

Prep for April 2021 NOSB meeting

April 13 - Noon ET

Biochar (WT) - TR sufficiency due 5.4.21

May 4, 2021 - Cancelled

May 18, 2021

Assign 2024 Sunsets (for TR determination)

Calcium chloride (LP) - TR sufficiency due 5.29.21

Chitosan - plant disease control (RG) - Discuss draft proposal

Chitosan - coagulant for fertilizer (RG) - Discuss draft proposal

June 1, 2021

2024 Sunset TR requests

June 15, 2021

July 6, 2021

July 20, 2021

Research Priorities - Discuss/Send to MS

August 3, 2021

August 17, 2021

September 7, 2021

September 21, 2021  
 October 5, 2021  
 October 19, 2021  
 November 2, 2021  
 November 16, 2021  
 December 7, 2021  
 December 21, 2021

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Paper based crop planting aid	SE	Proposal	Petition sent to CS 8.14.18. Petition suff/TR request due 10.13.18. Petition found sufficient 9.4.18. CS requested Lmt'd scope TR 3.5.19. TR due early August. TR sent to CS 7.26.19. TR sufficiency due 9.24.19. TR found suff 8.6.19. <a href="#">2017 TR Newspaper</a>	1.19.21	Spr 2021
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	08.04.20 08.18.20 10.6.20 11.17.20 5.18.21	Fall 2021
Chitosan - coagulant for fertilizer	RG	Proposal	Petition sent to CS 07.31.20. Petition sufficiency due 09.29.20. CS sent additional questions back to petitioner.	08.18.20 5.18.21	Fall 2021
Biochar	WT	Proposal	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor. TR addendum sent to CS 3.5.21. TR suff due 5.4.21. TR found sufficient 4.13.21	03.17.20 12.15.20 1.19.21 4.13.21	Fall 2021
Ammonia Extract	SE	Petition discussion doc	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21.	2.16.21 3.2.21	Spr 2021



Kasugamycin	RG	Discussion doc	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	07.07.20 1.5.21 2.2.21	Spr 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20. CS revisited and determined that a TR was not necessary.	11.17.20 12.1.20 12.15.20 3.2.21	Fall 2021
Carbon Dioxide	LP	Discussion doc	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now.	2.2.21 3.2.21 4.6.21	Fall 2021
Lithothamnion	BC	Proposal	NOP memo sent to NOSB 3.12.21.	4.6.21	TBD

#### Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	1.5.21 1.19.21 2.2.21 2.16.21	Spr 2021
Research Priorities	All	N/A	Due to MS 01.19.21	1.5.21 1.19.21 7.6.2021	Spr 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. Due May/early June	1.19.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	12.15.20 01.19.21	"
Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	2.2.21	"
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in May/early June	12.15.20	"
Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. TR due to CS late March. TR sent to CS 3.30.21. <b>TR suff due 5.29.21</b>	12.1.20 5.18.21	"

Rotenone (CAS # 83-79-4).	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	12.1.20	“
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### 2024 Sunset Review: TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR Request ?	Notes*	Schedule d, Discussed Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)			Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)			Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Boric acid	205.601(e)(3)			Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Sticky traps/barriers	205.601(e)(9)			Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Elemental sulfur	205.601(h)(2)			Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21	“ “
Coppers, fixed	205.601(i)(2)			Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Copper sulfate	205.601(i)(3)			Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Polyoxin D zinc salt	205.601(i)(11)			Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21	“ “
Humic acids	205.601(j)(3)			Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Soluble boron products	205.601(j)(7)(i)			Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “

Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)			Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Vitamins, B <sub>1</sub> , C, and E	205.601(j)(9)			Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew C&amp;E/REMOVE B1</a>	5.18.21	“ “
Squid byproducts	205.601(j)(10)			Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21	“ “
Lead salts	205.602(d)			Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)			Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “

Spring 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Feb 18, 2021
NOSB - Spring 2021 proposals due to NOP	Feb 18, 2021
New NOSB member training	Feb 3 - 5, 2021
NOP - Draft Spring 2021 NOSB meeting tentative agenda	Feb 2, 2021
NOP - Post proposals	Mar 3, 2021
Public comment closes	Apr 5, 2021
NOP - Send compiled public comments to NOSB	Apr 6, 2021
Public comment webinars	Apr 20 & 22, 2021
Spring 2021 NOSB meeting - Virtual	Apr 28 - 30, 2021

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.

## **Crops Subcommittee (CS) Notes** **Tuesday, April 6, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Asa Bradman (AB); Jerry D'Amore (JD); Amy Bruch (ADB); Brian Caldwell (BC); Logan Petrey (LP)

**Absent:** Wood Turner (WT)

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

### **Agenda**

- Review March 2 notes
- Carbon Dioxide petition (LP) - determined need for TR
- Review public comments
- Prep for April 2021 NOSB meeting
- Lithothamnion - Assign lead
- Additional Items
  - Discuss cancelling May 4 call
- Adjourn

### **Discussion**

- **March 2 notes** were accepted as written
- **Carbon Dioxide petition (LP).** The lead summarized the last conversation the CS had about carbon dioxide, noting that it is used to acidify irrigation water. She also relayed additional information from the petitioner about the use and breakdown products. The Crops Subcommittee had some additional questions about carbon emissions, and will write a discussion document with targeted questions for public comment.
- **Review public comments.** ~860 written comments submitted to the current comment docket and available in Regulations.gov. Oral commenter schedules will be sent to NOSB members soon - prior to the webinars on April 20 & 22.
- **Prep for April 2021 NOSB meeting.** The Chair summarized the processes for the NOSB meeting including presenting a substance, asking questions of commenters, and voting.
- **Lithothamnion.** BC volunteered to lead this review, which was a work agenda item requested by the NOP. The NOP gave some of the background information and will provide any additional information the Crops Subcomm may need to conduct its review.
- **Additional Items.**
  - The NOP will make the comment webinar recording available to members who will miss part of the webinar.
  - The Crops Subcommittee canceled its May 4 and will meet briefly on April 13 to review the TR for biochar for sufficiency.
- **The meeting was adjourned.**

### [Previous CS Notes](#)

### **Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

March 2, 2021

Hydronium (RG) - Discuss need for TR

Carbon Dioxide petition (LP) - Petition sufficiency

March 16, 2021 - Canceled

April 6, 2021

Carbon Dioxide petition (LP) - determined need for TR  
Review public comments  
Prep for April 2021 NOSB meeting

April 13 - Noon ET

Biochar (WT) - TR sufficiency due 5.4.21

May 4, 2021 - Cancelled

May 18, 2021

Assign 2024 Sunsets (for TR determination)  
Calcium chloride (LP) - TR sufficiency due 5.29.21  
Chitosan - plant disease control (RG) - Discuss draft proposal  
Chitosan - coagulant for fertilizer (RG) - Discuss draft proposal

June 1, 2021

2024 Sunset TR requests

June 15, 2021

July 6, 2021

July 20, 2021

Research Priorities - Discuss/Send to MS

August 3, 2021

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

### Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Paper based crop planting aid	SE	Proposal	Petition sent to CS 8.14.18. Petition suff/TR request due 10.13.18. Petition found sufficient 9.4.18. CS requested Lmt'd scope TR 3.5.19. TR due early August. TR sent to CS 7.26.19. TR sufficiency due 9.24.19. TR found suff 8.6.19. <a href="#">2017 TR Newspaper</a>	1.19.21	Spr 2021
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	08.04.20 08.18.20 10.6.20 11.17.20 5.18.21	Fall 2021

Chitosan - coagulant for fertilizer	RG	Proposal	Petition sent to CS 07.31.20. Petition sufficiency due 09.29.20. CS sent additional questions back to petitioner.	08.18.20 5.18.21	Fall 2021
Biochar	WT	Petition discussion doc	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor. TR addendum sent to CS 3.5.21. <b>TR suff due 5.4.21.</b>	03.17.20 12.15.20 1.19.21 4.13.21	Fall 2021
Ammonia Extract	SE	Petition discussion doc	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21.	2.16.21 3.2.21	Spr 2021
Kasugamycin	RG	Discussion doc	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	07.07.20 1.5.21 2.2.21	Spr 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20. CS revisited and determined that a TR was not necessary.	11.17.20 12.1.20 12.15.20 3.2.21	Fall 2021
Carbon Dioxide	LP	Discussion doc	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21 and will not request a TR for now.	2.2.21 3.2.21 4.6.21	Fall 2021
Lithothamnion	BC	Proposal	NOP memo sent to NOSB 3.12.21.	4.6.21	TBD

### Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff	1.5.21 1.19.21	Spr 2021

			1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	2.2.21 2.16.21	
Research Priorities	All	N/A	Due to MS 01.19.21	1.5.21 1.19.21 7.6.2021	Spr 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

### 2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. Due May/early June	1.19.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	12.15.20 01.19.21	"



Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	2.2.21	“
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in May/early June	12.15.20	“
Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. TR due to CS late March. TR sent to CS 3.30.21. <b>TR suff due 5.29.21</b>	12.1.20 5.18.21	“
Rotenone (CAS # 83-79-4).	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	12.1.20	“

### 2024 Sunset Review: TR Requests (June 2021), Summary (Spr 2022), Review (Fall 2022)

Substance	National List	Contact	TR Request ?	Notes*	Schedule d, Discussed Voted	Target meeting
Herbicides, soap-based	205.601(b)(1)			Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	Summary: Spr 2022 Review: Fall 2022
Biodegradable biobased mulch film	205.601(b)(2)(iii)			Sunset date: 10.30.24 TR: <a href="#">2012 TR</a> ; <a href="#">2015 Report</a> ; <a href="#">NOP 15-1</a> ; <a href="#">2016 Supplemental TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Boric acid	205.601(e)(3)			Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Sticky traps/barriers	205.601(e)(9)			Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “

Elemental sulfur	205.601(h)(2)			Sunset date: 11.22.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2018 TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21	“ “
Coppers, fixed	205.601(i)(2)			Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Copper sulfate	205.601(i)(3)			Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2011 TR</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Polyoxin D zinc salt	205.601(i)(11)			Sunset date: 11.22.24 TR: <a href="#">2012 TR</a> ; <a href="#">2017 Limited Scope TR</a> . <a href="#">2018/Spring - Rec to ADD</a>	5.18.21	“ “
Humic acids	205.601(j)(3)			Sunset date: 10.30.24 TR: <a href="#">1996 TAP</a> ; <a href="#">2006 TR</a> ; <a href="#">2012 TR (oxidized lignite/humic acid derivatives)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Soluble boron products	205.601(j)(7)(i)			Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt	205.601(j)(7)(ii)			Sunset date: 1.28.24 TR: <a href="#">2010 TR (Micronutrients)</a> . <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Vitamins, B <sub>1</sub> , C, and E	205.601(j)(9)			Sunset date: 10.30.24 TR: <a href="#">1995 TAP</a> ; <a href="#">2015 TR</a> . <a href="#">2017/Fall - Rec to Renew C&amp;E/REMOVE B1</a>	5.18.21	“ “
Squid byproducts	205.601(j)(10)			Sunset date: 1.28.24 TR: <a href="#">2016 TR</a> <a href="#">2016/Spring - Rec to ADD</a>	5.18.21	“ “
Lead salts	205.602(d)			Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “
Tobacco dust (nicotine sulfate)	205.602(j)			Sunset date: 10.30.24 TR: N/A <a href="#">2017/Fall - Rec to Renew</a>	5.18.21	“ “

Spring 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Feb 18, 2021

NOSB - Spring 2021 proposals due to NOP	Feb 18, 2021
New NOSB member training	Feb 3 - 5, 2021
NOP - Draft Spring 2021 NOSB meeting tentative agenda	Feb 2, 2021
NOP - Post proposals	Mar 3, 2021
Public comment closes	Apr 5, 2021
NOP - Send compiled public comments to NOSB	Apr 6, 2021
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Spring 2021 NOSB meeting - Virtual	Apr 28 - 30, 2021

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.

**Crops Subcommittee (CS) Notes**  
**Tuesday, March 2, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Asa Bradman (AB); Jerry D'Amore (JD); Amy Bruch (ADB); Brian Caldwell (BC); Wood Turner (WT); Logan Petrey (LP)

**Absent:** None

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

**Agenda**

- Review February 16 notes
- Hydronium (RG) - Discuss need for TR
- Carbon Dioxide petition (LP) - Petition sufficiency/Determine need for TR
- Ammonia Extract (SE) - TR sufficiency
- Additional Items
- Adjourn

**Discussion**

- **February 16 notes** were accepted as written
- **Hydronium (RG).** The group re-reviewed the petition, and although a previous iteration of the Crops Subcommittee had deemed it sufficient and requested a TR, the current Crops Subcommittee revisited the need for a TR, and determined that one is not needed.
- **Carbon Dioxide petition (LP).** The lead summarized the petitioned uses of carbon dioxide and the Subcommittee found the petition sufficient. The group discussed the scale of use and potential environmental concerns with producing carbon dioxide, which would not be released to the air. A member recommended that when reviewing this substance, the group consider only the petitioned use and not an expanded use. The NOP pointed out a previous TR for CO<sub>2</sub> (in Handling), and suggested that it may contain enough information to complete the review, and if not, the CS could request a limited scope TR.
- **Ammonia Extract petitioned (SE).** The lead summarized the answers to the questions the Subcommittee posed to the TR contractor, and the group discussed them, as well as alternatives and the potential for fraud. The CS felt that some of the information in the TR about impacts on soil was not detailed enough, but acknowledged that there may not be a way to glean the information via another addendum to the TR. The CS found the TR sufficient and will reach out to stakeholders to supplement the information.
- **Additional Items.**
  - NOP spoke with the petitioner for chitosan (as a flocculant) and the petitioner will submit an addendum with answers to the additional questions from the Subcommittee.
  - The Crops Subcommittee canceled the March 16 call
- **The meeting was adjourned.**

[Previous CS Notes](#)

**Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

February 16, 2021

Biodegradable Biobased mulch annotation change (AB) - Discuss/vote

Ammonia Extract (SE) - Discuss petition discussion document

March 2, 2021

Hydronium (RG) - Discuss need for TR  
 Carbon Dioxide petition (LP) - Petition sufficiency  
 March 16, 2021 - Canceled  
 April 6, 2021  
 Carbon Dioxide petition (LP) - determined need for TR  
 Review public comments  
 April 20, 2021  
 May 4, 2021  
 Chitosan - plant disease control - Discuss  
 Chitosan - coagulant for fertilizer - Discuss  
 May 18, 2021  
 June 1, 2021  
 June 15, 2021  
 July 6, 2021  
 July 20, 2021  
 Research Priorities - Discuss/Send to MS  
 August 3, 2021  
 August 17, 2021  
 September 7, 2021  
 September 21, 2021  
 October 5, 2021  
 October 19, 2021  
 November 2, 2021  
 November 16, 2021  
 December 7, 2021  
 December 21, 2021

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Paper based crop planting aid	SE	Proposal	Petition sent to CS 8.14.18. Petition suff/TR request due 10.13.18. Petition found sufficient 9.4.18. CS requested Lmt'd scope TR 3.5.19. TR due early August. TR sent to CS 7.26.19. TR sufficiency due 9.24.19. TR found suff 8.6.19. <a href="#">2017 TR Newspaper</a>	1.19.21	Spr 2021
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	08.04.20 08.18.20 10.6.20 11.17.20 5.4.21	Fall 2021
Chitosan - coagulant for fertilizer	RG	Proposal	Petition sent to CS 07.31.20. Petition sufficiency due 09.29.20. CS sent additional questions back to petitioner.	08.18.20 5.4.21	Fall 2021

Biochar	WT/EO	Petition discussion doc	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor.	03.17.20 12.15.21 1.19.21	Fall 2021
Ammonia Extract	SE	Petition discussion doc	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info. Updated TR sent to CS 2.23.21. TR found sufficient 3.2.21.	2.16.21 3.2.21	Spr 2021
Kasugamycin	RG	Discussion doc	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	07.07.20 1.5.21 2.2.21	Spr 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20. CS revisited and determined that a TR was not necessary.	11.17.20 12.1.20 12.15.20 3.2.21	Fall 2021
Carbon Dioxide	LP	Proposal	<a href="#">2006 TR</a> (Handling) Petition sent to CS 01.15.21. Petition suff/TR request due 03.16.21. CS found the petition sufficient 3.2.21.	2.2.21 3.2.21 4.6.21	Fall 2021

### Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	1.5.21 1.19.21 2.2.21 2.16.21	Spr 2021
Research Priorities	All	N/A	Due to MS 01.19.21	1.5.21 1.19.21 7.6.2021	Spr 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

**2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)**

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20.	1.19.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	12.15.20 01.19.21	"
Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	2.2.21	"
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in Feb.	12.15.20	"

Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20.TR due to CS XXXX	12.1.20	“
Rotenone (CAS # 83-79-4).	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	12.1.20	“

Spring 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	Feb 18, 2021
NOSB - Spring 2021 proposals due to NOP	Feb 18, 2021
New NOSB member training	Feb 3 - 5, 2021
NOP - Draft Spring 2021 NOSB meeting tentative agenda	Feb 2, 2021
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**Crops Subcommittee (CS) Notes**  
**Tuesday, February 16, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Asa Bradman (AB); Jerry D'Amore (JD); Amy Bruch (ADB); Brian Caldwell (BC)

**Absent:** Wood Turner (WT); Logan Petrey (LP)

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

**Agenda**

- Review February 2 notes
- Biodegradable Biobased mulch annotation change proposal (AB) - Discuss/vote
- Ammonia Extract (SE) - Discuss petition discussion document/Vote
- Hydronium (RG) - Discuss
- Additional Items
- Adjourn

**Discussion**

- **February 2 notes** accepted as written
- **Biodegradable Biobased mulch film (BBMF) annotation change proposal (AB).** The lead summarized the draft proposal as well as the history of the project thus far. Initially when the NOSB recommended BBMF, the presumption was that it was 100% biobased, and it was later discovered there are no products that qualify. A subsequent NOP memo clarifying this was later withdrawn and the NOSB is reviewing the listing again. The group discussed of impacts on soil health, and breakdown products, and a comparative risk assessment between polyethylene film and its manufacture compared to biodegradable biobased mulch film. The group also discussed a requirement for a certain percentage of biobased content. A member added that if/when the film is tilled into the soil, it would be several inches below the surface where there are active microbes, and therefore it would not be broken down.

Motion to accept the proposal on the biodegradable biobased mulch annotation change (with proposed additions to the definition at 205.2)

Motion by: AB

Seconded by: RG

Yes: 5 No: 1 Abstain: 0 Absent: 2 Recuse: 0

- **Ammonia Extract (SE).** The group discussed the draft document and questions for public comment.

Motion to accept the discussion document on ammonia extract

Motion by: SE

Seconded by: RG

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

- **Hydronium (RG).** The hydronium discussion was deferred to the next call.
- **Additional Items.** None.
- **The meeting was adjourned.**

## [Previous CS Notes](#)

### **Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

February 2, 2021

Kasugamycin (RG) - TR sufficiency/Discuss document/vote  
2023 Sunset: Chlorine materials (WT) - Discuss review  
Biodegradable Biobased mulch annotation change (AB) - Discuss/vote  
Carbon Dioxide petition - Assign lead reviewer

February 16, 2021

Biodegradable Biobased mulch annotation change (AB) - Discuss/vote  
Ammonia Extract (SE) - Discuss petition discussion document

March 2, 2021

Hydronium (RG) - Discuss need for TR  
Carbon Dioxide petition (LP) - Petition sufficiency/Determine need for TR

March 16, 2021 - May cancel

April 6, 2021

April 20, 2021

May 4, 2021

Chitosan - plant disease control - Discuss  
Chitosan - coagulant for fertilizer - Discuss

May 18, 2021

June 1, 2021

June 15, 2021

July 6, 2021

July 20, 2021

Research Priorities - Discuss/Send to MS

August 3, 2021

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
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Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	08.04.20 08.18.20 10.6.20 11.17.20 5.4.21	Fall 2021
Chitosan - coagulant for fertilizer	RG	Proposal	Petition sent to CS 07.31.20. Petition sufficiency due 09.29.20. CS sent additional questions back to petitioner.	08.18.20 5.4.21	Fall 2021
Biochar	WT/EO	Petition discussion doc	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor.	03.17.20 12.15.21 1.19.21	Fall 2021
Ammonia Extract	SE	Petition discussion doc	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20. TR sent back for additional info.	2.16.21	Spr 2021
Kasugamycin	RG	Discussion doc	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	07.07.20 1.5.21 2.2.21	Spr 2021
Hydronium	RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20.	11.17.20 12.1.20 12.15.20 3.2.21	Fall 2021
Carbon Dioxide	LP	TBD	Petition sent to CS 01.15.21. <b>Petition suff/TR request due 03.16.21.</b>	2.2.21 3.2.21	Fall 2021

## Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	1.5.21 1.19.21 2.2.21 2.16.21	Spr 2021
Research Priorities	All	N/A	Due to MS 01.19.21	1.5.21 1.19.21 7.6.2021	Spr 2021

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## 2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20.	1.19.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	12.15.20 01.19.21	"

Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	2.2.21	“
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in Feb.	12.15.20	“
Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20.TR due to CS XXXX	12.1.20	“
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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.

**Crops Subcommittee (CS) Notes**  
**Tuesday, February 2, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Asa Bradman (AB); Jerry D'Amore (JD); Wood Turner (WT); Logan Petrey (LP); Amy Bruch (ADB); Brian Caldwell (BC)

**Absent:** None

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

**Agenda**

- Review January 19 notes
- Kasugamycin (RG) - TR sufficiency/Discuss document/vote
- 2023 Sunset: Chlorine materials (WT) - Discuss review
- Biodegradable Biobased mulch annotation change (AB) - Discuss/vote
- Carbon Dioxide petition - Assign lead reviewer
- Additional Items
- Adjourn

**Discussion**

- **January 19 notes** accepted as written.
- **Kasugamycin (RG).** The lead summarized the petitioned uses for kasugamycin and noted that it is an antibiotic, although it is not used in humans. The draft summary includes manufacturing information, environmental concerns about cross resistance, and potential soil contamination. A member noted that kasugamycin resistance in conventional ag is already present. The TR was found sufficient and the CS voted on the discussion document and will submit it for public feedback at the Spring meeting.

Motion to accept the discussion document on kasugamycin

Motion by: RG

Seconded by: SE

Yes: 8 No: 0 Abstain: 0 Absent: 0 Recuse: 0

- **2023 Sunset: Chlorine materials (WT).** The lead summarized the draft review, noting the four substances listed under chlorine materials. Both the Handling and Livestock Subcommittees are also reviewing chlorine materials. The Food Safety Modernization Act (FSMA) is a consideration for the handling listing, but not necessarily Crops. Members expressed concern about widespread use of these materials and potential human health and environmental issues, while also acknowledging the difficulty in removing them from the list due to the lack of alternatives and FSMA requirements. The HS will add questions to the review that emanated from the Fall 2020 Sanitizer panel. The Crops Chair mentioned that the TR for ozone discusses some of the concerns discussed here.
- **Biodegradable biobased mulch film (BBMF) annotation change (AB).** The lead discussed the issues the NOSB has been grappling with over the last few years with regard to BBMF. The listing requires 100% biobased material, and there are currently no products that meet that standard. The question is whether to maintain the listing as is, and make it aspirational, or to modify the annotation to allow for BBMF with a lesser percentage, which means it would contain a certain proportion of petroleum based products. The CS noted that they are aiming for consistency with paper pots.
- **Carbon Dioxide petition.** LP volunteered to lead the review for carbon dioxide.
- **The meeting was adjourned.**

## [Previous CS Notes](#)

### **Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

January 19, 2021

Research Priorities. Finalize and send to Materials Subcomm  
2023 Sunset: EPA List 3 - Inerts of unknown toxicity (AB/SE) - Discuss review  
2023 Sunset: Copper sulfate 205.601(a)(3) & 205.601(e)(4) (JD) - Discuss review  
2023 Sunset: Ozone gas (RG) - Discuss review  
Paper pots (SE) - Discuss next steps  
Biochar (EO/WT) - TR sufficiency/Discuss draft discussion doc  
Biodegradable Biobased mulch annotation change (AB) - Discuss/vote

February 2, 2021

Kasugamycin (RG) - TR sufficiency/Discuss document/vote  
2023 Sunset: Chlorine materials (WT) - Discuss review  
Biodegradable Biobased mulch annotation change (AB) - Discuss/vote  
Carbon Dioxide petition - Assign lead reviewer

February 16, 2021

Biodegradable Biobased mulch annotation change (AB) - Discuss/vote  
Ammonia Extract (SE) - Discuss petition discussion document

March 2, 2021

Carbon Dioxide petition - Petition sufficiency/Determine need for TR

March 16, 2021

April 6, 2021s

May 4, 2021

Chitosan - plant disease control (RG) - Discuss proposal  
Chitosan - coagulant for fertilizer (RG) - Discuss proposal

May 18, 2021

June 1, 2021

June 15, 2021

July 6, 2021

July 20, 2021

August 3, 2021

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Paper based crop planting aid	SE	Proposal	Petition sent to CS 8.14.18. Petition suff/TR request due 10.13.18. Petition found sufficient 9.4.18. CS requested Lmt'd scope TR 3.5.19. TR due early August. TR sent to CS 7.26.19. TR sufficiency due 9.24.19. TR found suff 8.6.19. <a href="#">2017 TR Newspaper</a>	1.19.21	Spr 2021
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	08.04.20 08.18.20 10.6.20 11.17.20	Fall 2021
Chitosan - coagulant for fertilizer	RG	Proposal	Petition sent to CS 07.31.20. Petition sufficiency due 09.29.20. CS sent additional questions back to petitioner.	08.18.20	Fall 2021
Biochar	WT/EO	Petition discussion doc	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor.	03.17.20 12.15.21 1.19.21	Fall 2021
Ammonia Extract	SE	Discussion doc	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to lead 12.31.20. TR sent back by NOP for additional info.	2.16.21	Spr 2021
Kasugamycin	RG	Discussion doc	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to lead 12.22.20. TR sent to CS 01.21.21. TR sufficiency due 03.22.21. TR found sufficient 2.2.21.	07.07.20 1.5.21 2.2.21	Spr 2021
Hydronium	EO/RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20.	11.17.20 12.1.20 12.15.20	Fall 2021
Carbon Dioxide	LP	TBD	Petition sent to CS 01.15.21. <b>Petition suff/TR request due 03.16.21.</b>	2.2.21 3.2.21	TBD



## Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	1.5.21 1.19.21 2.2.21 2.16.21	Spr 2021
Research Priorities	All	N/A	Due to MS 01.19.21	1.5.21 1.19.21	Spr 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

## 2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20.	1.19.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	12.15.20 01.19.21	"

Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	2.2.21	“
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	ADB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in Feb.	12.15.20	“
Calcium chloride	205.602	LP	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20.TR due to CS XXXX	12.1.20	“
Rotenone (CAS # 83-79-4).	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	12.1.20	“

Spring 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	~Nov 15, 2020
NOSB - Spring 2021 proposals due to NOP	Feb 18, 2021
New NOSB member training	TBD
NOP - Draft Spring 2021 NOSB meeting tentative agenda	Feb 2, 2021
NOP - Post proposals	Mar 3, 2021
Public comment closes	Apr 1, 2021
NOP - Send compiled public comments to NOSB	Apr 6, 2021
Public comment webinars	Apr 20 & 22, 2021
Spring 2021 NOSB meeting - Crystal City, VA	Apr 28 - 30, 2021

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.

**Crops Subcommittee (CS) Notes**  
**Tuesday, January 19, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Asa Bradman (AB); Jerry D'Amore (JD); Emily Oakley (EO); Wood Turner (WT); Logan Petrey (LP) - observer; Amy Bruch (ADB) – observer; Brian Caldwell (BC) - observer

**Absent:** Jesse Buie (JB)

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

**Agenda**

- Review January 5 notes
- Research Priorities. Finalize and send to Materials Subcomm
- 2023 Sunset: EPA List 3 - Inerts of unknown toxicity (AB/SE) - Discuss review
- 2023 Sunset: Copper sulfate 205.601(a)(3) & 205.601(e)(4) (JD) - Discuss review
- 2023 Sunset: Ozone gas (RG) - Discuss review
- Paper based crop planting aids (SE) - Discuss /vote
- Biochar (EO/WT) - TR sufficiency/Discuss draft discussion doc
- Biodegradable Biobased mulch annotation change (AB) - Discuss/vote
- Additional Items
- Adjourn

**Discussion**

- **January 5 notes** were accepted as written.
- **Research Priorities.** The Crops Subcommittee Chair will reach out to the former Chair to see if there are other items from the last round of public comments that should be included on the research priorities list, and then send the finalized list to the Materials Subcommittee.
- **2023 Sunset: EPA List 3 - Inerts of unknown toxicity (AB/SE).** The lead will add additional questions to the draft review and submit the document for the Spring posting.
- **2023 Sunset: Copper sulfate 205.601(a)(3) & 205.601(e)(4) (JD).** The lead summarized the uses of copper sulfate and possible environmental health concerns. Based on feedback from stakeholders about alternatives, the lead added a couple of questions regarding dry seeding. A member also identified sodium carbonate peroxyhydrate as an alternative, and noted that both substances are typically used simultaneously. The lead will forward the document to the NOP for posting to the web for the Spring meeting.
- **2023 Sunset: Ozone gas (RG).** The lead summarized the uses of ozone gas in organic agriculture, and noted that although it is a strong oxidizer, it doesn't have residue, so it is considered to be relatively benign. Human health concerns are minimal because it's used in a closed system. The lead will forward the review to the NOP for posting.
- **Paper based crop planting aids (SE).** The lead summarized the previous iterations of the document and subsequent feedback from public comment. The group discussed the additions and moved to three votes on paper pots:

Motion to classify paper based crop planting aids as synthetic

Motion by: SE

Seconded by: JD

Yes: 6 No: 0 Abstain: 0 Absent: 1 Recuse: 0

Motion to add to 205.2 Terms Defined:

*Paper-based crop planting aid.* A material that is comprised of at least 60% cellulose-based fiber by weight, including, but not limited to, pots, seed tape, and collars that are placed in or on the soil and later incorporated into the soil, [excluding biodegradable mulch film](#). [Up to 40% of the ingredients can be non-synthetic, other permitted synthetic ingredients at §205.601\(j\), or synthetic strengthening fibers, adhesives, or resins.](#) Contains no less than 80% biobased content as verified by a qualified third party assessment (e.g. laboratory test using ASTM D6866 or composition review by qualified personnel). [Added nutrients must comply with §205.105, 205.203, and 205.206.](#)

Motion by: SE

Seconded by: RG

Yes: 6 No: 0 Abstain: 0 Absent: 1 Recuse: 0

Motion to add to 205.601 (p) Production Aids:

Paper-based crop planting aids as defined in 205.2. Virgin or recycled paper without glossy paper or colored inks.

Motion by: SE

Seconded by: EO

Yes: 6 No: 0 Abstain: 0 Absent: 1 Recuse: 0

- **Biochar (EO/WT).** The CS sent additional questions to TR contractor, and will defer this project to the Fall 2021 meeting.
- **Biodegradable Biobased mulch annotation change (AB).** The discussion and vote were deferred to the February 2 call.
- **Additional Items.**
  - The CS deferred several projects to the Fall meeting, including chitosan, ammonia extract, hydronium, and biochar.
  - A member asked that the Board continue to discuss containers at some future date.
- **The meeting was adjourned.**

## [Previous CS Notes](#)

### **Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

January 5, 2021

2023 Sunset: Peracetic acid 205.601(a)(6) 7 205.601(i)(8) (WT) - Discuss review

Research Priorities - Discuss draft

Kasugamycin (SE) - Discuss next steps

Biodegradable Biobased mulch annotation change (AB) - Discuss

January 19, 2021

Research Priorities. Finalize and send to Materials Subcomm

2023 Sunset: EPA List 3 - Inerts of unknown toxicity (AB/SE) - Discuss review

2023 Sunset: Copper sulfate 205.601(a)(3) & 205.601(e)(4) (JD) - Discuss review

2023 Sunset: Ozone gas (RG) - Discuss review

Paper pots (SE) - Discuss next steps

Biochar (EO/WT) - TR sufficiency/Discuss draft discussion doc

Biodegradable Biobased mulch annotation change (AB) - Discuss/vote

February 2, 2021

Kasugamycin (SE) - Discuss proposal/vote

2023 Sunset: Chlorine materials (WT) - Discuss review  
 Biodegradable Biobased mulch annotation change (AB) - Discuss/vote  
 Carbon Dioxide petition - Assign lead reviewer

February 16, 2021

Biodegradable Biobased mulch annotation change (AB) - Discuss/vote if not finished on Feb 2

March 2, 2021

March 16, 2021

April 6, 2021s

April 20, 2021

May 4, 2021

May 18, 2021

June 1, 2021

June 15, 2021

July 6, 2021

July 20, 2021

August 3, 2021

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Paper based crop planting aid	SE	Proposal	Petition sent to CS 8.14.18. Petition suff/TR request due 10.13.18. Petition found sufficient 9.4.18. CS requested Lmt'd scope TR 3.5.19. TR due early August. TR sent to CS 7.26.19. TR sufficiency due 9.24.19. TR found suff 8.6.19. <a href="#">2017 TR Newspaper</a>	1.19.21	Spr 2021
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	08.04.20 08.18.20 10.6.20 11.17.20	Fall 2021
Chitosan - coagulant for fertilizer	RG	Proposal	Petition sent to CS 07.31.20. Petition sufficiency due 09.29.20. CS sent additional questions back to petitioner.	08.18.20	Fall 2021

Biochar	WT/EO	Petition discussion doc	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor.	03.17.20 12.15.21 1.19.21	Fall 2021
Ammonia Extract	SE	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20	TBD	Fall 2021
Kasugamycin	RG	Proposal	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20	07.07.20 1.5.21 2.2.21	Spr 2021
Hydronium	EO/RG	Proposal	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20.	11.17.20 12.1.20 12.15.20	Fall 2021
Carbon Dioxide	TBD		Petition sent to CS 01.15.21. <b>Petition suff/TR request due 03.16.21.</b>	2.2.21	

### Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	1.5.21 1.19.21 2.2.21	Spr 2021
Research Priorities	All	N/A	Due to MS 01.19.21	1.5.21 1.19.21	Spr 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20.	1.19.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	12.15.20 01.19.21	"
Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	2.2.21	"
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	JB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in Feb.	12.15.20	"
Calcium chloride	205.602	EO	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20. TR due to CS XXXX	12.1.20	"
Rotenone (CAS # 83-79-4).	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	12.1.20	"

Spring 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	~Nov 15, 2020
NOSB - Spring 2021 proposals due to NOP	Feb 18, 2021
New NOSB member training	TBD
NOP - Draft Spring 2021 NOSB meeting tentative agenda	Feb 2, 2021
NOP - Post proposals	Mar 3, 2021
Public comment closes	Apr 1, 2021
NOP - Send compiled public comments to NOSB	Apr 6, 2021
Public comment webinars	Apr 20 & 22, 2021
Spring 2021 NOSB meeting - Crystal City, VA	Apr 28 - 30, 2021



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.

**Crops Subcommittee (CS) Notes**  
**Tuesday, January 5, 2021 2:00 pm ET**

**Present:** Rick Greenwood (RG), Chair; Steve Ela (SE), Vice Chair; Asa Bradman (AB); Jesse Buie (JB); Emily Oakley (EO); Wood Turner (WT); Logan Petrey (LP) - observer; Amy Bruch (ADB) - observer

**Absent:** Jerry D'Amore (JD)

**Staff:** Michelle Arsenault (MA); Jared Clark (JC); Devon Pattillo (DP)

**Agenda**

- Review December 15 notes
- 2023 Sunset: Peracetic acid 205.601(a)(6) 7 205.601(i)(8) (WT) - Discuss review
- Research Priorities - Discuss draft
- Kasugamycin (RG) - Discuss next steps
- Biodegradable Biobased mulch annotation change (AB) - Discuss
- Additional Items
- Adjourn

**Discussion**

- **December 15 notes** were accepted as written.
- **2023 Sunset: Peracetic acid 205.601(a)(6) 7 205.601(i)(8) (WT).** The group discussed the sunset process in general, and summarized peracetic acid, emphasizing that it is a sanitizer. Peracetic acid has been on the National List for a long time and is in wide use. A member noted that since the Food Safety Modernization Act (FSMA) was passed, it has become more important as it is an alternative to chlorine materials.
- **Research Priorities.** The group discussed the Fall 2020 research priorities list and will assess if they should make additions, changes, or deletions. The MS Chair will reach out to the previous MS Chair to see if there was any additional feedback from the Fall 2020 meeting.
- **Kasugamycin petition (RG).** The lead summarized the petitioned uses of kasugamycin and members discussed environmental concerns, including the use of antibiotics, noting the removal a few years ago of streptomycin and tetracycline. Kasugamycin is not used in humans and there are no human health effects, but it may potentially affect soil biota and grazing animals. The Crops Subcommittee received a draft version of the TR in order to review it for this discussion, but the TR is not final yet. The CS will put forth a proposal for the Spring 2021 meeting and add questions for public comment.
- **Biodegradable Biobased mulch annotation change (AB).** The lead circulated several documents including prior comments, previous NOSB work, and the NOP-contracted report from Michigan State University. The lead asked for feedback from members and will discuss this topic again on the next call.
- **Additional Items.** None
- **The meeting was adjourned.**

[Previous CS Notes](#)

**Future call schedule (1st and 3rd Tuesdays 2:00 ET, except where noted)**

December 15, 2020

Biochar (EO/WT) - TR suff due 12.21.20

2023 Sunset: EPA List 3 - Inerts of unknown toxicity (AB/SE) - Discuss review

2023 Sunset: Magnesium oxide (JB) - Discuss review

Research Priorities - assign lead  
Hydronium (EO/RG) - TR request due 12.15.20

January 5, 2021

2023 Sunset: Peracetic acid 205.601(a)(6) 7 205.601(i)(8) (WT) - Discuss review  
Research Priorities - Discuss draft  
Kasugamycin (SE) - Discuss next steps  
Biodegradable Biobased mulch annotation change (AB) - Discuss

January 19, 2021

Research Priorities. Finalize and send to Materials Subcomm  
2023 Sunset: EPA List 3 - Inerts of unknown toxicity (AB/SE) - Discuss review  
2023 Sunset: Copper sulfate 205.601(a)(3) & 205.601(e)(4) (JD) - Discuss review  
2023 Sunset: Ozone gas (RG) - Discuss review  
Paper pots (SE) - Discuss next steps  
Biochar (EO/WT) - TR sufficiency/Discuss draft discussion doc  
Biodegradable Biobased mulch annotation change (AB) - Discuss/vote

February 2, 2021

Kasugamycin (SE) - Discuss proposal/vote  
Chitosan - plant disease control (RG) - Discuss draft proposal  
Chitosan - coagulant for fertilizer (RG) - Discuss draft proposal  
Ammonia Extract (SE) - Discuss draft proposal  
2023 Sunset: Chlorine materials (WT) - Discuss review

February 16, 2021

March 2, 2021

March 16, 2021

April 6, 2021

April 20, 2021

May 4, 2021

May 18, 2021

June 1, 2021

June 15, 2021

July 6, 2021

July 20, 2021

August 3, 2021

August 17, 2021

September 7, 2021

September 21, 2021

October 5, 2021

October 19, 2021

November 2, 2021

November 16, 2021

December 7, 2021

December 21, 2021

## Work Agenda

### Petitioned Substances

Substance	Contact	Doc Type	Notes	Scheduled, Discussed, Voted	Target meeting
Paper pots	SE	Proposal	Petition sent to CS 8.14.18. Petition suff/TR request due 10.13.18. Petition found sufficient 9.4.18. CS requested Lmt'd scope TR 3.5.19. TR due early August. TR sent to CS 7.26.19. TR sufficiency due 9.24.19. TR found suff 8.6.19. <a href="#">2017 TR Newspaper</a>	1.19.21	Spr 2021
Chitosan - plant disease control	RG	Proposal	Petition sent to CS 12.6.19. Petition suff/TR request due 2.4.20. Petition found sufficient/CS requested a TR 2.4.20. TR due back to CS mid-July. TR sent to CS 7.13.20. TR sufficiency due 9.11.20. TR found sufficient 08.18.20.	08.04.20 08.18.20 10.6.20 11.17.20 2.2.21	Spr 2021
Chitosan - coagulant for fertilizer	RG	Proposal	Petition sent to CS 07.31.20. Petition sufficiency due 09.29.20. CS sent additional questions back to petitioner.	08.18.20 2.2.21	Spr 2021
Biochar	WT/EO	Petition discussion doc	Petition sent to CS 12.19.19. Petition suff/TR request due 2.17.20. Petition found sufficient 2.4.20. CS requested TR 3.18.20. TR due back in Sep/Oct. TR sent to CS 10.21.20. TR suff due 12.21.20. Additional questions sent to TR contractor.	03.17.20 12.15.21 1.19.21	Spr 2021
Ammonia Extract	SE	Proposal	Petition sent to CS 05.26.20. Petition suff/TR request due 7.24.20. Petition found sufficient 06.16.20. CS requested TR 06.19.20. TR due mid-December. Draft TR sent to CS 12.31.20	2.2.21	Spr 2021
Kasugamycin	RG	Proposal	Petition sent to CS 05.27.20. Petition found sufficient 07.07.20 and the CS requested a TR. TR due mid-December. Draft TR sent to CS 12.22.20	07.07.20 1.5.21	Spr 2021
Hydronium	EO/RG	Petition discussion doc	Petition sent to CS 10.6.20. Petition suff/TR request due 12.15.20. Petition found sufficient 12.1.20. CS requested TR 12.15.20.	11.17.20 12.1.20 12.15.20	Spr 2021

## Other Topics

Project	Contact	Doc Type	Notes*	Scheduled, Discussed, Voted	Target meeting
Biodegradable Biobased mulch annotation change	AB	Proposal	Limited scope TR request sent to NOP 8.2.16. TR sent to CS on 12.28.16. TR Suff due 2.27.17. CS found TR suff 1.3.17. On hold pending further research. NOP sent response to CS about adding this to work agenda. Waiting for details from NOP based on the report from the cooperative agreement with Michigan State University. Report sent to NOSB 10.17.19	1.5.21 1.19.21	Spr 2021
Research Priorities	All	N/A	Due to MS 01.19.21	1.5.21 1.19.21	Spr 2021

\*Yellow highlight indicates Subcommittee action needed. \*Highlight indicates review completion

## 2023 Sunset Review: TR Requests (July 2020), Summary (Spr 2021), Review (Fall 2021)

Substance	National List	Contact	TR Request?	Notes*	Scheduled, Discussed, Voted	Target meeting
Copper sulfate	205.601(a)(3)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	Summary: Spr 2021 Review: Fall 2021
Copper sulfate	205.601(e)(4)	JD	N	Sunset date: 5.29.23 <a href="#">2011 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.19.21	"
Ozone gas	205.601(a)(5)	RG	Y	Sunset date: 5.29.23 <a href="#">2002 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20.	1.19.21	"
Peracetic acid	205.601(a)(6)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
Peracetic acid	205.601(i)(8)	WT	N	Sunset date: 5.29.23 <a href="#">2016 TR</a> <a href="#">2016/Fall - Rec to Renew</a>	1.5.21	"
EPA List 3 - Inerts of unknown toxicity	205.601(m)(2)	AB/SE	N	Sunset date: 5.29.23 TR - None <a href="#">2016/Fall - Rec to Renew</a>	12.15.20 01.19.21	"

Chlorine materials (i) Calcium hypochlorite. (ii) Chlorine dioxide. (iii) Hypochlorous acid - generated from electrolyzed water. (iv) Sodium hypochlorite	205.601(a)(2)	WT	N	Sunset date: 10.30.24 & 1.28.24 (Hypochlorous acid) <a href="#">2006 TR</a> <a href="#">2011 TR</a> <a href="#">2016 TR Hypochlorous acid (Crops, Livestock, Handling)</a> <a href="#">2017 TR Limited scope (Livestock)</a> <a href="#">2016/Spring - Rec to ADD Hypochlorous Acid</a>	2.2.21	“
Magnesium oxide (CAS # 1309-48-4)	205.601(j)(5)	JB	Y	Sunset date: 1.28.24 TR - None <a href="#">2014/Spring - Rec to ADD</a> CS requested TR 6.2.20. TR due in Feb.	12.15.20	“
Calcium chloride	205.602	EO	Y	Sunset date: 5.29.23 <a href="#">2001 TR</a> <a href="#">2016/Fall - Rec to Renew</a> CS requested TR 6.2.20.TR due to CS XXXX	12.1.20	“
Rotenone (CAS # 83-79-4).	205.602(f)	RG	N	Sunset date: 1.28.24 TR - None <a href="#">2012/Fall - Rec to ADD</a>	12.1.20	“

Spring 2021 Milestones	Target dates (tentative)
NOP - Publish FRN, Open public comment	~Nov 15, 2020
NOSB - Spring 2021 proposals due to NOP	Feb 18, 2021
New NOSB member training	TBD
NOP - Draft Spring 2021 NOSB meeting tentative agenda	Feb 2, 2021
NOP - Post proposals	Mar 3, 2021
Public comment closes	Apr 1, 2021
NOP - Send compiled public comments to NOSB	Apr 6, 2021
Public comment webinars	Apr 20 & 22, 2021
Spring 2021 NOSB meeting - Crystal City, VA	Apr 28 - 30, 2021