

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, January 7, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Joe Dickson, Vice Chair (JD), Jean Richardson (JR), Francis Thicke (FT), Calvin Walker (CW), Jay Feldman - sitting in
Absent: Mac Stone (MS), Colehour Bondera (CBo)
Staff: Michelle Arsenault (MA), Scott Updike (SU)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR likely won't be back in time for mid Dec.)		Update Spr 2014
Aquaculture-CO₂ , (Crops)	205.609	TF/CBo	No	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal Spr 2014
Aquaculture-Chlorine (Crops)	205.609 and 205.611	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal Spr 2014

Aquaculture- Micronutrients (Crops)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal Spr 2014
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Aquaculture- plant production Vitamins (B1, B12, H) (Crops)	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal Spr 2014
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Aquaculture - Chlorine (Livestock)	205.609 205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested Need to revise annotation for Spr 2014	Original vote 06 18 13 Revised annotati on revote 08 06 13 and 08 20 13	Spr 2014
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Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines update)	JR/NM	Yes (revised and sent 12/5/11)	Fall 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Update Spring 2014

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Agenda:

- Approve Notes from December 17, 2013 call
- Methionine, Tocopherols - discuss public comments
- Chlorine - discuss public comments
- Aquaculture - Biologics: Vaccines for Aquatic Animals if TR is back. Update Spring 2014

Discussion:

- Notes from December 17, 2013 call were approved with minor changes suggested by the Chair.
- The group discussed the last LS call and noted that the participation of the guest speakers was very useful and helpful.
- Methionine, Tocopherols - discuss public comments. Deferred to next call
- Chlorine. Postponed to future call. A member noted that the checklist and the representation of the minority and majority opinion was not very clear or easy to read, and would like to discuss this on the next call. MA will check with the NOP about the annotation that the NOP suggested which was not correct, so it can be rewritten.

- Aquaculture - Biologics: Vaccines for Aquatic Animals. The lead reviewer would like to add to the workplan an update for the spring 2014 meeting. The group discussed a certifier survey of mostly dairy Livestock producers that was conducted to gather manufacturing data, such as which vaccines are being used and which ones are GMO or non-GMO. The results indicated that many manufacturers already had non-GMO statements on file. The group felt that this would be a positive result to present at the spring 2014 to indicate that the community is taking steps in the right direction. The survey results indicated that there were about 40 vaccines for cattle that were made without the use of excluded methods.
- The chair noted that the aquaculture materials that were transferred from the Crops Subcommittee were completed on the old checklist and would need to be revised. MA will resend the checklist if anyone needs it. The LS Chair asked that each lead write the checklist and submit it to JR for review who will then prepare them for the spring meeting. The checklist and proposal for Lignin sulfonate was completed as an example and NOP is reviewing it to see if it is a useful template for the others.
- The group reviewed the list of materials in progress including Aquaculture - Biologics: Vaccines for Aquatic Animals for which they are awaiting a TR, and Chlorine, which is under review. MA will add the prior proposals (from the cancelled fall 2013 meeting) to the table above for tracking purposes and for development of the spring 2014 NOSB meeting agenda.
- Members discussed the public comment that was received regarding the aquaculture materials. Many commenters were not supportive of moving forward with the proposals until the regulations were released, and the group decided the best path forward would be to post the proposals to gather more public comment, and proceed from there based on that comment. The Board could choose not to vote on any materials they feel are not ready or for which there is substantive comment against.
- Meeting was adjourned.

Future Call Schedule:

December 17, 2013 3:00 ET

Jim Pierce + additional OTCO expert on plant aquaculture – moved from Crops to Livestock/Aquaculture Subcommittee call (MA sent invitation 11 29 13)

January 7, 2014 3:00 ET

Methionine, Tocopherols - discuss public comments - deferred to January call

LS Chlorine - discuss public comments - postponed to January 21 call

Aquaculture - Biologics: Vaccines for Aquatic Animals. Discuss if TR is back. TR not received yet

January 21, 2014 3:00 ET

Aquaculture - Biologics: Vaccines for Aquatic Animals.

Methionine, Tocopherols - discuss public comments

LS Chlorine - discuss public comments

AQ: CO2 discuss checklist/draft proposal

AQ Lignin Sulfonate discuss checklist/draft proposal

February 4, 2014 3:00 ET-call cancelled

NOSB Training meeting in DC

February 18, 2014 3:00 ET

Sunset 2017 Materials - discuss and assign materials

AQ: Vitamins discuss cklst

AQ: Micronutrients discuss cklst

CS Chlorine discuss cklst

March 4, 2014 3:00 ET
March 18, 2014 3:00 ET
April 1, 2014 3:00 ET
April 15, 2014 3:00 ET

Spring 2014 Milestones	Target date
Subcommittee requests technical reports for Sunset 2016 substances	Jan 15, 2014
NOSB Training meeting	Feb 4 - 5, 2014
NOP – Complete tentative agenda	Feb 7, 2014
Spring 2014 proposals due to NOP	Feb 26, 2014
NOP - Post proposals, Publish FRN, Open public comment	Mar 10, 2014
Subcommittees submit tentative workplans to NOP	Mar 12, 2014
Discuss workplans on ES call	Mar 14, 2014
NOP provides written comments on workplans to NOSB	Mar 28, 2014
Public comment closes	Apr 8, 2014
Workplans finalized on ES call	Apr 11, 2014
NOP - Send compiled public comments to NOSB	Apr 14, 2014
Spring 2014 NOSB Meeting – San Antonio, TX	~Apr 28- May 1, 2014

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Absent: none

Staff: Michelle Arsenault (MA), Scott Updike (SU), Mark Bradley

Workplan

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* **Yellow highlight** indicates committee action needed

Agenda:

- Approve Notes from January 7 2014
- AQ: Biologics: Vaccines for Aquatic Animals (LS)
- Methionine (MET) discuss possible revisions

- AQ: Tocopherols (LS) - discuss public comments
- AQ: Chlorine (LS) - discuss public comments
- AQ: CO₂ (CS) - discuss checklist/draft proposal
- AQ Lignin Sulfonate (LS) for a aquatic plants discuss checklist/draft proposal
- AQ: Vitamins (LS) - discuss public comments

Discussion:

- Notes from January 7 2014 call were approved as is.
- **AQ: Biologics: Vaccines for Aquatic Animals (LS)(JR).** TR is not available yet. The NOP reviewed the initial TR and returned it to the contractor for some revision.
- **Methionine (MET) (MS).** MS stated that after reviewing the comments he was inclined to leave the fall proposal unchanged. He further stated that poultry producers concerned about methionine could feed more fish meal. The NOP noted two items the Subcommittee might consider when resubmitting the proposals that might be useful for the rulemaking stage: 1) The inclusion of justification for the 60% reduction in MET levels for broilers, while all other poultry methionine levels were cut by 50%, effectively making it harder for broiler producers and 2) Not all certifiers accept the use of synthetic tocopherols as a preservative in fishmeal so many could or would not use fish meal. MS responded that the additional cut of methionine levels for broilers was arbitrary and depending on the outcome of the aquaculture petition for tocopherols, producers may be able to use fishmeal in the future or have access to organically produced fishmeal. MS is seeking information from the community about methionine, specifically what levels of methionine are natural in the diet and what is added. The group discussed how to proceed with this proposal in light of the public comment. MS will do some more research and talk with the LS Chair prior to the February NOSB training.
- **AQ: Tocopherols (LS) (TF/CBo)** - The members discussed the public comments that were submitted to the fall 2013 proposals. The majority of commenters were opposed to the inclusion of tocopherols on the list. OTA noted that most, if not all, synthetic tocopherols are produced using hexane. Several commenters felt that the annotation was too narrow and wanted it expanded, or more restrictive. The group considered revising the annotation from the proposal. A member noted that the annotation in effect sets the bar higher for animal feed than it would for human food, and it potentially could completely eliminate the possibility of tocopherols in organics. The members moved to a vote to amend the proposal by removing the restriction on solvent extraction from the annotation.

Vote on tocopherols

Motion: To amend the fall 2013 tocopherols proposal by removing the following text from the annotation: *“not extracted using volatile synthetic solvents”*. *The new annotation will read: Tocopherols derived from vegetable oils, are allowed as ingredients in aquatic livestock production when rosemary extracts are not a suitable alternative.*

Motion by: JR

Seconded by: MS

Discussion: none

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

AQ: Chlorine (LS) (JD) – Members discussed the fall 2013 public comment which varied: Some commenters felt that the aquaculture proposed rule should be released before any materials are approved and some felt it would be better to have materials ready first. One of the petitioners commented that the addition of the annotation to the fall 2013 proposal weakened the petition and advocated for removal. A representative from Oregon Tilth, who provided technical advice on several Subcommittee calls, concurred. The subcommittee discussed this and determined that restricting the use of chlorine was redundant and unnecessary, so will use the original annotation and remove the language about animal contact. The fall 2013 annotation read as follows: *Chlorine materials - Disinfecting and sanitizing facilities and equipment. Residual chlorine levels in the water in direct animal contact (for example, culture water) shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act.*

Members moved to a friendly amendment to strike the following language from the annotation: *“...in direct animal contact (for example, culture water)...”*

Vote on Chlorine annotation

Motion: To amend the chlorine proposal by removing the phrase *“...in direct animal contact (for example, culture water)...”* from the annotation. The new annotation will read: *Chlorine materials - Disinfecting and sanitizing facilities and equipment. Residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act.*

Motion by: JR

Seconded by: MS

Discussion: none

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

- **AQ: CO₂ (CS) (TF/CBo).** Discuss checklist/draft proposal - deferred to next call.
- **AQ: Lignin Sulfonate (LS) (JR).** The group discussed the checklist and the draft proposal, noting that this material is already approved for use in Crops as an allowed synthetic. Presently it is allowed as a soil amendment and chelating agent and the petitioner is requesting its use as a chelating agent for aquatic plants. For aquaculture, it will not be used in open ocean systems, only in closed containers. A member noted that without it, the health of the plant is compromised, and misuse is not a concern because it would affect the pH of the soil. The members proceeded to a vote.

Vote on Lignin Sulfonate

Motion: To add lignin sulfonate (CAS #s 9009-75-0, 8062-15-5, 8061-51-6) as petitioned to section 205.609 as a chelating agent.

Motion by: CW

Seconded by: MS

Discussion: CBo noted that the Crops Subcommittee had included a minority opinion regarding several points including chelating agents, open vs closed systems, and the lack of regulations. A member noted that the open vs closed system is not an issue here because the petition is very

specific about where it will be used. As for the lack of regulations, CBo noted that the current proposal does address his concerns and will elicit public comment about these views. Another member felt strongly that the minority opinion should be included in the proposal. The group thought the best vehicle for presenting that is to include an addendum to the proposal. The deadline for submittal of the minority position (for this as well as any other proposals for the spring 2014 meeting) is February 26, although the Board Chair asked that they be turned in earlier, if possible.

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

- **AQ Vitamins (LS):** The lead reviewer circulated a modified document prior to the call to which another member added some comments. This document does not contain any new data or substantive modifications from the fall 2013 version. It was edited to clarify line references from the TR and to make all the aquaculture checklists look more consistent to help with rulemaking. Although this document was not altered substantively, members decided to proceed to a re-vote

Vote on AQ Vitamins (LS).

Motion: To accept the modified proposal on aquaculture: vitamins for aquatic animals

Motion by: CW

Seconded by: JR

Discussion: none

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

- Meeting was adjourned.

Future Call Schedule:

January 7, 2014 3:00 ET

Methionine, Tocopherols - discuss public comments - deferred to January call

LS Chlorine - discuss public comments - postponed to January 21 call

Aquaculture - Biologics: Vaccines for Aquatic Animals. Discuss if TR is back. TR not received yet

January 21, 2014 3:00 ET

AQ: Biologics: Vaccines for Aquatic Animals (Crops). Deferred to next call...waiting for TR

Methionine (MET) - more discussion on next call

AQ: Tocopherols (Livestock) - discuss public comments - voted to change annotation

AQ: Chlorine (Livestock) - discuss public comments – voted to change annotation

AQ: CO₂ (Crops) - discuss checklist/draft proposal - deferred to next call

AQ: Lignin Sulfonate (Crops) - discuss checklist/draft proposal

February 3, 2014 6:00 ET (In DC)

- Methionine (MET) - revised proposal, discussion and vote
- AQ: CO₂ (Crops) – discuss checklist/draft proposal and vote
- AQ: Micronutrients (Crops) - discuss checklist/draft proposal and vote
- AQ: Trace minerals (Livestock) - (discuss if needed) revised format for checklist and vote
- AQ: Biologics: Vaccines for Aquatic Animals (Crops) - discuss draft proposal

February 4, 2014 3:00 ET-call cancelled

NOSB Training meeting in DC

February 18, 2014 3:00 ET

- AQ: Biologics: Vaccines for Aquatic Animals (Crops) - discuss draft proposal/vote
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- AQ: plant production Vitamins (B1, B12, H) (Crops) - discuss draft proposal/vote
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- AQ: CO2 (Crops) – discuss checklist/draft proposal and vote

- AQ: Micronutrients (Crops) - discuss checklist/draft proposal and vote
- AQ: Trace minerals (Livestock) - (discuss if needed) revised format for checklist and vote
- AQ: Biologics: Vaccines for Aquatic Animals (Crops) - discuss draft proposal

Discussion:

- Notes from January 21, 2014 call were approved as is.
- **Methionine (MET)** - The members discussed the Methionine proposal and chose to revise it based on public comment. The revisions will include a reduction in methionine to 2lbs for layers and 2.5 lbs for broilers. This is a change from the original proposal in which the methionine levels were reduced uniformly. The final draft proposal will be presented before the next call. The group will have a final discussion and vote on the final proposal during the February 18 call.
- **AQ: Micronutrients (Crops)** - The group discussed the checklist and draft proposal, including several key issues the lead reviewer felt were important to the decision: the exclusion of nitrates perhaps via an annotation, testing requirements, and restricting use to non-vascular plants only. Classification and listing motions were made and both motions were carried. The proposal will be forwarded along to NOP staff for posting and public comments.

VOTE: AQ: Micronutrients (Crops) Feb 3: (also see final vote below)

Motion to classify micronutrients as petitioned as synthetic

Motion by: FT

Seconded by: CW

Y: 5 N: 0 Absent: 2 Recuse: 0 Abstain: 0

Motion to list micronutrients at §205.609 with the following annotation: For non-vascular plants only.

Motion by: FT

Seconded by: CW

Additional discussion: A member asked about Nickel, which is petitioned as a micronutrient but is not allowed on the National List

Y: 5 N: 0 Absent: 2 Recuse: 0 Abstain: 0

The vote was left open so the remainder of the LS members could vote.

ABS Note: The LS convened briefly on Feb 5 to allow the remaining members to vote on both motions for micronutrients. See below for final vote tally.

FINAL VOTE: AQ: Micronutrients (Crops) Feb 5:

Motion to classify micronutrients as petitioned as synthetic

Motion by: FT

Seconded by: CW

Y: 7 N: 0 Absent: 0 Recuse: 0 Abstain: 0 (JD arrived after this vote)

Motion to list micronutrients at §205.609 with the following annotation: For non-vascular plants only.

Motion by: FT

Seconded by: CW

Additional discussion: A member asked about Nickel, which is petitioned as a micronutrient but is not allowed on the National List

Y: 7 N: 0 Absent: 0 Recuse: 0 Abstain: 0

- **AQ: Trace Minerals (Livestock)** - The members discussed trace minerals briefly and moved to a vote on this material. In the course of further discussion the group chose to table the motion in order to ask the NOP for some clarification about the use of the word "trace".

VOTE: AQ: Trace Minerals (Livestock) Feb 3: (also see revote below)

Motion to classify trace minerals as petitioned as synthetic

Motion by: FT

Seconded by: CW

Y: 4 N: 0 Absent: 3 Recuse: 0 Abstain: 0

The LS members chose to table the listing vote so they could explore the option of removing the word "trace" from the material description since some of the petitioned materials such as Calcium and Magnesium are not considered trace minerals. The LS Chair will follow up with the NOP and the group will reconvene Wednesday, February 5 to revote.

Follow up from Feb 5: The LS will revise the checklist for trace minerals, removing the word trace. The group revoted on this material with all members present:

VOTE: AQ: ~~Trace~~ Minerals (Livestock) Feb 5:

Motion to classify minerals as synthetic

Motion by: FT

Seconded by: CW

Y: 7 N: 0 Absent: 0 Recuse: 0 Abstain: 0

Motion to list minerals at §205.611

Motion by: FT

Seconded by: CW

Additional discussion: none

Y: 6 N: 1 Absent: 0 Recuse: 0 Abstain: 0

- **AQ: CO₂ (Crops)** – The group discussed various aspects of the petition and CO₂: it is an inorganic compound petitioned for synthetic use in closed systems to regulate pH; Naturally occurring sources are not always geographically available; CO₂ is a greenhouse gas that is sometimes manufactured from noxious sources. In this instance, it is already being produced and the petitioned use would be as a secondary use of the byproduct. Further, restricting it would not reduce production. Additionally CO₂ is already used in Post-Harvest handling and there isn't a suitable alternative. The LS did not request a TR since there is a 1995 TAP review and a 2006 NOSB review.

VOTE: AQ: CO₂ (Crops) Feb 3

Motion to classify CO₂ as petitioned as synthetic

Motion by: TF

Seconded by: JD

Additional discussion: none

Y: 5 N: 0 Absent: 2 Recuse: 0 Abstain: 0

Motion to list CO₂ at §205.609 with the following annotation: for use in contained systems.

Motion by: TF

Seconded by: CW

Additional Discussion: none

Y: 4 N: 1 Absent: 2 Recuse: 0 Abstain: 0

- **AQ: Biologics: Vaccines for Aquatic Animals (Crops)** - The members discussed the TR and found it to be sufficient. The LS Chair will notify the NOP of their determination.
- The Livestock Subcommittee meeting was adjourned.

Future Call Schedule:

January 21, 2014 3:00 ET

AQ: Biologics: Vaccines for Aquatic Animals (Crops). Deferred to next call...waiting for TR Methionine (MET) - more discussion on next call

AQ: Tocopherols (Livestock) - discuss public comments - voted to change annotation

AQ: Chlorine (Livestock) - discuss public comments – voted to change annotation

AQ: CO₂ (Crops) - discuss checklist/draft proposal - deferred to next call

AQ: Lignin Sulfonate (Crops) - discuss checklist/draft proposal

February 3, 2014 6:00 ET (In DC)

Methionine (MET) - revised proposal, discussion and vote

AQ: CO₂ (Crops) – discuss checklist/draft proposal and vote

AQ: Micronutrients (Crops) - discuss checklist/draft proposal and vote

AQ: Trace minerals (Livestock) - (discuss if needed) revised format for checklist and vote

AQ: Biologics: Vaccines for Aquatic Animals (Crops) - discuss draft proposal

February 4, 2014 3:00 ET- call cancelled

NOSB Training meeting in DC

February 18, 2014 3:00 ET

Methionine (MET) - Discussion and vote

AQ: Biologics: Vaccines for Aquatic Animals (Crops) - discuss draft proposal/vote

AQ: Chlorine (Crops) - discuss draft proposal/vote

AQ: plant production Vitamins (B1, B12, H) (Crops) - discuss draft proposal/vote

Sunset 2017 Materials - discuss and assign materials

March 4, 2014 3:00 ET

March 18, 2014 3:00 ET

April 1, 2014 3:00 ET

April 15, 2014 3:00 ET

Spring 2014 Milestones	Target date
Subcommittee requests technical reports for Sunset 2016 substances	Jan 15, 2014
NOSB Training meeting	Feb 4 - 5, 2014
NOP – Complete tentative agenda	Feb 7, 2014
Spring 2014 proposals due to NOP	Feb 26, 2014
NOP - Post proposals, Publish FRN, Open public comment	Mar 10, 2014
Subcommittees submit tentative workplans to NOP	Mar 12, 2014
Discuss workplans on ES call	Mar 14, 2014
NOP provides written comments on workplans to NOSB	Mar 28, 2014
Public comment closes	Apr 8, 2014
Workplans finalized on ES call	Apr 11, 2014
NOP - Send compiled public comments to NOSB	Apr 14, 2014
Spring 2014 NOSB Meeting – San Antonio, TX	~Apr 28- May 1, 2014

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, February 18, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Francis Thicke (FT), Calvin Walker (CW), Jean Richardson (JR), Colehour Bondera (CBo), Joe Dickson, Vice Chair (JD), Jay Feldman - sitting in

Absent : Mac Stone (MS)

Staff: Michelle Arsenault (MA), Scott Updike (SU)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14	Voted 02 18 14	Update Spr 2014
Aquaculture-CO₂, (Crops)	205.609	TF/CBo	No	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.	Discussion on 02 03 14 Revised and voted: 02 03 14	Proposal Spr 2014
Aquaculture-Chlorine (Crops)	205.609 and 205.611	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.	Voted 02 18 14	Proposal Spr 2014

Aquaculture- Micronutrients (Crops)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.	Discussion on 02 03 14 Voted: 02 03 14 and 02 05 14	Proposal Spr 2014
Aquaculture- Lignin sulfonate (chelating agent for aquatic plants) (Crops) CAS #s 9009-75-0, 8062- 15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient	01 21 14	Proposal Spr 2014
Aquaculture- Vitamins (B1, B12, H) for aquatic plants (Crops)	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.	Voted 02 18 14	Proposal Spr 2014
Methionine in organic poultry feed (MET)- petitioned	205.603	MS	2011 TR	TR received 11 15 11. Proposal was not revised	08 20 13 Discussion on 02 03 14. Decided to not revise.	Proposal Spr 2014
Aquaculture - Chlorine (Livestock)	205.609 205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested Revised annotation for Spr 2014	Original vote 06 18 13 Revsd annotation revote 08 06 13 and 08 20 13 Voted on revsd annotation 01 21 14	Proposal Spr 2014

Aquaculture – Tocopherols (Livestock)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13. Revise based on public comment	08 26 13 (via email) Voted on revsd annotation 01 21 14	Proposal Spr 2014
Aquaculture – Vitamins (Livestock)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.	06 18 13 Voted on minor revisions 01 21 14	Proposal Spr 2014
Aquaculture - Trace Minerals (Livestock)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled. Proposal will be posted as is with minor formatting changes.	07 30 13 Voted on minor frmmtng revisions 02 03 14	Proposal Spr 2014
Acidified Sodium chlorite (ASC)	205.603(a)(b)	JD	2008 TR	Petition sent to LS on 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled. Proposal will be posted as is.	08 20 13	Proposal Spr 2014

Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines update)	JR/NM	Yes (revised and sent 12/5/11)	Fall 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Update Spring 2014

* **Yellow highlight** indicates committee action needed

Agenda:

- Approve notes from February 3/5, 2014
- Methionine (MET) - Discussion and vote
- AQ: Biologics: Vaccines for Aquatic Animals (Crops) - discuss draft proposal/vote

- AQ: Chlorine (Crops) - discuss draft proposal/vote
- AQ: Vitamins (B1, B12, H) (Crops) - discuss draft proposal/vote
- Sunset 2017 Materials - discuss and assign materials

Discussion:

- Notes from notes from February 3/5, 2014 approved with no changes.
- **Methionine (MET)** -The lead reviewer, who could not be on the call, recommended not revising the fall 2013 Subcommittee. Members discussed the fact that the methionine levels they are proposing are somewhat arbitrary and not based on scientific evidence but are based on the original levels, which also didn't seem to have much scientific support. However, they did not feel the lack of scientific rationale was sufficient reason to revise the proposal at this time. The Subcommittee will seek input from the public about this and move forward from there. The methionine proposal will be reposted for public comment with no revisions.
- **AQ: Biologics: Vaccines for Aquatic Animals (Crops)** - The LS discussed the draft proposal that was circulated prior to the call, and proceeded to a vote. The members discussed and added an annotation prohibiting vaccines produced using excluded methods. The members want to send a strong message that this Board, unlike previous Boards, did not want any vaccines made with excluded methods to be used by organic producers. A member proposed another annotation regarding the materials' 5-year review (see annotation language below). The NOP does not support this annotation as it is in direct conflict with the new sunset policy, and several members agreed that it would not be accepted by the NOP so it was not useful to include it. The LS Chair suggested that instead of this annotation, the NOSB find a way to refine the new sunset process that would be productive and useful. While not supportive of the annotation, the Chair suggested the Subcommittee proceed to a vote on this material, at which time members could motion to add the annotation.

VOTE: AQ: Biologics: Vaccines for Aquatic Animals (Crops)

Motion to classify Biologics: Vaccines for Aquatic Animals as petitioned as synthetic:

Motion by: JR

Seconded by: CW

Discussion: none

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

Motion carries

Motion to add Biologics: Vaccines for Aquatic Animals at §205.611 with the following annotation; except those produced with excluded methods

Motion by: JR

Seconded by: JD

Discussion: none

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

Motion carries

ABS Note: MS cast his vote via email on February 21, 2014. The tally above was changed to reflect this.

Motion to amend the listing for Biologics: Vaccines for Aquatic Animals at §205.611 with the following annotation: The listing of this material expires after 5 years. The review in 5 years provides an opportunity for the Board to reevaluate and vote for the continued or modified use of the material under the same standard of review that is used to approve the material initially.

Motion by: FT

Seconded by: CBo

Discussion: Several members were concerned about the new sunset process and expressed support for this annotation. The Chair reiterated that the NOP would not accept an annotation that is in direct conflict with an NOP policy, and suggested instead that the members write a minority position to be included as an addendum to the proposal.

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

The vote will remain open so the absent member can cast a vote. The LS Chair will then forward the finalized version to MA before the deadline on Feb 26.

ABS Note: MS cast his vote via email on February 21, 2014. The tally above was changed to reflect this.

- **AQ: Chlorine (Crops)** – The LS discussed the most recent draft proposal and proceeded to a vote on this material. The primary reviewer noted an editing error in the most recent document and will strike the language prior to sending the final version to the NOP. He also noted that the previous discussion about the annotation for the 5-year expiration date review would apply to this material as well, but again, the NOP will likely not accept it. The lead reviewer acknowledged and responded to several comments by other members, sent via email prior to the call, regarding inclusion of language in the proposal. Concerns included the lack of citation of the Safe Drinking Water Act (SDWA), and information pertaining to essentiality. With regard to the SDWA, it was noted that since it is the prevailing legislation it is not necessary to reference it, as it is implied. The group discussed the question of essentiality and indicated that although the TR included information about alternatives it doesn't necessarily mean that the alternatives are readily available. Essentiality is something only producers and manufacturers can answer and in support of that, the members agreed to add questions to the proposal for public comment. Members also discussed the subjectivity of some of the answers in the checklist, acknowledging that interpretation varies among Board members. However, the lead reviewer supported his position based on a careful review and consideration of the supporting documents and feels that it is well justified.

VOTE: AQ: Chlorine (Crops)

Motion to classify chlorine materials (Calcium hypochlorite, chlorine dioxide, sodium hypochlorite) as synthetic

Motion by: JD

Seconded by: CBo

Discussion: none

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

Motion carries

ABS Note: MS cast his vote via email on February 21, 2014. The tally above was changed to reflect this.

Motion to list chlorine materials (Calcium hypochlorite, chlorine dioxide, sodium hypochlorite) at §205.609 with the following annotation: Chlorine materials - Disinfecting and sanitizing facilities and equipment. Residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act.

Motion by: JD

Seconded by: JR

Additional discussion: A member asked if the group would consider adding direct language restricting it to closed systems, admitting there is no definition for closed systems. Another member voiced concern that this would inadvertently and unintendedly limit usage for some producers, and therefore will not support it. The LS Chair suggested that the member who proposed the annotation instead write a minority opinion about closed systems. Again, the group discussed addition of the annotation about the 5-year review of the material and chose to not add this annotation based on the previously mentioned reasons: The NOP will not accept an annotation that is in direct conflict with a policy.

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

Motion carries

The vote will remain open so the absent member can cast a vote. The LS Chair will then forward the finalized version to MA before the deadline on Feb 26.

ABS Note: MS cast his vote via email on February 21, 2014. The tally above was changed to reflect this.

- **AQ: Vitamins (B1, B12, H) (Crops)** - The members briefly discussed the draft proposal and proceeded to vote. The lead reviewer noted that vitamins are already approved for land based crop use. A member suggested adding a question about essentiality, as they did for chlorine, and the group members were in strong agreement about this. JR will add this question in an effort to seek public comment, and forward the document to the LS Chair. The members proceed to a vote on vitamins.

VOTE: AQ: Vitamins (B1, B12, H)

Motion to classify Vitamins (B1, B12, H) as petitioned as synthetic.

Motion by: JR

Seconded by: CBo

Discussion: none

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

Motion carries

Motion to list Vitamins (B1, B12, H) as petitioned at \$205.609

Motion by: CW

Seconded by: JR

Discussion: A member mentioned the idea of adding an annotation to this material, but then decided that it would be procedurally incorrect to vote against listing and then request an annotation. Instead he will write a minority position and forward it to the LS Chair for inclusion.

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

Motion carries

The vote will remain open so the absent member can cast a vote. The LS Chair will then forward the finalized version to MA before the deadline on Feb 26.

ABS Note: MS cast his vote via email on February 21, 2014. The tally above was changed to reflect this.

- **Sunset 2017 Materials** – This discussion was postponed to the next call for lack of time
- The Livestock Subcommittee meeting was adjourned.

ABS Note: After the meeting, the Subcommittee determined that according to Robert's Rules, the second vote should have been a "motion to amend" rather than a motion that was voted on after the first motion passed. Since the second motion did not pass, this procedural error did not warrant any additional action by the Subcommittee.

Future Call Schedule:

February 3, 2014 6:00 ET (In DC)

Methionine (MET) - revised proposal, discussion and vote

AQ: CO₂ (Crops) – discuss checklist/draft proposal and vote

AQ: Micronutrients (Crops) - discuss checklist/draft proposal and vote

AQ: Trace minerals (Livestock) - (discuss if needed) revised format for checklist and vote

AQ: Biologics: Vaccines for Aquatic Animals (Crops) - discuss draft proposal

February 4, 2014 3:00 ET- call cancelled

NOSB Training meeting in DC

February 18, 2014 3:00 ET

Methionine (MET) - Discussion and vote

AQ: Biologics: Vaccines for Aquatic Animals (Crops) - discuss draft proposal/vote

AQ: Chlorine (Crops) - discuss draft proposal/vote

AQ: plant production Vitamins (B1, B12, H) (Crops) - discuss draft proposal/vote

Sunset 2017 Materials - discuss and assign materials –deferred to next call.

March 4, 2014 3:00 ET

Sunset 2017 Materials - discuss and assign materials

March 18, 2014 3:00 ET

April 1, 2014 3:00 ET

April 15, 2014 3:00 ET

Spring 2014 Milestones	Target date
Subcommittee requests technical reports for Sunset 2016 substances	Jan 15, 2014
NOSB Training meeting	Feb 4 - 5, 2014
NOP – Complete tentative agenda	Feb 7, 2014
Spring 2014 proposals due to NOP	Feb 26, 2014
NOP - Post proposals, Publish FRN, Open public comment	Mar 10, 2014
Subcommittees submit tentative workplans to NOP	Mar 12, 2014
Discuss workplans on ES call	Mar 14, 2014
NOP provides written comments on workplans to NOSB	Mar 28, 2014
Public comment closes	Apr 8, 2014
Workplans finalized on ES call	Apr 11, 2014
NOP - Send compiled public comments to NOSB	Apr 14, 2014
Spring 2014 NOSB Meeting – San Antonio, TX	~Apr 28- May 1, 2014

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, March 4, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Francis Thicke (FT), Calvin Walker (CW), Jean Richardson (JR), Mac Stone (MS), Colehour Bondera (CBo), Joe Dickson, Vice Chair (JD), Jay Feldman - sitting in

Absent: none

Staff: Michelle Arsenault (MA), Scott Updike (SU)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14	Voted 02 18 14	Proposal Spr 2014
Aquaculture-CO₂, (Crops)	205.609	TF/CBo	No	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.	Discussion on 02 03 14 Revised and voted: 02 03 14	Proposal Spr 2014
Aquaculture-Chlorine (Crops)	205.609 and 205.611	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.	Voted 02 18 14	Proposal Spr 2014

Aquaculture- Micronutrients (Crops)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.	Discussion on 02 03 14 Voted: 02 03 14 and 02 05 14	Proposal Spr 2014
Aquaculture- Lignin sulfonate (chelating agent for aquatic plants) (Crops) CAS #s 9009-75-0, 8062- 15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient	01 21 14	Proposal Spr 2014
Aquaculture- Vitamins (B1, B12, H) for aquatic plants (Crops)	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.	Voted 02 18 14	Proposal Spr 2014
Methionine in organic poultry feed (MET)- petitioned	205.603	MS	2011 TR	TR received 11 15 11. Proposal was not revised	08 20 13 Discussion on 02 03 14. No revisions	Proposal Spr 2014
Aquaculture - Chlorine (Livestock)	205.609 205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested Revised annotation for Spr 2014	Original vote 06 18 13 Revsd annotation revote 08 06 13 and 08 20 13 Voted on revsd annotation 01 21 14	Proposal Spr 2014

Aquaculture – Tocopherols (Livestock)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13. Revise based on public comment	08 26 13 (via email) Voted on revsd annotation 01 21 14	Proposal Spr 2014
Aquaculture – Vitamins (Livestock)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.	06 18 13 Voted on minor revisions 01 21 14	Proposal Spr 2014
Aquaculture - Trace Minerals (Livestock)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled. Proposal will be posted as is with minor formatting changes.	07 30 13 Voted on minor frmmtng revisions 02 03 14	Proposal Spr 2014
Acidified Sodium chlorite (ASC)	205.603(a)(b)	JD	2008 TR	Petition sent to LS on 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled. Proposal will be posted as is.	08 20 13	Proposal Spr 2014

2017 Sunsets (TR requests due to NOP July 2014)

Substance	NL §	Contact	TR requested	Notes	Vote	Meeting
Aspirin	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Butorphanol	205.603	CBo				Summary: Spr 2015 Review: Fall 2015

Calcium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorine dioxide	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Copper sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Electrolytes	205.603	CW				Summary: Spr 2015 Review: Fall 2015
EPA List 4 - Inerts of Minimal Concern	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Ethanol	205.603	MS	Y	TR in development		Summary: Spr 2015 Review: Fall 2015
Excipients	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Fenbendazole	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Flunixin	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Formic Acid	205.603	CBo				Summary: Spr 2015 Review: Fall 2015

Furosemide	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Glucose	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Glycerine	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Hydrated lime	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Hydrogen peroxide	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (a)(14)	JR				Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (b)(2)	JR				Summary: Spr 2015 Review: Fall 2015
Isopropanol	205.603	CW	Y	TR in development		Summary: Spr 2015 Review: Fall 2015
Ivermectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Lidocaine	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Magnesium hydroxide	205.603	MS				Summary: Spr 2015 Review: Fall 2015

Magnesium sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Methionine	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Mineral oil	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Moxidectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Oxytocin	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Peracetic acid	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Phosphoric acid	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Poloxalene	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Procaine	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Sodium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Strychnine	205.604	JR				Summary: Spr 2015 Review: Fall 2015

Sucrose octanoate esters	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Tolazoline	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Trace minerals	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Vaccines	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Vitamins	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Xylazine	205.603	CBo				Summary: Spr 2015 Review: Fall 2015

Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines update)	JR/NM	Yes (revised and sent 12/5/11)	Fall 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Update Spring 2014

* **Yellow highlight** indicates committee action needed

* **Aqua highlight** indicates multiple NL entries

Agenda:

- Approve notes from February 18, 2014
- Adjourn

Discussion:

- **Notes from February 18, 2014** were approved with the addition of a sentence about the lack of proper voting procedure during the February 18 call. Upon review of Roberts Rules of order after the call, it was determined that the procedure for voting on an annotation was conducted incorrectly. However it did not affect the outcome so the vote was left as is.
- **Sunset 2017 Materials** – Each Subcommittee member will review ~7 materials and the members volunteered for materials based on expertise, experience. Materials were grouped based on

similarities, to make the review process more efficient. The table of sunset materials was added to the notes and populated with the reviewer's initials. MA will link the list with the web documents.

- **JR:** aspirin, iodine, iodine, lidocaine, procaine, Peracetic acid, vaccines, strychnine, phosphoric acid.
- **CW:** oxytocin, hydrogen peroxide, vitamins, glucose, electrolytes, isopropanol
- **MS:** MET, copper sulfate, magnesium sulphate, magnesium hydroxide, hydrated lime, ethanol.
- **TF:** glycerin, furosemide, atropine, EPA list 4 inerts, flunixin
- **JD:** chlorine dioxide, calcium hypochlorite, chlorhexidine, sodium hypochlorite
- **CBo:** formic acid, mineral oil, Xylazine, Butorphanol, excipients
- **FT:** poloxalene, fenbendazole, trace minerals, ivermectin, moxidectin (JR will send pertinent review materials to FT for review), sucrose, tolazoline.

TR requests need to be made by July 2014. A member asked about methionine and the potential overlap due to the spring 2014 proposal, and the impending sunset review for 2017. Specifically, how will the Board's review and vote at the spring 2014 meeting affect the sunset review? The NOP suggested continuing with the review until they determine the outcome at the spring meeting, and proceeding from there. A member emphasized the need for thorough reviews in light of the new sunset review process, since there must be strong justification for a proposal to remove a substance from the list. Members also discussed the use of checklists for their reviews, and several members felt strongly that they should be completed for due diligence.

- The Livestock Subcommittee meeting was adjourned.

Future Call Schedule:

February 18, 2014 3:00 ET

Methionine (MET) - Discussion and vote

AQ: Biologics: Vaccines for Aquatic Animals (Crops) - discuss draft proposal/vote

AQ: Chlorine (Crops) - discuss draft proposal/vote

AQ: plant production Vitamins (B1, B12, H) (Crops) - discuss draft proposal/vote

Sunset 2017 Materials - discuss and assign materials –deferred to next call.

March 4, 2014 3:00 ET

Sunset 2017 Materials - discuss and assign materials

March 18, 2014 3:00 ET

Discuss chlorine proposals (MB)

Dress rehearsal for spring meeting

Discuss spring meeting proposals

2017 sunsets TR determinations

April 1, 2014 3:00 ET

April 15, 2014 3:00 ET

Public comment

Spring 2014 Milestones	Target date
Subcommittee requests technical reports for Sunset 2016 substances	Jan 15, 2014
NOSB Training meeting	Feb 4 - 5, 2014
NOP – Complete tentative agenda	Feb 7, 2014
Spring 2014 proposals due to NOP	Feb 26, 2014
NOP - Post proposals, Publish FRN, Open public comment	Mar 10, 2014
Subcommittees submit tentative workplans to NOP	Mar 12, 2014
Discuss workplans on ES call	Mar 14, 2014
NOP provides written comments on workplans to NOSB	Mar 28, 2014
Public comment closes	Apr 8, 2014
Workplans finalized on ES call	Apr 11, 2014
NOP - Send compiled public comments to NOSB	Apr 14, 2014
Spring 2014 NOSB Meeting – San Antonio, TX	~Apr 28- May 1, 2014

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, March 18, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Joe Dickson, Vice Chair (JD), Francis Thicke (FT), Calvin Walker (CW), Jean Richardson (JR), Mac Stone (MS), Colehour Bondera (CBo), Jay Feldman - sitting in

Absent: none

Staff: Michelle Arsenault (MA), Scott Updike (SU), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14	Voted 02 18 14	Proposal Spr 2014
Aquaculture-CO₂, (Crops)	205.609	TF/CBo	No	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.	Discussion on 02 03 14 Revised and voted: 02 03 14	Proposal Spr 2014
Aquaculture-Chlorine (Crops)	205.609 and 205.611	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.	Voted 02 18 14	Proposal Spr 2014

Aquaculture- Micronutrients (Crops)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.	Discussion on 02 03 14 Voted: 02 03 14 and 02 05 14	Proposal Spr 2014
Aquaculture- Lignin sulfonate (chelating agent for aquatic plants) (Crops) CAS #s 9009-75-0, 8062- 15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient	01 21 14	Proposal Spr 2014
Aquaculture- Vitamins (B1, B12, H) for aquatic plants (Crops)	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.	Voted 02 18 14	Proposal Spr 2014
Methionine in organic poultry feed (MET)- petitioned	205.603	MS	2011 TR	TR received 11 15 11. Proposal was not revised	08 20 13 Discussion on 02 03 14. No revisions	Proposal Spr 2014
Aquaculture - Chlorine (Livestock)	205.609 205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested Revised annotation for Spr 2014	Original vote 06 18 13 Revsd annotation revote 08 06 13 and 08 20 13 Voted on revsd annotation 01 21 14	Proposal Spr 2014

Aquaculture – Tocopherols (Livestock)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13. Revise based on public comment	08 26 13 (via email) Voted on revsd annotation 01 21 14	Proposal Spr 2014
Aquaculture – Vitamins (Livestock)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.	06 18 13 Voted on minor revisions 01 21 14	Proposal Spr 2014
Aquaculture - Trace Minerals (Livestock)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled. Proposal will be posted as is with minor formatting changes.	07 30 13 Voted on minor frmmtng revisions 02 03 14	Proposal Spr 2014
Acidified Sodium chlorite (ASC)	205.603(a)(b)	JD	2008 TR	Petition sent to LS on 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled. Proposal will be posted as is.	08 20 13	Proposal Spr 2014
Aluminum Sulfate (PDF)	205.603			The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). TR request/Questions due 05 13 14.		

Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines update)	JR/NM	Yes (revised and sent 12/5/11)	Fall 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Update Spring 2014

* **Yellow highlight** indicates committee action needed

Agenda:

- Approve notes from March 4, 2014
- Assign Alginic Acid
Discuss chlorine proposals (MB)
- Dress rehearsal for spring meeting
- Talk about spring meeting proposals
- 2017 sunsets TR determinations
- Adjourn

Discussion:

- **Notes from March 4, 2014** approved with no changes.
- **Assign Alginic Acid.** Deferred to next call.
Discuss chlorine proposals (MB). The members and the NOP discussed the Chlorine proposal that was submitted for the spring 2014 NOSB meeting, noting that there was miscommunication between the Subcommittee and the program which has led to multiple revisions of the annotation. The issue is complicated because Chlorine has 3 listings: Crops, Livestock and Handling. The Crops listing was revised in 2011 based on an NOSB recommendation that aligned with the NOP issued guidance (5026). The Handling Subcommittee recommended a similar annotation, which has not yet been adopted by the NOP due to some outstanding issues, and Livestock has not proposed an annotation change. The NOP feels that the annotation for the spring 2014 proposal needs some clarification, including the definition of culture water, which is also not entirely clear in the petition. The group discussed the specifics of culture water and noted that it is not precluded by the current annotation. They also noted that it could be construed as ambiguous and as such proposed adding some clarifying language such as the following: "Culture water – aerated, effectively volatilizing the chlorine, so little to none is left". The Subcommittee and the NOP see this as clarifying language only and not as a substantive change to the intent of the proposal. The group also discussed how chlorine is used in aquaculture systems, emphasizing that chlorine is used to clean equipment and facilities on land only and is not used in the open water such as a bay or ocean. JD will draft the clarifying language prior to the meeting, so the group can present it to the public and the Board.
- **Dress rehearsal for spring meeting.** The group discussed how best to present the minority positions for several proposals. The members felt the best approach would be for the lead reviewer to lead the discussion and reference the minority opinion, and then let the member who wrote the minority opinion, or the LS Chair, lead that portion of the discussion. The members will discuss this further before the spring meeting.
- **Talk about spring meeting proposals** – deferred to next call.
- **2017 sunsets TR determinations.** JR will send the list and her notes for the sunset materials she has completed to the group. A member emphasized the need for transparency and due diligence when reviewing the sunset materials, in light of the new sunset process. The group discussed the TR determination process and reminded everyone to keep in mind that some questions, such as need and essentiality, are better answered via public comment and not through a TR.
- **The Livestock Subcommittee meeting was adjourned.**

[Previous LS Notes](#)

Future Call Schedule:

March 4, 2014 3:00 ET

Sunset 2017 Materials - discuss and assign materials

March 18, 2014 3:00 ET

Discuss chlorine proposals (MB)

Dress rehearsal for spring meeting

Discuss spring meeting proposals

2017 sunsets TR determinations

April 1, 2014 3:00 ET

Discuss spring meeting proposals

Assign Alginic Acid (2017 Sunset Material)

2017 sunsets TR determinations

April 15, 2014 3:00 ET

Dress rehearsal for spring meeting

Review public comment

Spring 2014 Milestones	Target date
Subcommittee requests technical reports for Sunset 2016 substances	Jan 15, 2014
NOSB Training meeting	Feb 4 - 5, 2014
NOP – Complete tentative agenda	Feb 7, 2014
Spring 2014 proposals due to NOP	Feb 26, 2014
NOP - Post proposals, Publish FRN, Open public comment	Mar 10, 2014
Subcommittees submit tentative workplans to NOP	Mar 12, 2014
Discuss workplans on ES call	Mar 14, 2014
NOP provides written comments on workplans to NOSB	Mar 28, 2014
Public comment closes	Apr 8, 2014
Workplans finalized on ES call	Apr 11, 2014
NOP - Send compiled public comments to NOSB	Apr 14, 2014
Spring 2014 NOSB Meeting – San Antonio, TX	~Apr 28- May 1, 2014

2017 Sunsets (TR requests due to NOP July 2014)						
Substance	NL §	Contact	TR requested	Notes	Vote	Meeting
Alginic Acid	205.605 (a)	?				

Aspirin	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Butorphanol	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Calcium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorine dioxide	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Copper sulfite	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Electrolytes	205.603	CW				Summary: Spr 2015 Review: Fall 2015
EPA List 4 - Inerts of Minimal Concern	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Ethanol	205.603	MS	Y	TR in development		Summary: Spr 2015 Review: Fall 2015
Excipients	205.603	CBo				Summary: Spr 2015 Review: Fall 2015

Fenbendazole	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Flunixin	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Formic Acid	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Furosemide	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Glucose	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Glycerine	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Hydrated lime	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Hydrogen peroxide	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (a)(14)	JR				Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (b)(2)	JR				Summary: Spr 2015 Review: Fall 2015
Isopropanol	205.603	CW	Y	TR in development		Summary: Spr 2015 Review: Fall 2015

Ivermectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Lidocaine	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Magnesium hydroxide	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Magnesium sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Methionine	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Mineral oil	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Moxidectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Oxytocin	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Peracetic acid	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Phosphoric acid	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Poloxalene	205.603	FT				Summary: Spr 2015 Review: Fall 2015

Procaine	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Sodium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Strychnine	205.604	JR				Summary: Spr 2015 Review: Fall 2015
Sucrose octanoate esters	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Tolazoline	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Trace minerals	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Vaccines	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Vitamins	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Xylazine	205.603	CBo				Summary: Spr 2015 Review: Fall 2015

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, April 1, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Jean Richardson (JR), Mac Stone (MS), Colehour Bondera (CBo), Jay Feldman - sitting in

Absent: Francis Thicke (FT), Joe Dickson, Vice Chair (JD), Calvin Walker (CW)

Staff: Michelle Arsenault (MA), Scott Updike (SU)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14	Voted 02 18 14	Proposal Spr 2014
Aquaculture-CO₂, (Crops)	205.609	TF/CBo	No	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.	Discussion on 02 03 14 Revised and voted: 02 03 14	Proposal Spr 2014
Aquaculture-Chlorine (Crops)	205.609 and 205.611	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.	Voted 02 18 14	Proposal Spr 2014

Aquaculture- Micronutrients (Crops)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.	Discussion on 02 03 14 Voted: 02 03 14 and 02 05 14	Proposal Spr 2014
Aquaculture- Lignin sulfonate (chelating agent for aquatic plants) (Crops) CAS #s 9009-75-0, 8062- 15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient	01 21 14	Proposal Spr 2014
Aquaculture- Vitamins (B1, B12, H) for aquatic plants (Crops)	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.	Voted 02 18 14	Proposal Spr 2014
Methionine in organic poultry feed (MET)- petitioned	205.603	MS	2011 TR	TR received 11 15 11. Proposal was not revised	08 20 13 Discussion on 02 03 14. No revisions	Proposal Spr 2014
Aquaculture - Chlorine (Livestock)	205.609 205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested Revised annotation for Spr 2014	Original vote 06 18 13 Revsd annotation revote 08 06 13 and 08 20 13 Voted on revsd annotation 01 21 14	Proposal Spr 2014

Aquaculture – Tocopherols (Livestock)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13. Revise based on public comment	08 26 13 (via email) Voted on revsd annotation 01 21 14	Proposal Spr 2014
Aquaculture – Vitamins (Livestock)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.	06 18 13 Voted on minor revisions 01 21 14	Proposal Spr 2014
Aquaculture - Trace Minerals (Livestock)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled. Proposal will be posted as is with minor formatting changes.	07 30 13 Voted on minor frmmtng revisions 02 03 14	Proposal Spr 2014
Acidified Sodium chlorite (ASC)	205.603(a)(b)	JD	2008 TR	Petition sent to LS on 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled. Proposal will be posted as is.	08 20 13	Proposal Spr 2014
Aluminum Sulfate (PDF)	205.603			The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). TR request/Questions due 05 13 14.		

Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines update)	JR/NM	Yes (revised and sent 12/5/11)	Fall 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Update Spring 2014

* **Yellow highlight** indicates committee action needed

Agenda:

- Approve notes from March 18, 2014
- Discuss spring meeting proposals
- Assign Alginic Acid (2017 Sunset Material)
- 2017 sunsets TR determinations
- Adjourn

Discussion:

- **Notes from March 18, 2014** approved with no changes.
- **Spring meeting proposals.** The group once again discussed the Chlorine proposal and the comments provided by the NOP. The NOP suggested clarifying language for the annotation about effluent, which they originally determined to be a non-substantive change that would not require the Subcommittee to revise the proposal. Clarifying language was to be added to the narrative which did not change the intent of the proposal. However, feedback from others in NOP suggested that the new language does constitute a substantive change and therefore the proposal would have to be tabled at the spring meeting. The members discussed the best way forward and the LS Chair TF will speak with the lead reviewer prior to the next LS call on April 15, where the group will once again discuss it and finalize it.
- **Assign Alginic Acid (2017 Sunset Material).** TF volunteered to review this substance. The table below was changed to reflect this.
- **2017 sunsets TR determinations.** The members discussed adding CAS numbers to the Sunset materials, but decided that because there are no annotation changes there would be no need. One member assessed the need for TRs for her eight 2017 Sunset materials, and determined that no TRs are needed for the following:
 - Aspirin
 - Iodine - Simple but adequate TAP in 1995.
 - Lidocaine, Procaine - The withholding period for these substances seems unnecessarily long and arbitrary and the lead reviewer asked about the need for more information. The members felt that the best source for that information would be public comment and not a TR therefore they will not request a TR
 - Phosphoric acid - No TR request, nor will they complete a checklist
 - Paracetic Acid
 - Strychnine - prohibited
 - Vaccines biologics
- The LS Chair asked that the members use JR's process as a model, and keep track of the resource documents as they are undertaking their reviews. i.e. previous TRs, TAPS, meeting minutes, etc.
- The LS Chair noted that at the Spring meeting she will announce the aquaculture materials as a group, and then hand off the individual discussions to the respective lead reviewers. Each discussion should incorporate a summary of the comments from both the fall 2013 and spring 2014 comment periods.
- **The Livestock Subcommittee meeting was adjourned.**

[Previous LS Notes](#)**Future Call Schedule:**

March 18, 2014 3:00 ET

- Discuss chlorine proposals (MB)
- Dress rehearsal for spring meeting
- Discuss spring meeting proposals
- 2017 sunsets TR determinations

April 1, 2014 3:00 ET

- Discuss spring meeting proposals
- Assign Alginic Acid (2017 Sunset Material)
- 2017 sunsets TR determinations

April 15, 2014 3:00 ET

- Dress rehearsal for spring meeting
- Review public comment
- Finalize decision on Chlorine annotation/narrative change.
- 2017 sunsets TR determinations

Spring 2014 Milestones	Target date
Subcommittee requests technical reports for Sunset 2016 substances	Jan 15, 2014
NOSB Training meeting	Feb 4 - 5, 2014
NOP – Complete tentative agenda	Feb 7, 2014
Spring 2014 proposals due to NOP	Feb 26, 2014
NOP - Post proposals, Publish FRN, Open public comment	Mar 10, 2014
Subcommittees submit tentative workplans to NOP	Mar 12, 2014
Discuss workplans on ES call	Mar 14, 2014
NOP provides written comments on workplans to NOSB	Mar 28, 2014
Public comment closes	Apr 8, 2014
Workplans finalized on ES call	Apr 11, 2014
NOP - Send compiled public comments to NOSB	Apr 14, 2014
Spring 2014 NOSB Meeting – San Antonio, TX	~Apr 28- May 1, 2014

2017 Sunsets (TR requests due to NOP July 2014)						
Substance	NL §	Contact	TR requested	Notes	Vote	Meeting
Alginic Acid	205.605(a)	TF				

Aspirin	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Butorphanol	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Calcium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorine dioxide	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Copper sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Electrolytes	205.603	CW				Summary: Spr 2015 Review: Fall 2015
EPA List 4 - Inerts of Minimal Concern	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Ethanol	205.603	MS	Y	TR in development		Summary: Spr 2015 Review: Fall 2015
Excipients	205.603	CBo				Summary: Spr 2015 Review: Fall 2015

Fenbendazole	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Flunixin	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Formic Acid	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Furosemide	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Glucose	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Glycerine	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Hydrated lime	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Hydrogen peroxide	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (a)(14)	JR				Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (b)(2)	JR				Summary: Spr 2015 Review: Fall 2015
Isopropanol	205.603	CW	Y	TR in development		Summary: Spr 2015 Review: Fall 2015

Ivermectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Lidocaine	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Magnesium hydroxide	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Magnesium sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Methionine	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Mineral oil	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Moxidectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Oxytocin	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Peracetic acid	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Phosphoric acid	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Poloxalene	205.603	FT				Summary: Spr 2015 Review: Fall 2015

Procaine	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Sodium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Strychnine	205.604	JR				Summary: Spr 2015 Review: Fall 2015
Sucrose octanoate esters	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Tolazoline	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Trace minerals	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Vaccines	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Vitamins	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Xylazine	205.603	CBo				Summary: Spr 2015 Review: Fall 2015

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**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, April 15, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Jean Richardson (JR), Colehour Bondera (CBo), Francis Thicke (FT), Calvin Walker (CW), Joe Dickson, Vice Chair (JD), Mac Stone (MS), Carmela Beck (CBe) - sitting in, Jay Feldman - sitting in

Absent: none

Staff: Michelle Arsenault (MA), Scott Updike (SU)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14	Voted 02 18 14	Proposal Spr 2014
Aquaculture-CO₂ , (Crops)	205.609	TF/CBo	No	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.	Discussion on 02 03 14 Revised and voted: 02 03 14	Proposal Spr 2014
Aquaculture-Chlorine (Crops)	205.609 and 205.611	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.	Voted 02 18 14	Proposal Spr 2014

Aquaculture- Micronutrients (Crops)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.	Discussion on 02 03 14 Voted: 02 03 14 and 02 05 14	Proposal Spr 2014
Aquaculture- Lignin sulfonate (chelating agent for aquatic plants) (Crops) CAS #s 9009-75-0, 8062- 15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient	01 21 14	Proposal Spr 2014
Aquaculture- Vitamins (B1, B12, H) for aquatic plants (Crops)	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.	Voted 02 18 14	Proposal Spr 2014
Methionine in organic poultry feed (MET)- petitioned	205.603	MS	2011 TR	TR received 11 15 11. Proposal was not revised	08 20 13 Discussion on 02 03 14. No revisions	Proposal Spr 2014
Aquaculture - Chlorine (Livestock)	205.609 205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested Revised annotation for Spr 2014	Original vote 06 18 13 Revsd annotation revote 08 06 13 and 08 20 13 Voted on revsd annotation 01 21 14	Proposal Spr 2014

Aquaculture – Tocopherols (Livestock)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13. Revise based on public comment	08 26 13 (via email) Voted on revsd annotation 01 21 14	Proposal Spr 2014
Aquaculture – Vitamins (Livestock)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.	06 18 13 Voted on minor revisions 01 21 14	Proposal Spr 2014
Aquaculture - Trace Minerals (Livestock)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled. Proposal will be posted as is with minor formatting changes.	07 30 13 Voted on minor frmmtng revisions 02 03 14	Proposal Spr 2014
Acidified Sodium chlorite (ASC)	205.603(a)(b)	JD	2008 TR	Petition sent to LS on 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled. Proposal will be posted as is.	08 20 13	Proposal Spr 2014
Aluminum Sulfate (PDF)	205.603			The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). TR request/Questions due 05 13 14.		

Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines update)	JR/NM	Yes (revised and sent 12/5/11)	Fall 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Update Spring 2014

* **Yellow highlight** indicates committee action needed

Agenda:

- Approve notes from April 1, 2014
- Dress rehearsal for spring meeting
- Review public comment
- Finalize decision on Chlorine annotation/narrative change.
- 2017 sunsets TR determinations
- Adjourn

Discussion:

- **Notes from** April 1, 2014 approved with no changes
- **Dress rehearsal** for spring meeting
- **Review public comment.** Comments about AQ were overwhelmingly against proceeding without standards. Both trade and environmental organizations are against it. Based on public comments all LS members were in favor of tabling these proposals until the fall 2014 meeting in anticipation of the aquaculture rule. The group discussed the pros and cons either way and what implications this will have for workload. MA will check with the program staff about the proper procedure and terminology for “tabling” or referring a vote.
- **Finalize decision on Chlorine annotation/narrative change.** The LS will address the issue of the use of chlorine in culture water in the revised checklist. According to the petition the culture water has “no contact with soil”. The NOSB received lots of public comment about chlorine but the group feels that until the petitioner clarifies the intended use for chlorine in culture water and there are standards by which to measure, this will be difficult.
- **Methionine (MET) comments.** A member noted from the comments that industry is in favor of this proposal, but the public is not. The group also discussed the potential economic implications such as an increase in grain prices for other producers. One member noted that dairy producers were having a hard time sourcing organic grain, and what they did find was expensive. It was suggested that if methionine were no longer on the National List, some organic poultry producers would then leave organic production, making organic grain more available to organic dairy farms. A member added that the economic analysis didn’t include information for small producers.
- **2017 sunsets TR determinations** - deferred to next call
- The Livestock Subcommittee meeting was adjourned.

[Previous LS Notes](#)

Future Call Schedule:

April 1, 2014 3:00 ET

Discuss spring meeting proposals
Assign Alginic Acid (2017 Sunset Material)
2017 sunsets TR determinations

April 15, 2014 3:00 ET

Dress rehearsal for spring meeting
Review public comment
Finalize decision on Chlorine annotation/narrative change.
2017 sunsets TR determinations - deferred to next call

May 20, 2014 3:00 ET

2017 sunsets TR determinations

- June 3, 2014 3:00 ET
- June 17, 2014 3:00 ET
- July 1, 2014 3:00 ET
- July 15, 2014 3:00 ET
- Aug 5, 2014 3:00 ET
- Aug 19, 2014 3:00 ET
- Sep 2, 2014 3:00 ET
- Sep 16, 2014 3:00 ET
- Oct 7, 2014 3:00 ET
- Oct 21, 2014 3:00 ET
- Nov 4, 2014 3:00 ET
- Nov 18, 2014 3:00 ET

Spring 2014 Milestones	Target date
Subcommittee requests technical reports for Sunset 2016 substances	Jan 15, 2014
NOSB Training meeting	Feb 4 - 5, 2014
NOP – Complete tentative agenda	Feb 7, 2014
Spring 2014 proposals due to NOP	Feb 26, 2014
NOP - Post proposals, Publish FRN, Open public comment	Mar 10, 2014
Subcommittees submit tentative workplans to NOP	Mar 12, 2014
Discuss workplans on ES call	Mar 14, 2014
NOP provides written comments on workplans to NOSB	Mar 28, 2014
Public comment closes	Apr 8, 2014
Workplans finalized on ES call	Apr 11, 2014
NOP - Send compiled public comments to NOSB	Apr 14, 2014
Spring 2014 NOSB Meeting – San Antonio, TX	~Apr 28- May 1, 2014

2017 Sunsets (TR requests due to NOP July 2014)						
Substance	NL §	Contact	TR requested	Notes	Vote	Meeting
Alginic Acid	205.605(a)	TF				
Aspirin	205.603	JR				Summary: Spr 2015 Review: Fall 2015

Atropine	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Butorphanol	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Calcium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorine dioxide	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Copper sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Electrolytes	205.603	CW				Summary: Spr 2015 Review: Fall 2015
EPA List 4 - Inerts of Minimal Concern	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Ethanol	205.603	MS	Y	TR in development		Summary: Spr 2015 Review: Fall 2015
Excipients	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Fenbendazole	205.603	FT				Summary: Spr 2015 Review: Fall 2015

Flunixin	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Formic Acid	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Furosemide	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Glucose	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Glycerine	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Hydrated lime	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Hydrogen peroxide	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (a)(14)	JR				Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (b)(2)	JR				Summary: Spr 2015 Review: Fall 2015
Isopropanol	205.603	CW	Y	TR in development		Summary: Spr 2015 Review: Fall 2015
Ivermectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015

Lidocaine	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Magnesium hydroxide	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Magnesium sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Methionine	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Mineral oil	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Moxidectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Oxytocin	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Peracetic acid	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Phosphoric acid	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Poloxalene	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Procaine	205.603	JR				Summary: Spr 2015 Review: Fall 2015

Sodium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Strychnine	205.604	JR				Summary: Spr 2015 Review: Fall 2015
Sucrose octanoate esters	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Tolazoline	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Trace minerals	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Vaccines	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Vitamins	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Xylazine	205.603	CBo				Summary: Spr 2015 Review: Fall 2015

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, May 20, 2014 3:00pm ET**

Attending: Joe Dickson, Vice Chair (JD), Jean Richardson (JR), Colehour Bondera (CBo), Francis Thicke (FT), Calvin Walker (CW), Mac Stone (MS), Jay Feldman - sitting in

Absent: Tracy Favre, Chair (TF)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	No	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD

Aquaculture- Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD
Aquaculture- Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD
Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD

Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11.		Proposal Fall 2014
Acidified Sodium chlorite (ASC)	205.603(a)(b)	JD	2008 TR	Petition sent to LS on 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled.	08 20 13	Proposal Fall 2014
Aluminum Sulfate (PDF)	205.603	JR		The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request/Questions due 05 13 14.		Proposal Fall 2014

Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines update)	JR/NM	Yes (revised and sent 12/5/11)	Spring 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Proposal Fall 2014

* **Yellow highlight** indicates committee action needed

Agenda

- Approve notes from April 15, 2014
- 2017 sunsets TR determinations schedule- Assign reviewer for aluminum sulfate
- Schedule materials for discussion
- Aquaculture work trail
- Discuss research priorities
- Adjourn

Discussion

- **Notes from April 15, 2014** approved with no changes.
- **2017 sunsets TR determinations** - The NOP suggested that the group might want to request a TR for iodine, as well as for excipients, as neither had been done previously. The group discussed oral comments received at the spring meeting, which JD offered to forward to the EBR.
- **Assign reviewer for aluminum sulfate** - JR volunteered to review this for next call. The table above was changed to reflect this new assignment
- **Schedule materials for discussion** - materials were scheduled for review (see below).
- **Aquaculture** - the members discussed the process for creating a document trail and suggested that the LS Chair create the initial document and then others can add to it or edit. The document should include all the pertinent information a future Board may need in order to complete the review and voting process for these materials: The dates for receipt of the petitions, history of discussions, the actions taken by the Board, the summary of the comments, and the justification for why they proposals were deferred at the spring 2014 meeting. The NOSB wants to ensure that if the Aquaculture Rule is not released while the current Board is seated, the future Board will be able to go forth with the materials without having to duplicate work and effort.
- **Research priorities** - The Livestock Subcommittee had 3 research priorities, and was asked to prepare any new topics for the fall 2014 meeting. The list is due to the Materials Subcommittee, via CW who is the LS liaison, by August 11th.
 - A member asked if the GMO vaccines project is still a high priority. The lead reviewer feels that it is imperative to keep it on the list as they are still waiting for guidance and clarification. Going forward, the Vaccines working group and the NOP will be exploring data collection on non-GMO vaccine use.
- The Livestock Subcommittee meeting was adjourned.

[Previous LS Notes](#)

Future Call Schedule:

April 15, 2014 3:00 ET

Dress rehearsal for spring meeting

Review public comment

Finalize decision on Chlorine annotation/narrative change.

2017 sunsets TR determinations

May 20, 2014 3:00 ET

2017 sunsets TR determinations

Assign aluminum sulfate

June 3, 2014 3:00 ET

Methionine (MS)

ASC additional discussion

Aluminum sulfate (JR)

2017 Sunsets (TF) (6)

2017 Sunsets CW (6)

June 17, 2014 3:00 ET

JD (4)

CBo (5)

July 1, 2014 3:00 ET
 MS (5)
 July 15, 2014 3:00 ET
 FT (7)
 Aug 5, 2014 3:00 ET
 Aug 19, 2014 3:00 ET
 Sep 2, 2014 3:00 ET
 Sep 16, 2014 3:00 ET
 Oct 7, 2014 3:00 ET
 Oct 21, 2014 3:00 ET
 Nov 4, 2014 3:00 ET
 Nov 18, 2014 3:00 ET

Fall 2014 Milestones	Target date
NOSB Subcommittee requests technical reports for Sunset 2017 substances	Jul 15, 2014
NOP - Complete tentative agenda	Aug 7, 2014
NOSB - Fall 2014 proposals due to NOP	Aug 27, 2014
NOP - Post proposals, Publish FRN, Open public comment	Sep 8, 2014
NOSB Subcommittees - submit tentative workplans to NOP	Sept 11, 2014
Discuss workplans on ES call	Sept 12, 2014
Public comment closes	Oct 7, 2014
Workplans finalized on ES call (last call before fall mtg)	Oct 17, 2014
NOP - Send compiled public comments to NOSB	Oct 13, 2014
Fall 2014 NOSB Meeting – Louisville, KY	Oct 27 - Oct 31

2017 Sunsets (TR requests due to NOP July 2014)						
Substance	NL §	Contact	TR requested	Notes	Vote	Meeting
Alginic Acid	205.605(a)	TF				
Aspirin	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF				Summary: Spr 2015 Review: Fall 2015

Butorphanol	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Calcium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorine dioxide	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Copper sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Electrolytes	205.603	CW				Summary: Spr 2015 Review: Fall 2015
EPA List 4 - Inerts of Minimal Concern	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Ethanol	205.603	MS	Y	TR in development		Summary: Spr 2015 Review: Fall 2015
Excipients	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Fenbendazole	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Flunixin	205.603	TF				Summary: Spr 2015 Review: Fall 2015

Formic Acid	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Furosemide	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Glucose	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Glycerine	205.603	TF				Summary: Spr 2015 Review: Fall 2015
Hydrated lime	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Hydrogen peroxide	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (a)(14)	JR	N			Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (b)(2)	JR				Summary: Spr 2015 Review: Fall 2015
Isopropanol	205.603	CW	Y	TR in development		Summary: Spr 2015 Review: Fall 2015
Ivermectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Lidocaine	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015

Magnesium hydroxide	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Magnesium sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Methionine	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Mineral oil	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Moxidectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Oxytocin	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Peracetic acid	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
Phosphoric acid	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
Poloxalene	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Procaine	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
Sodium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015

Strychnine	205.604	JR	N			Summary: Spr 2015 Review: Fall 2015
Sucrose octanoate esters	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Tolazoline	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Trace minerals	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Vaccines	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
Vitamins	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Xylazine	205.603	CBo				Summary: Spr 2015 Review: Fall 2015

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, June 3, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Joe Dickson, Vice Chair (JD), Jean Richardson (JR), Colehour Bondera (CBo), Francis Thicke (FT), Calvin Walker (CW), Jay Feldman - sitting in, Harold Austin (HA) - sitting in, Carmela Beck - sitting in

Absent: Mac Stone (MS)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	No	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD

Aquaculture- Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD
Aquaculture- Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD
Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD

Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11.		Proposal Fall 2014
Acidified Sodium chlorite (ASC)	205.603(a)(b)	JD	2008 TR	Petition sent to LS 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled.		Proposal Fall 2014
Aluminum Sulfate (PDF)	205.603	JR		The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 03 14.		Proposal Fall 2014
Sodium Bisulfate (PDF)	205.603	JR		Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14.		TBD

Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines)	JR/NM	Yes (revised and sent 12/5/11)	Spring 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Proposal Fall 2014

* **Yellow highlight** indicates committee action needed

Agenda

- **Approve notes from May 20, 2014**
- **Methionine (MS)**
- **ASC additional discussion**
- **Aluminum sulfate (JR)**

- **2017 Sunsets (TF) (6)**
- **2017 Sunsets (CW) (6)**
- **Adjourn**

Discussion

- **Notes from May 20, 2014** approved with no changes.
- **Methionine (MS)** - deferred to next call. MS will discuss the proposal with JR and report back on next call.
- **ASC additional discussion** - The group discussed a petition that was mentioned at the spring meeting and will seek more information from the commenter.
- **Aluminum sulfate (JR)** - The lead reviewer summarized the review of Aluminum Sulfate (Alum), which has been petitioned for addition to the NL at §205.603 for Livestock and §205.601 crops. The two interrelated requests will be handled sequentially; Livestock in fall 2014 and Crops in spring 2015. Petitioned Use: 1. For addition/amendment to poultry livestock bedding/litter for control of Ammonia which poses a health hazard to the livestock and to the humans who care for them. 2. Alum treated litter is approved by the EPA/National Resource Conservation Service (NRCS) as part of Environmental Quality Incentives Program (EQIP). NRCS pays an incentive to encourage farmers to use alum which binds soluble phosphorus in litter, thus preventing phosphorus run off into lakes and streams with the associated algal blooms and eutrophication of water bodies. Thus, chicken manure treated with alum could have added benefits for soil and water conservation and nutrient availability. The lead suggests asking for a TR focusing on use of alum in the livestock house. Questions should include details on alternative materials that can be used to reduce ammonia in poultry houses, breakdown products of alum in the litter while it is in contact with poultry feet and feathers, and if there are any issues with birds ingesting alum. A member suggested adding questions about ventilation and ammonium buildup. The group discussed asking for a combined TR and felt that if they did, then the Crops Subcommittee should commence with its review instead of waiting. JR will write a list of questions for the TR and share them with the NOP to pass along to Crops.
- **2017 Sunsets (TF)**. The lead reviewer doesn't feel there is a need for new TRs for any of the 5 materials: Atropine, Flunixin, Furosemide, Glycerine, EPA List 4 - Inerts of Minimal Concern, Alginic acid. The group discussed the EPA List 4 Inerts and how to proceed. A member, who serves on the Inerts Working Group (IWG), and the NOP both noted that the IWG is working on this and suggested it might be best for the LS to postpone its review until more information is available. The IWG has already grouped some of the chemicals, but it is difficult to know which inerts are used in livestock products so it would be hard to parse out the reviews to various Subcommittees while the initial determination is in progress. . The LS Chair asked if it would be able to get feedback from the IWG before the TR request deadline. The NOP indicated that it would be possible and plan to provide the LS with an update in the near future.
- **Alginic Acid** belongs in Handling not Livestock. MA will correct this in their respective notes.
- **2017 Sunsets CW (6)** - CW asked how best to review materials and determine if a TR is necessary when the last TR was old (ca. 1995) or doesn't exist at all. A member suggested that if a reviewer feels there is insufficient info to make a determination, then that would warrant a TR request. CW will forward his list of sunset materials to the group by COB Thursday.
- **Aquaculture breadcrumb trail**. The group discussed how to gather the pertinent information and what to include in a document they feel will be extremely beneficial to future Boards as they go forth with the review of aquaculture materials.

- **Research Priorities** - CW reminded the group that the LS needs to discuss its research priorities (past ones) and think about and prepare any new topics for the fall 2014 meeting. The list is due to the Materials Subcommittee, via CW who is the LS liaison, by August 11th.
- The Livestock Subcommittee meeting was adjourned.

[Previous LS Notes](#)

Future Call Schedule:

May 20, 2014 3:00 ET

2017 sunsets TR determinations

Assign aluminum sulfate

June 3, 2014 3:00 ET

Methionine (MS) - deferred

ASC additional discussion

Aluminum sulfate (JR)

2017 Sunsets (TF) (6)

2017 Sunsets CW (6)

June 17, 2014 3:00 ET

Methionine (MS)

Aluminum sulfate (JR) - Discuss TR questions?

2017 Sunsets:

JD (4) (Calcium hypochlorite, Chlorhexidine, Chlorine dioxide, Sodium hypochlorite)

CBo (5) (Butorphanol, Excipients, Formic Acid, Mineral oil, Xylazine)

JR (1) Revisit Iodine and need for TR

July 1, 2014 3:00 ET

Rank Research Priorities (all)

2017 Sunsets:

MS (5) (Copper sulfate, Ethanol, Hydrated lime, Magnesium hydroxide, Magnesium sulfate, Methionine)

July 15, 2014 3:00 ET (TF may not be on call)

2017 Sunsets:

FT (7) (Fenbendazole, Ivermectin, Moxidectin, Poloxalene, Sucrose octanoate esters, Tolazoline, Trace minerals)

Aug 5, 2014 3:00 ET

TF update on AQ legacy document

Aug 19, 2014 3:00 ET

Sep 2, 2014 3:00 ET

Sep 16, 2014 3:00 ET

Oct 7, 2014 3:00 ET

Oct 21, 2014 3:00 ET

Nov 4, 2014 3:00 ET

Nov 18, 2014 3:00 ET

Fall 2014 Milestones	Target date
NOSB Subcommittee requests technical reports for Sunset 2017 substances	Jul 15, 2014

NOP - Complete tentative agenda	Aug 7, 2014
NOSB - Fall 2014 proposals due to NOP	Aug 27, 2014
NOP - Post proposals, Publish FRN, Open public comment	Sep 8, 2014
NOSB Subcommittees - submit tentative workplans to NOP	Sept 11, 2014
Discuss workplans on ES call	Sept 12, 2014
Public comment closes	Oct 7, 2014
Workplans finalized on ES call (last call before fall mtg)	Oct 17, 2014
NOP - Send compiled public comments to NOSB	Oct 13, 2014
Fall 2014 NOSB Meeting – Louisville, KY	Oct 27 - Oct 31

2017 Sunsets (TR requests due to NOP July 2014)						
Substance	NL §	Contact	TR requested	Notes	Vote	Meeting
Aspirin	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF	N			Summary: Spr 2015 Review: Fall 2015
Butorphanol	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Calcium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Chlorine dioxide	205.603	JD				Summary: Spr 2015 Review: Fall 2015

Copper sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Electrolytes	205.603	CW				Summary: Spr 2015 Review: Fall 2015
EPA List 4 - Inerts of Minimal Concern	205.603	TF	N			Summary: Spr 2015 Review: Fall 2015
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Excipients	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Fenbendazole	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Flunixin	205.603	TF	N			Summary: Spr 2015 Review: Fall 2015
Formic Acid	205.603	CBo				Summary: Spr 2015 Review: Fall 2015
Furosemide	205.603	TF	N			Summary: Spr 2015 Review: Fall 2015
Glucose	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Glycerine	205.603	TF	N			Summary: Spr 2015 Review: Fall 2015

Hydrated lime	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Hydrogen peroxide	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (a)(14)	JR	N			Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (b)(2)	JR	N			Summary: Spr 2015 Review: Fall 2015
Isopropanol	205.603	CW	Y	TR in development		Summary: Spr 2015 Review: Fall 2015
Ivermectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Lidocaine	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
Magnesium hydroxide	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Magnesium sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Methionine	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Mineral oil	205.603	CBo				Summary: Spr 2015 Review: Fall 2015

Moxidectin	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Oxytocin	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Peracetic acid	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
Phosphoric acid	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
Poloxalene	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Procaine	205.603	JR				Summary: Spr 2015 Review: Fall 2015
Sodium hypochlorite	205.603	JD				Summary: Spr 2015 Review: Fall 2015
Strychnine	205.604	JR	N			Summary: Spr 2015 Review: Fall 2015
Sucrose octanoate esters	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Tolazoline	205.603	FT				Summary: Spr 2015 Review: Fall 2015
Trace minerals	205.603	FT				Summary: Spr 2015 Review: Fall 2015

Vaccines	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
Vitamins	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Xylazine	205.603	CBo				Summary: Spr 2015 Review: Fall 2015

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, June 17, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Joe Dickson, Vice Chair (JD), Jean Richardson (JR), Colehour Bondera (CBo), Calvin Walker (CW), Jay Feldman - sitting in

Absent: Francis Thicke (FT), Mac Stone (MS)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11.		Proposal Fall 2014
Acidified Sodium chlorite (ASC)	205.603(a)(b)	JD	2008 TR	Petition sent to LS 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled.		Proposal Fall 2014
Aluminum Sulfate (PDF)	205.603	JR	Y	The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 18 14.		Proposal Fall 2014
Sodium Bisulfate (PDF)	205.603	JR		Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14.		TBD
Zinc Sulfate (PDF)	205.603	TF		Petition sent to LS 06 16 14. Sufficiency due 8 19 14		TBD
Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	No	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal TBD

Aquaculture- Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture- Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD
Aquaculture- Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD
Aquaculture- Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD
Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD

Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD
Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD
Other projects						
Project	Contact	TR Reqst?	Notes		Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines)	JR/NM	Yes (revised and sent 12/5/11)	Spring 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12		NA	Proposal Fall 2014

* **Yellow highlight** indicates committee action needed

Agenda

- **Approve notes from June 3, 2014**
- **Methionine (MS)**
- **Aluminum sulfate (JR)** - Discuss TR questions?
- **2017 Sunsets - TR Determination:**
 - JD (4) (Calcium hypochlorite, Chlorhexidine, Chlorine dioxide, Sodium hypochlorite)
 - CBo (5) (Butorphanol, Excipients, Formic Acid, Mineral oil, Xylazine)

- JR (1) Revisit Iodine and need for TR
- **Adjourn**

Discussion

- **Notes from June 3, 2014** were approved with no changes.
- **Methionine (MS)** - postponed to July 1
- **Aluminum sulfate (JR)** - The group discussed various questions to include in the TR request and suggested sharing them with Crops Subcomm. Once the Livestock Subcommittee is done, Crops will discuss this. JR will copy the CS Chair when she sends the questions to the members for feedback.
- **2017 Sunsets:**
 - **Calcium hypochlorite, Chlorine dioxide, Sodium hypochlorite (JD)** - These substances were the subject of a recent, high quality TR, and therefore a new TR is not recommended for Chlorine Materials. Several other Subcomm members were in agreement and supportive of the assessment.
 - **Chlorhexidine (JD)** - The lead reviewer recommended a new TR based on the questions of essentiality surrounding teat dips and mastitis preventatives and treatments, along with the technical complexity of this veterinary issue. The group discussed seeking a new TR on this material or perhaps teat dips as a group. The members were in agreement that requesting a TR with specific questions alternatives for mastitis treatments would be very useful. The group will discuss this further on the July 1 call.
 - **Butorphanol (CBo)** - Listed at §205.603(a),(5) Butorphanol (CAS # 42408-82-2). The 2002 TAP review, although old, seems exceptionally thorough, and the reviewers were all supportive of the listing as annotated. Butorphanol has a low priority for a new TR. A member asked about the recommended withdrawal period and if it seemed reasonable. Another member questioned the best way to determine such things. The NOP noted that the rationale for the withdrawal period is described in the FR notices, and offered to find some background info and send it to the group.
 - **Excipients (CBo)** - Listed at §205.603(f). No petition, TAP or TR. The annotation in the listing has been recognized as incomplete, and in 2009 the NOSB passed a recommendation to add “or approved by APHIS” at the end of the listing. This was accepted by the NOP, but has not been put into regulation yet. In 2010, the NOSB recommended renewal of the original listing. The group feels a TR is necessary and discussed how to request a TR for a class of materials acknowledging that it will be complicated.
 - **Formic Acid (CBo)** - Listed at §205.603(b)(2) Formic acid (CAS # 64-18-6). The lead reviewer feels that no new TR is needed; however, formic acid was approved before the apiculture regulations have been published, and therefore should be reconsidered in light of apiculture regulations. Especially essentiality.
 - **Mineral oil (CBo)** - 205.603(b). 2002 TAP Review. Mid-level need for an updated TR.
 - **Xylazine (CBo)** - Listed at §205.603(a)(23) (CAS # 7361-61-7). Used as a sedative in surgeries. 2002 TAP Review seems thorough and this material doesn't seem to be a high priority for a new TR. Members discussed reviewing this in conjunction with Tolazoline as they are used together. CBo will discuss this idea with FT and will revisit the need for a TR on the next LS call.
 - **Iodine (JR)** - §205.603 (a) and (b). The group discussed this on the April 1 call and did not recommend a TR. The NOP suggested that they might want to request one because there are many forms of iodine products on the market, and the 1995 TAP is very brief.

Members discussed what they would do with new information, since iodine is seen as very essential for dairy producers. Since annotation changes cannot be handled during sunset review, a new TR would provide information that could be used in a petition to add an annotation.

- **Zinc Sulfate (PDF)** - Petition was sent to the Subcommittee on June 16 and assigned to TF to review.
- The group added time onto the next call for a discussion on research priorities.
- **The meeting was adjourned**

[Previous LS Notes](#)

Future Call Schedule:

June 3, 2014 3:00 ET

Methionine (MS) - deferred
ASC additional discussion
Aluminum sulfate (JR)
2017 Sunsets (TF) (6)
2017 Sunsets CW (6)

June 17, 2014 3:00 ET

Methionine (MS) - postponed to July 1
Aluminum sulfate (JR) - Discuss TR questions?
2017 Sunsets:

- JD (4) (Calcium hypochlorite, Chlorhexidine, Chlorine dioxide, Sodium hypochlorite)
- CBo (5) (Butorphanol, Excipients, Formic Acid, Mineral oil, Xylazine)
- JR (1) Revisit Iodine and need for TR

July 1, 2014 3:00 ET

Methionine (MS)
Rank Research Priorities (all)
Discuss Chlorhexidine TR questions (JD)
2017 Sunset TR Determinations:

- MS (5) (Copper sulfate, Ethanol, Hydrated lime, Magnesium hydroxide, Magnesium sulfate, Methionine)
- CW (6) (Electrolytes, Glucose, Hydrogen peroxide, Isopropanol, Oxytocin, Vitamins)

July 15, 2014 3:00 ET (TF may not be on call)

2017 Sunset TR Determinations:

- FT (7) (Fenbendazole, Ivermectin, Moxidectin, Poloxalene, Sucrose octanoate esters, Tolazoline, Trace minerals)

Aug 5, 2014 3:00 ET

TF update on AQ legacy document

Aug 19, 2014 3:00 ET

Sep 2, 2014 3:00 ET

Sep 16, 2014 3:00 ET

Oct 7, 2014 3:00 ET

Oct 21, 2014 3:00 ET

Nov 4, 2014 3:00 ET

Nov 18, 2014 3:00 ET

Fall 2014 Milestones	Target date
NOSB Subcommittee requests technical reports for Sunset 2017 substances	Jul 15, 2014
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Fall 2014 NOSB Meeting – Louisville, KY	Oct 27 - Oct 31

2017 Sunsets (TR requests due to NOP July 2014)						
Substance	NL §	Contact	TR requested	Notes	Vote	Meeting
Aspirin	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF	N			Summary: Spr 2015 Review: Fall 2015
Butorphanol	205.603	CBo	N (likely)			Summary: Spr 2015 Review: Fall 2015
Calcium hypochlorite	205.603	JD	N			Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD	Y			Summary: Spr 2015 Review: Fall 2015
Chlorine dioxide	205.603	JD	N			Summary: Spr 2015 Review: Fall 2015

Copper sulfate	205.603	MS				Summary: Spr 2015 Review: Fall 2015
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EPA List 4 - Inerts of Minimal Concern	205.603	TF	N			Summary: Spr 2015 Review: Fall 2015
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Fenbendazole	205.603	FT				Summary: Spr 2015 Review: Fall 2015
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Furosemide	205.603	TF	N			Summary: Spr 2015 Review: Fall 2015
Glucose	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Glycerine	205.603	TF	N			Summary: Spr 2015 Review: Fall 2015

Hydrated lime	205.603	MS				Summary: Spr 2015 Review: Fall 2015
Hydrogen peroxide	205.603	CW				Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (a)(14)	JR	?			Summary: Spr 2015 Review: Fall 2015
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Tolazoline	205.603	FT	?			Summary: Spr 2015 Review: Fall 2015
Trace minerals	205.603	FT				Summary: Spr 2015 Review: Fall 2015

Vaccines	205.603	JR	N			Summary: Spr 2015 Review: Fall 2015
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Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, July 1, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Jean Richardson (JR), Colehour Bondera (CBo), Calvin Walker (CW), Francis Thicke (FT), Wendy Fulwider (WF), Jay Feldman - sitting in

Absent: Mac Stone (MS), Joe Dickson, Vice Chair (JD)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
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Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD
Aquaculture-Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD
Aquaculture-Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD

Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD
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Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
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* **Yellow highlight** indicates committee action needed

Agenda

- Approve notes from June 17, 2014
- Methionine (MS)
- Rank Research Priorities (all)
- Discuss Chlorhexidine TR questions (JD)
- 2017 Sunset TR Determinations:
 - Copper sulfate (MS)
 - Ethanol (MS)
 - Hydrated lime (MS)
 - Magnesium hydroxide (MS)
 - Magnesium sulfate (MS)
 - Methionine (MS)
 - Electrolytes (CW)
 - Glucose (CW)
 - Hydrogen peroxide (CW)
 - Isopropanol (CW)
 - Oxytocin (CW)
 - Vitamins (CW)
- **Adjourn**

Discussion

- **Notes from June 17, 2014** were approved with no changes.
- **Methionine (MS)** - postponed to next call. The Chair indicated that the LS will have a solid proposal for the fall 2014 meeting.
- **Rank Research Priorities (CW)**. The list was sent to members prior to call. Top three priorities: GMO vaccines, Organic Aquaculture, and Methionine alternatives. The LS Chair suggested adding pastured poultry. TF asked that CW take the prior list and revise it, based on feedback from the working group, and resubmit it. [Note: after the call members decided GM vaccines are not a candidate for research, but further work will be done on a proposal]
- **Discuss Chlorhexidine TR questions (JD)** - Sunset 2017. WF will develop a list of specific questions in consultation with FT and JD this afternoon and send to the group.
- **2017 Sunset TR Determinations:**
 - **Copper sulfate (MS)**. Postponed to July 15
 - **Ethanol (MS)**. Postponed to July 15
 - **Hydrated lime (MS)**. Postponed to July 15
 - **Magnesium hydroxide (MS)**. Postponed to July 15
 - **Magnesium sulfate (MS)**. Postponed to July 15
 - **Methionine (MS)**. Postponed to July 15
 - **Electrolytes (CW)**. 1995 TAP. Added to the National List, section 205.603(a)(8) with annotation: without antibiotics. Relisted in 2012 without a new TR. . New TR needed.
 - **Glucose (CW)**. 1995 TAP, §205.603. Classified as synthetic. Used as an electrolyte. Relisted in 2012 without a new TR. A member suggested that this might be a GMO material. No separate TR needed, as it will be included in review for electrolytes.
 - **Hydrogen peroxide (CW)**. Added to §205.603(a)(13), relisted in 2012. Alternative to Chlorine. The group discussed the uses for livestock and determined a low to medium need for TR.

- **Isopropanol** (CW). 1995 TAP. Added to §205.603 with annotation. Relisted in 2012. TR in development for both Crops and Livestock
 - **Oxytocin** (CW). 1995 TAP and 2005 Technical Evaluation Report (not posted yet - EBR will send to the group and the NL Manager for posting). Added to §205.603 with annotation: Use in post parturition therapeutic applications. Relisted in 2006 and 2010. No TR needed. The group discussed international use of this substance and there was some disagreement as to whether or not it was allowed by EU, CODEX, CN, etc. Once the group receives the TR to review they will determine if a new TR is necessary.
 - **Vitamins** (CW). 1995 TAP. Added to §205.603, with annotation: Use as feed additive. Feels a limited scope TR is needed to explore alternatives. There is an April 2013 TR for vitamins for AQ animals. The NOP will find the original recommendations for vitamins and minerals in the “Green book” and send them to the group.
- **The meeting was adjourned**

Previous LS Notes

Future Call Schedule:

June 17, 2014 3:00 ET

Methionine (MS) - postponed to July 1

Aluminum sulfate (JR) - Discuss TR questions?

2017 Sunsets:

- JD (4) (Calcium hypochlorite, Chlorhexidine, Chlorine dioxide, Sodium hypochlorite)
- CBo (5) (Butorphanol, Excipients, Formic Acid, Mineral oil, Xylazine)
- JR (1) Revisit Iodine and need for TR

July 1, 2014 3:00 ET

Methionine (MS)

Rank Research Priorities (all)

Discuss Chlorhexidine TR questions (JD)

2017 Sunset TR Determinations:

- MS (6) (Copper sulfate, Ethanol, Hydrated lime, Magnesium hydroxide, Magnesium sulfate, Methionine) - postponed to July 15
- CW (6) (Electrolytes, Glucose, Hydrogen peroxide, Isopropanol, Oxytocin, Vitamins)

July 15, 2014 3:00 ET (TF will not be on call)

2017 Sunset TR Determinations:

- FT (7) (Fenbendazole, Ivermectin, Moxidectin, Poloxalene, Sucrose octanoate esters, Tolazoline, Trace minerals)
- TF (6) (Copper sulfate, Ethanol, Hydrated lime, Magnesium hydroxide, Magnesium sulfate, Methionine)
- Discuss Chlorhexidine TR questions (JD)
- Xylazine final discussion (CBo)
- Oxytocin (CW)

Zinc sulfate sufficiency (TF)

Report on GMO vaccine info the Vaccines working group (VMWEM)

Aug 5, 2014 3:00 ET

Discuss non-GMO vaccine verification issue

Update on AQ legacy document (TF)

Aug 19, 2014 3:00 ET

Sep 2, 2014 3:00 ET

Sep 16, 2014 3:00 ET
 Oct 7, 2014 3:00 ET
 Oct 21, 2014 3:00 ET
 Nov 4, 2014 3:00 ET
 Nov 18, 2014 3:00 ET

Fall 2014 Milestones	Target date
NOSB Subcommittee requests technical reports for Sunset 2017 substances	Jul 15, 2014
NOP - Complete tentative agenda	Aug 7, 2014
NOSB - Fall 2014 proposals due to NOP	Aug 27, 2014
NOP - Post proposals, Publish FRN, Open public comment	Sep 8, 2014
NOSB Subcommittees - submit tentative workplans to NOP	Sept 11, 2014
Discuss workplans on ES call	Sept 12, 2014
Public comment closes	Oct 7, 2014
Workplans finalized on ES call (last call before fall mtg)	Oct 17, 2014
NOP - Send compiled public comments to NOSB	Oct 13, 2014
Fall 2014 NOSB Meeting – Louisville, KY	Oct 27 - Oct 31

2017 Sunsets (TR requests due to NOP July 2014)							
Substance	NL §	Cont act	TR reqst	New TR reqst?	Notes	Vote	Meeting
Aspirin	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Butorphanol	205.603	CBo	N (likely)	? Low priority (06 17)			Summary: Spr 2015 Review: Fall 2015
Calcium hypochlorite	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015

Chlorhexidine	205.603	JD	Y	Y (06 17)			Summary: Spr 2015 Review: Fall 2015
Chlorine dioxide	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Copper sulfate	205.603	TF		?			Summary: Spr 2015 Review: Fall 2015
Electrolytes	205.603	CW		Y (07 01)			Summary: Spr 2015 Review: Fall 2015
EPA List 4 - Inerts of Minimal Concern	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Ethanol	205.603	TF	Y	Y	TR in development		Summary: Spr 2015 Review: Fall 2015
Excipients	205.603	CBo	Y	Y (06 17)			Summary: Spr 2015 Review: Fall 2015
Fenbendazole	205.603	FT		?			Summary: Spr 2015 Review: Fall 2015
Flunixin	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Formic Acid	205.603	CBo	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Furosemide	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015

Glucose	205.603	CW		N (07 01)			Summary: Spr 2015 Review: Fall 2015
Glycerine	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Hydrated lime	205.603	TF		?			Summary: Spr 2015 Review: Fall 2015
Hydrogen peroxide	205.603	CW		Y Low to med need (07 01)			Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (a)(14)	JR	?	Y (06 17)			Summary: Spr 2015 Review: Fall 2015
Iodine	205.603 (b)(2)	JR	N	Y (06 17)			Summary: Spr 2015 Review: Fall 2015
Isopropanol	205.603	CW	Y	Y in development	TR in development		Summary: Spr 2015 Review: Fall 2015
Ivermectin	205.603	FT		?			Summary: Spr 2015 Review: Fall 2015
Lidocaine	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Magnesium hydroxide	205.603	TF		?			Summary: Spr 2015 Review: Fall 2015
Magnesium sulfate	205.603	TF		?			Summary: Spr 2015 Review: Fall 2015

Methionine	205.603	TF		?			Summary: Spr 2015 Review: Fall 2015
Mineral oil	205.603	CBo	N	Y (06 17)			Summary: Spr 2015 Review: Fall 2015
Moxidectin	205.603	FT		?			Summary: Spr 2015 Review: Fall 2015
Oxytocin	205.603	CW		N (07 01)			Summary: Spr 2015 Review: Fall 2015
Peracetic acid	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Phosphoric acid	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Poloxalene	205.603	FT		?			Summary: Spr 2015 Review: Fall 2015
Procaine	205.603	JR		N (04 01)			Summary: Spr 2015 Review: Fall 2015
Sodium hypochlorite	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Strychnine	205.604	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Sucrose octanoate esters	205.603	FT		?			Summary: Spr 2015 Review: Fall 2015

Tolazoline	205.603	FT	?	?			Summary: Spr 2015 Review: Fall 2015
Trace minerals	205.603	FT		?			Summary: Spr 2015 Review: Fall 2015
Vaccines	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Vitamins	205.603	CW		Y Lmtd scope (07 01)			Summary: Spr 2015 Review: Fall 2015
Xylazine	205.603	CBo	?	?			Summary: Spr 2015 Review: Fall 2015

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, July 15, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Jean Richardson (JR), Colehour Bondera (CBo), Calvin Walker (CW), Francis Thicke (FT), Wendy Fulwider (WF), Joe Dickson, Vice Chair (JD), Jay Feldman - sitting in

Absent: Mac Stone (MS)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11.		Proposal Fall 2014
Acidified Sodium chlorite (ASC)	205.603(a)(b)	JD	2008 TR	Petition sent to LS 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled.		Proposal Fall 2014
Aluminum Sulfate (PDF)	205.603	JR	Y	The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 18 14.		TBD
Sodium Bisulfate	205.603	JR		Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14.		TBD
Zinc Sulfate	205.603	TF		Petition sent to LS 06 16 14. Q's for petitioner/TR request due 8 19 14		TBD

Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	N	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD
Aquaculture-Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD
Aquaculture-Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD

Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD
Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD

2017 Sunsets

Summary: Spr 2015 Review: Fall 2015

Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Butorphanol	205.603	CBo	2002 TR Y	Lower priority		Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD	2010 TR Y			
Copper sulfate	205.603	TF	1995 TAP Y Lmtd Scope			
Electrolytes	205.603	CW	1995 TAP Y			

Ethanol	205.603	TF	Y	TR in development		
Excipients	205.603	CBo	Y			
Fenbendazole	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Moxidectin and Ivermectin)		
Ivermectin	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Fendbendazole and Moxidectin)		
Moxidectin	205.603	FT	2003 TR Y	Y, combined with other paraciticides (Fendbendazole and Ivermectin)		
Hydrated lime	205.603	TF	1995 TAP			
Hydrogen peroxide	205.603	CW		Y Low to med need		
Iodine	205.603 (a)(14) and 205.603 (b)(2)	JR	1994 TAP Y			
Isopropanol	205.603	CW	Y	TR in development		
Mineral oil	205.603	CBo	2002 TR Y			
Vitamins	205.603	CW	Y Lmtd scope			
Tolazoline	205.603	FT	2002 TR Y	Combined w/Xylazine med priority		
Xylazine	205.603	CBo	2002 TR Y	Combined w/Tolazoline med priority		

Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines)	JR/NM	<u>Yes</u> (revised and sent 12/5/11)	Spring 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Proposal Fall 2014

* **Yellow highlight** indicates committee action needed

Agenda

- Approve notes from July 1, 2014
- 2017 Sunset TR Determinations:
 - Fenbendazole (FT)
 - Ivermectin (FT)
 - Moxidectin (FT)
 - Poloxalene (FT)
 - Sucrose octanoate esters (FT)
 - Tolazoline (FT)
 - Trace minerals (FT)

- Copper sulfate (TF)
- Ethanol (TF)
- Hydrated lime (TF)
- Magnesium hydroxide (TF)
- Magnesium sulfate (TF)
- Methionine (TF)
- Oxytocin (CW) - TR was posted to NOP site after July 1 call. Need to complete determination.
- Vitamins (CW) - Original vitamin recommendation sent to LS July 1. Need to complete TR determination.
- Xylazine (CBo) - Revisit TR determination.
- Discuss Chlorhexidine TR questions (JD)
- Finalize the Research Priorities ranking (all)
- Adjourn

Discussion

- **Notes from July 1, 2014** were approved with no changes
- **2017 Sunset TR Determinations**
 - **Parasticides: Fenbendazole, Ivermectin, Moxidectin** (FT). A combination TR for Ivermectin, Moxidectin and Fenbendazole to compare the efficacy and health and environmental effects of the three parasiticides, with particular attention to the question of whether all three parasiticides are needed, or if the one or two most benign would be adequate to meet the needs of organic livestock producers. The group discussed whether or not there were regional differences or levels of effectiveness based on various parasites. The group also discussed alternatives such as herbal based products, which are fairly new, as well as animal husbandry practices. The NOP noted that there are different uses based on species and labeling restrictions.
 - **Poloxalene** (FT). For emergency treatment of bloat. Petitioned in December 2000. TAP review February 2001. The TAP review was found quite thorough, and there is not likely to be a lot of new information available on bloat and the use of poloxalene. Therefore, a new TR is not a high priority.
 - **Sucrose octanoate esters** (FT). For control of mites in honeybees. Petition received January 2004, TR March 2005, NOSB vote to list, August 2005: 13-0. The TR seems to be comprehensive and should be adequate. This was not evaluated as part of the apiculture standards review so there is no other information to contradict the comprehensive nature of the 2005 TR. A member asked if the honey color is tainted by the use of this. The NOP suggested that it might be useful to ask pointed questions in the posting rather than requesting a TR.
 - **Tolazoline** (FT). Antidote for the sedative Xylazine. Petition received April 2002, TAP review August 2002 on both Xylazine and Tolazoline. Livestock Committee voted 2002: 3-0, and NOSB voted to list September 2002,.The TAP review focused primarily on Xylazine and did not offer much information on Tolazoline. A new TR would be a medium priority and if done should include both Xylazine and Tolazoline. The NOP will forward a 2007 FR notice to the group.
 - **Trace minerals** (FT). Could not find any TAP review or TR on file. NOSB voted to list in October 1995. NOSB sunset vote November 2005: 14-0. A TR was done on minerals for aquatic animals in June 2013, which covers information useful for minerals for terrestrial livestock; therefore the LS will not request a new TR. The group discussed this

in light of the vitamins TR request with a member noting that the main difficulty is finding minerals that are not proteinated with plant sources, which could contain GMOs.

- **Copper sulfate** (TF). Listed at 205.603(b) with no annotation. The NOP will try to locate an old TAP or TR if one exists. Commonly used as a foot treatment. The LS recommends a limited scope TR to ascertain whether there are alternatives.
 - **Ethanol** (TF). Listed at 205.603(a)(1)(i) with annotation: Ethanol - disinfectant and sanitizer only, prohibited as a feed additive. A TR is currently in development. The TR was requested to evaluate whether there are better alternatives and to get the most up to date technical information. A member asked if the TR will contain information about natural ethanol (i.e. non-GMO).
 - **Hydrated lime** (TF). Listed at 205.603(b) with annotation: as an external pest control, not permitted to cauterize physical alterations or deodorize animal wastes. The LS recommended a TR, as there is no current technical information available.
 - **Magnesium hydroxide** (TF). Synthetic listed at 205.603a) with annotation: Federal law restricts this drug to use by or on the lawful written or oral order of a licensed veterinarian, in full compliance with the AMDUCA and 21 CFR part 530 of the Food and Drug Administration regulations. Also, for use under 7 CFR part 205, the NOP requires use by or on the lawful written order of a licensed veterinarian. Used as a laxative and for short term relief of upset stomach. No TR recommended at this time.
 - **Magnesium sulfate** (TF). Listed at 205.603(a) with no annotation. There was a 2011 TR commissioned for Livestock so no new TR is recommended at this time.
 - **Methionine** (TF). Listed at 205.603(d) with the annotation: for use only in organic poultry production at the following maximum levels of synthetic methionine per ton of feed: laying and broiler chickens - 2 pounds; turkeys and all other poultry - 3 pounds. No TR recommended at this time. A member presented several questions for discussion: How will the NOSB proceed with this as a research priority and who will be conducting the research? Does the NOSB need to request a TR? The NOP asked how a TR would help their objectives, and the group agreed that a TR would not be the most useful mechanism to get the information they need. The Chair noted that there is a viable alternate annotation that they will bring to the fall 2014 meeting.
 - **Oxytocin** (CW). The NOP forwarded some additional information and posted the 2005 TR, which the lead reviewer felt was sufficient. The group discussed whether or not to request a new TR, and decided that since there are so many other materials that have no TRs this would be a lower priority.
 - **Vitamins** (CW). The lead recommended a limited scope TR.
 - **Xylazine** (CBo). See comments above re: Tolazoline
- **Discuss Chlorhexidine TR questions (JD)**: WF and FT will compile questions, and JD will finalize the document.
 - **Finalize the Research Priorities ranking (all)**. The LS Research Priorities list was ranked verbally and the Chair is waiting for a couple more determinations. The Materials Subcommittee will meet in early August to review the lists.
 - **The meeting was adjourned**

Previous LS Notes

Future Call Schedule:

July 1, 2014 3:00 ET

Methionine (MS) - postponed

Rank Research Priorities (all) - postponed
 Discuss Chlorhexidine TR questions (JD) - postponed

2017 Sunset TR Determinations:

- MS (6) (Copper sulfate, Ethanol, Hydrated lime, Magnesium hydroxide, Magnesium sulfate, Methionine) - postponed to July 15
- CW (6) (Electrolytes, Glucose, Hydrogen peroxide, Isopropanol, Oxytocin, Vitamins)

July 15, 2014 3:00 ET

2017 Sunset TR Determinations:

- FT (7) (Fenbendazole, Ivermectin, Moxidectin, Poloxalene, Sucrose octanoate esters, Tolazoline, Trace minerals)
- TF (6) (Copper sulfate, Ethanol, Hydrated lime, Magnesium hydroxide, Magnesium sulfate, Methionine)
- Vitamins
- Xylazine final discussion (CBo)
- Oxytocin (CW)

Discuss Chlorhexidine TR questions (JD)

Finalize Research Priorities Ranking (all)

Aug 5, 2014 3:00 ET

Discuss Chlorhexidine TR questions (JD)

Zinc sulfate - Determine need for TR or questions for petitioner (TF)

Sodium Bisulfate - Determine need for TR or questions for petitioner (JR)

Methionine proposal (MS)

Discuss non-GMO vaccine verification issue

Update on AQ legacy document (TF)

Report on GMO vaccine info from the Vaccines Working Group (VMWEM)

Aug 19, 2014 3:00 ET

Sep 2, 2014 3:00 ET

Sep 16, 2014 3:00 ET

Oct 7, 2014 3:00 ET

Oct 21, 2014 3:00 ET

Nov 4, 2014 3:00 ET

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Fall 2014 Milestones	Target date
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Discuss workplans on ES call	Sept 12, 2014
Public comment closes	Oct 7, 2014

Workplans finalized on ES call (last call before fall mtg)	Oct 17, 2014
NOP - Send compiled public comments to NOSB	Oct 13, 2014
Fall 2014 NOSB Meeting – Louisville, KY	Oct 27 - Oct 31

2017 Sunsets No TR requests

Substance	NL §	Cont act	TR reqst	New TR reqst?	Notes	Vote	Meeting
Aspirin	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Calcium hypochlorite	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Chlorine dioxide	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
EPA List 4 - Inerts of Minimal Concern	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Flunixin	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Formic Acid	205.603	CBo	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Furosemide	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Glucose	205.603	CW		N (07 01)			Summary: Spr 2015 Review: Fall 2015

Glycerine	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Lidocaine	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Magnesium hydroxide	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015
Magnesium sulfate	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015
Methionine	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015
Oxytocin	205.603	CW		N (07 01)			Summary: Spr 2015 Review: Fall 2015
Peracetic acid	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Phosphoric acid	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Poloxalene	205.603	FT		N			Summary: Spr 2015 Review: Fall 2015
Procaine	205.603	JR		N (04 01)			Summary: Spr 2015 Review: Fall 2015
Sodium hypochlorite	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015

Strychnine	205.604	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Sucrose octanoate esters	205.603	FT		N			Summary: Spr 2015 Review: Fall 2015
Trace minerals	205.603	FT		N			Summary: Spr 2015 Review: Fall 2015
Vaccines	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, August 5, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Joe Dickson, Vice Chair (JD), Jean Richardson (JR), Calvin Walker (CW), Francis Thicke (FT), Wendy Fulwider (WF), Mac Stone (MS), Colehour Bondera (CBo), Jay Feldman - sitting in

Absent: none

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11.		Proposal Fall 2014
Acidified Sodium chlorite (ASC) Petition Addendum #1 Petition Addendum #2	205.603(a)(b)	JD	2008 TR	Petition sent to LS 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled.		Proposal Fall 2014
Aluminum Sulfate (PDF)	205.603	JR	Y	The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 18 14.		Proposal Spring 2015
Sodium Bisulfate	205.603	JR		Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14. TR request sent to NOP 08 06 14		TBD
Zinc Sulfate	205.603	TF		Petition sent to LS 06 16 14. Q's for petitioner/TR request due 8 19 14. Limited Scope TR request sent to NOP 08 06 14		TBD

Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	N	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD
Aquaculture-Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD
Aquaculture-Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD

Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD
Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD

2017 Sunsets

Summary: Spr 2015 Review: Fall 2015

Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Butorphanol	205.603	CBo	2002 TR Y	Lower priority		Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD	2010 TR Y			
Copper sulfate	205.603	TF	1995 TAP Y Lmtd Scope			
Electrolytes	205.603	CW	1995 TAP			

Ethanol	205.603	TF	Y	TR in development		
Excipients	205.603	CBo	Y			
Fenbendazole	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Moxidectin and Ivermectin)		
Ivermectin	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Fendbendazole and Moxidectin)		
Moxidectin	205.603	FT	2003 TR Y	Y, combined with other paraciticides (Fendbendazole and Ivermectin)		
Hydrated lime	205.603	TF	1995 TAP			
Hydrogen peroxide	205.603	CW		Y Low to med need		
Iodine	205.603 (a)(14) and 205.603 (b)(2)	JR	1994 TAP Y			
Isopropanol	205.603	CW	Y	TR in development		
Mineral oil	205.603	CBo	2002 TR Y			
Vitamins	205.603	CW	Y Lmtd scope			
Tolazoline	205.603	FT	2002 TR Y	Combined w/Xylazine med priority		
Xylazine	205.603	CBo	2002 TR Y	Combined w/Tolazoline med priority		

Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines)	JR/NM	<u>Yes</u> (revised and sent 12/5/11)	Spring 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Proposal Fall 2014

* **Yellow highlight** indicates committee action needed

Agenda

- Approve notes from July 15, 2014
- Discuss Chlorhexidine TR questions (JD)
- Zinc sulfate - Determine need for TR or questions for petitioner (TF)
- Sodium Bisulfate - Determine need for TR or questions for petitioner (JR)
- Methionine proposal (MS)
- Update on AQ legacy document (TF)
- Report on GMO vaccine made with excluded methods (JR email July 27 @ 1)
- Adjourn

Discussion

- **Notes from July 15, 2014** were approved with changes.
- Chlorhexidine TR questions (JD). Several members of the Subcommittee compiled a list of questions that will be sent to the contractor for inclusion in the Technical Report. The Chair will forward the list to the NOP.
- Zinc sulfate (TF). Used in combination with copper sulfate for foot bath/dip. The lead reviewer found the petition sufficient and comprehensive. Since Zinc Sulfate is on the list but not for this use, there was no previous TR so the LS will request a limited scope TR to glean info about this application and potential alternatives.
- Sodium Bisulfate - Determine need for TR or questions for petitioner (JR). The petition was found to be complete and comprehensive. Petitioned for use as a poultry litter treatment for addition to 205.603 with the following proposed annotation: "To control ammonia in poultry houses for all species of domestic fowl in orders Galliformes and Anseriformes". Its uses are similar to those for aluminum sulfate for which the LS submitted questions as part of the TR request. Similar questions, with additional comments, apply for this material as well. The LS Chair will send the request for a TR, along with zinc sulfate.
- Methionine proposal (MS). The group reviewed the Methionine proposal, which was unchanged since the spring meeting except for an additional annotation to the effect that it will not reset the sunset clock. MET will sunset when it was originally scheduled: 2017. The group discussed this in light of the new sunset process and how this might affect the current review. The LS Chair emphasized that the new process does not preclude the Board from delisting materials; and finds that the sunset review is thorough. She added that this material is vital and does not want to see it delayed because some are unhappy with the new sunset process. A member suggested a fixed expiration date as opposed to the language about it undergoing a sunset review in 2017 in addition to its established 5-year sunset cycle. The NOP noted that sunset review will get reset for 5 years if the listing is amended, and perhaps the Board could request an intermediate review in the annotation. . Another member urged the group to keep the farmers and producers in mind as there is not currently an alternative for methionine. She added that the community is seeking alternatives but that the Board must act with compassion during the transition. Members noted that if there was no change, the sunset review would proceed on its current timeline for 2017. The topic will be discussed further at the next call.
- AQ legacy document (TF) - Postponed to next call
- Report on GMO Vaccines Made with Excluded methods (JR email July 27 @ 1) - Postponed to next call
- **The meeting was adjourned**

Previous LS Notes

Future Call Schedule:

July 15, 2014 3:00 ET

2017 Sunset TR Determinations:

- FT (7) (Fenbendazole, Ivermectin, Moxidectin, Poloxalene, Sucrose octanoate esters, Tolazoline, Trace minerals)
- TF (6) (Copper sulfate, Ethanol, Hydrated lime, Magnesium hydroxide, Magnesium sulfate, Methionine)
- Vitamins

- Xylazine final discussion (CBo)
- Oxytocin (CW)

Discuss Chlorhexidine TR questions (JD)
 Finalize Research Priorities Ranking (all)

Aug 5, 2014 3:00 ET

Discuss Chlorhexidine TR questions (JD)
 Zinc sulfate - Determine need for TR or questions for petitioner (TF)
 Sodium Bisulfate - Determine need for TR or questions for petitioner (JR)
 Methionine proposal (MS)
 Update on AQ legacy document (TF)
 Report on GMO vaccine made with excluded methods

Aug 19, 2014 3:00 ET

Discuss non-GMO vaccine verification issue
 Update on AQ legacy document (TF)
 Report on GMO vaccine made with excluded methods (JR email July 27 @ 1)

Sep 2, 2014 3:00 ET

Methionine proposal (MS). Continue discussion and finalize

Sep 16, 2014 3:00 ET

Oct 7, 2014 3:00 ET

Oct 21, 2014 3:00 ET

Nov 4, 2014 3:00 ET

Nov 18, 2014 3:00 ET

Fall 2014 Milestones	Target date
NOSB Subcommittee requests technical reports for Sunset 2017 substances	Jul 15, 2014
NOP - Complete tentative agenda	Aug 7, 2014
NOSB - Fall 2014 proposals due to NOP	Aug 27, 2014
NOP - Post proposals, Publish FRN, Open public comment	Sep 8, 2014
NOSB Subcommittees - submit tentative workplans to NOP	Sept 11, 2014
Discuss workplans on ES call	Sept 12, 2014
Public comment closes	Oct 7, 2014
Workplans finalized on ES call (last call before fall mtg)	Oct 17, 2014
NOP - Send compiled public comments to NOSB	Oct 13, 2014
Fall 2014 NOSB Meeting – Louisville, KY	Oct 27 - Oct 31

2017 Sunsets No TR requests

Substance	NL §	Cont act	TR reqst	New TR reqst?	Notes	Vote	Meeting
Aspirin	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Calcium hypochlorite	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Chlorine dioxide	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
EPA List 4 - Inerts of Minimal Concern	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Flunixin	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Formic Acid	205.603	CBo	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Furosemide	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Glucose	205.603	CW		N (07 01)			Summary: Spr 2015 Review: Fall 2015
Glycerine	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Lidocaine	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015

Magnesium hydroxide	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015
Magnesium sulfate	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015
Methionine	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015
Oxytocin	205.603	CW		N (07 01)			Summary: Spr 2015 Review: Fall 2015
Peracetic acid	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Phosphoric acid	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Poloxalene	205.603	FT		N			Summary: Spr 2015 Review: Fall 2015
Procaine	205.603	JR		N (04 01)			Summary: Spr 2015 Review: Fall 2015
Sodium hypochlorite	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Strychnine	205.604	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Sucrose octanoate esters	205.603	FT		N			Summary: Spr 2015 Review: Fall 2015

Trace minerals	205.603	FT		N			Summary: Spr 2015 Review: Fall 2015
Vaccines	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, August 19, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Francis Thicke (FT), Mac Stone (MS), Colehour Bondera (CBo), Joe Dickson, Vice Chair (JD), Wendy Fulwider (WF), Calvin Walker (CW), Nick Maravell – sitting in, Jay Feldman - sitting in

Absent: Jean Richardson (JR)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11.		Proposal Spr 2015
Acidified Sodium chlorite (ASC) Petition Addendum #1 Petition Addendum #2	205.603(a)(b)	JD	2008 TR	Petition sent to LS 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled.		Proposal Fall 2014
Aluminum Sulfate (PDF)	205.603	JR	Y	The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 18 14.		Proposal Spring 2015
Sodium Bisulfate	205.603	JR		Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14. TR request sent to NOP 08 06 14		TBD
Zinc Sulfate	205.603	TF		Petition sent to LS 06 16 14. Q's for petitioner/TR request due 8 19 14. Limited Scope TR request sent to NOP 08 06 14		TBD

Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	N	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD
Aquaculture-Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD
Aquaculture-Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD

Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD
Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD

2017 Sunsets

Summary: Spr 2015 Review: Fall 2015

Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Butorphanol	205.603	CBo	2002 TR Y	Lower priority		Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD	2010 TR Y			
Copper sulfate	205.603	TF	1995 TAP Y Lmtd Scope			
Electrolytes	205.603	CW	1995 TAP			

Ethanol	205.603	TF	Y	TR in development		
Excipients	205.603	CBo	Y			
Fenbendazole	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Moxidectin and Ivermectin)		
Ivermectin	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Fendbendazole and Moxidectin)		
Moxidectin	205.603	FT	2003 TR Y	Y, combined with other paraciticides (Fendbendazole and Ivermectin)		
Hydrated lime	205.603	TF	1995 TAP			
Hydrogen peroxide	205.603	CW		Y Low to med need		
Iodine	205.603 (a)(14) and 205.603 (b)(2)	JR	1994 TAP Y			
Isopropanol	205.603	CW	Y	TR in development		
Mineral oil	205.603	CBo	2002 TR Y			
Vitamins	205.603	CW	Y Lmtd scope			
Tolazoline	205.603	FT	2002 TR Y	Combined w/Xylazine med priority		
Xylazine	205.603	CBo	2002 TR Y	Combined w/Tolazoline med priority		

Other projects

Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines)	JR/NM	<u>Yes</u> (revised and sent 12/5/11)	Spring 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Proposal Fall 2014
AQ Review Legacy summary	TF		Summary of the AQ review to date.	NA	Update Fall 2014

* **Yellow highlight** indicates committee action needed

Agenda

- Approve notes from August 5, 2014
- Update on AQ legacy document (TF)
- Report on GMO vaccine made with excluded methods (JR email July 27 @ 1)
- Adjourn

Discussion

- **Notes from August 5, 2014** were approved with minor changes.
- **Update on Aquaculture legacy document (TF)**. The lead reviewer is compiling lots of information regarding the aquaculture reviews and will send it to the group once it is complete. The goal is to have it completed for the fall NOSB meeting.
- **Report on GMO Vaccines Made with Excluded Methods** - findings and recommendations. This document presents detailed findings about various issues, and seeks guidance about GMO vaccines. Members discussed the latest version of the document and some background information from the Vaccines Made with Excluded Methods Working Group (VMWEM). Many manufacturers have responded to requests for information and an informal list was compiled by one certifier. The NOP suggested that the group may want to add a statement about accepting petitions for vaccines. NOP noted that there was a formal checklist completed in the Spring 2012 and it could be helpful to analyze risk and make an informed decision. The group proceeded to a vote.

Motion to accept the GMO Vaccines Made with Excluded Methods - findings and recommendations document.

Motion by: JR

Seconded by: CBo

Discussion: none

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

- **Methionine.** MET will not be ready for the fall NOSB meeting
- **Acidified Sodium Chlorite (ASC)** will be ready for the fall NOSB meeting
- The LS will invite a researcher to join the next call (September 2) to talk about high methionine corn and recent research results. MA will send the meeting notice to the entire NOSB.
- **The meeting was adjourned**

Previous LS Notes

Future Call Schedule:

July 15, 2014 3:00 ET

2017 Sunset TR Determinations:

- FT (7) (Fenbendazole, Ivermectin, Moxidectin, Poloxalene, Sucrose octanoate esters, Tolazoline, Trace minerals)
- TF (6) (Copper sulfate, Ethanol, Hydrated lime, Magnesium hydroxide, Magnesium sulfate, Methionine)
- Vitamins
- Xylazine final discussion (CBo)
- Oxytocin (CW)

Discuss Chlorhexidine TR questions (JD)

Finalize Research Priorities Ranking (all)

Aug 5, 2014 3:00 ET

Discuss Chlorhexidine TR questions (JD)

Zinc sulfate - Determine need for TR or questions for petitioner (TF)

Sodium Bisulfate - Determine need for TR or questions for petitioner (JR)

Methionine proposal (MS)

Update on AQ legacy document (TF)

Report on GMO vaccine made with excluded methods
 Aug 19, 2014 3:00 ET
 Discuss non-GMO vaccine verification issue
 Update on AQ legacy document (TF)
 Report on GMO vaccine made with excluded methods
 Sep 2, 2014 3:00 ET
 Methionine proposal (MS). Continue discussion and finalize
 Sep 16, 2014 3:00 ET
 Oct 7, 2014 3:00 ET
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 Nov 4, 2014 3:00 ET
 Nov 18, 2014 3:00 ET

Fall 2014 Milestones	Target date
NOSB Subcommittee requests technical reports for Sunset 2017 substances	Jul 15, 2014
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NOSB - Fall 2014 proposals due to NOP	Aug 27, 2014
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Chlorine dioxide	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
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Flunixin	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Formic Acid	205.603	CBo	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Furosemide	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Glucose	205.603	CW		N (07 01)			Summary: Spr 2015 Review: Fall 2015
Glycerine	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
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Magnesium hydroxide	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015
Magnesium sulfate	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015

Methionine	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015
Oxytocin	205.603	CW		N (07 01)			Summary: Spr 2015 Review: Fall 2015
Peracetic acid	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
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Sodium hypochlorite	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
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Trace minerals	205.603	FT		N			Summary: Spr 2015 Review: Fall 2015
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**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, September 2, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Francis Thicke (FT), Colehour Bondera (CBo), Jean Richardson (JR), Calvin Walker (CW), Harold Austin (HA), Mac Stone (MS), Nick Maravell - sitting in, Carmela Beck – sitting in

Guests: Dr. Walter Goldstein (Mandaamin Institute, Michael Fields Agricultural Institute)

Absent: Joe Dickson, Vice Chair (JD), Wendy Fulwider (WF)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
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Aluminum Sulfate (PDF)	205.603	JR	Y	The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 18 14.		Proposal Spr 2015
Sodium Bisulfate	205.603	JR		Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14. TR request sent to NOP 08 06 14		TBD
Zinc Sulfate	205.603	TF		Petition sent to LS 06 16 14. Q's for petitioner/TR request due 8 19 14. Limited Scope TR request sent to NOP 08 06 14		TBD

Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	N	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD
Aquaculture-Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD
Aquaculture-Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD

Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD
Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD

Other projects					
Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines)	JR/NM	Yes (revised and sent 12/5/11)	Spring 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Proposal Fall 2014
AQ Review Legacy summary	TF		Summary of the AQ review to date.	NA	Update Fall 2014

* **Yellow highlight** indicates committee action needed

Agenda

- Approve notes from August 19, 2014
- Guest Speaker: Dr. Walter Goldstein (The Mandaamin Institute, Michael Fields Agricultural Institute)
- Discuss MET proposal
- Adjourn

Discussion

- **Notes from August 19, 2014** were approved with minor changes pending NOP review. A note was added to the notes to clarify that after the August 19 call, the LS determined that Acidified Sodium Chlorite (ASC) would not be ready for the fall meeting.
- **Guest Speaker:** FT introduced Dr. Walter Goldstein of the Mandaamin Institute, a new non-profit corporation formed with focus on plant breeding to benefit healthy, productive farming and healthy food. Dr. Goldstein and the group discussed his research on high methionine corn. Dr. Goldstein noted that he has spoken to the NOSB in the past and his testimony is on the public record. The group was provided with a Powerpoint presentation before the call, and Dr. Goldstein spoke to the research on high methionine corn. Members asked follow up questions about research into synthetic methionine, yields and improving yields, the Methionine Task Force (MTF), seed availability, marketing incentives, and how the NOSB can collaborate. Dr. Goldstein indicated that he has not had much contact with the MTF. The main takeaway message that Dr. Goldstein imparted was that entry into the marketplace seems to be a barrier, because synthetic methionine continues to be available.
- **MET proposal** - deferred to next call
- **The meeting was adjourned**

Previous LS Notes

Future Call Schedule:

Aug 19, 2014 3:00 ET

Discuss non-GMO vaccine verification issue
Update on AQ legacy document (TF)
Report on GMO vaccine made with excluded methods

Sep 2, 2014 3:00 ET

Guest Speaker: Dr. Walter Goldstein
Methionine proposal (MS). Continue discussion and finalize

Sep 16, 2014 3:00 ET

Methionine proposal (MS). Continue discussion and finalize

Oct 7, 2014 3:00 ET

Oct 21, 2014 3:00 ET

Nov 4, 2014 3:00 ET

Nov 18, 2014 3:00 ET

Fall 2014 Milestones

Target date

NOSB Subcommittee requests technical reports for Sunset 2017 substances	Jul 15, 2014
NOP - Complete tentative agenda	Aug 7, 2014
NOSB - Fall 2014 proposals due to NOP	Aug 27, 2014
NOP - Post proposals, Publish FRN, Open public comment	Sep 8, 2014
NOSB Subcommittees - submit tentative workplans to NOP	Sept 11, 2014
Discuss workplans on ES call	Sept 12, 2014
Public comment closes	Oct 7, 2014
Workplans finalized on ES call (last call before fall mtg)	Oct 17, 2014
NOP - Send compiled public comments to NOSB	Oct 13, 2014
Fall 2014 NOSB Meeting – Louisville, KY	Oct 27 - Oct 31

2017 Sunsets
Summary: Spr 2015 Review: Fall 2015

Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Butorphanol	205.603	CBo	2002 TR Y	Lower priority		Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD	2010 TR Y			
Copper sulfate	205.603	TF	1995 TAP Y Lmtd Scope			
Electrolytes	205.603	CW	1995 TAP			
Ethanol	205.603	TF	Y	TR in development		
Excipients	205.603	CBo	Y			
Fenbendazole	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Moxidectin and Ivermectin)		
Ivermectin	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Fenbendazole and Moxidectin)		
Moxidectin	205.603	FT	2003 TR Y	Y, combined with other paraciticides (Fenbendazole and Ivermectin)		
Hydrated lime	205.603	TF	1995 TAP			
Hydrogen peroxide	205.603	CW		Y Low to med need		
Iodine	205.603 (a)(14) and 205.603 (b)(2)	JR	1994 TAP Y			
Isopropanol	205.603	CW	Y	TR in development		
Mineral oil	205.603	CBo	2002 TR Y			
Vitamins	205.603	CW	Y Lmtd scope			
Tolazoline	205.603	FT	2002 TR Y	Combined w/Xylazine med priority		
Xylazine	205.603	CBo	2002 TR Y	Combined w/Tolazoline med priority		

2017 Sunsets No TR requests

Substance	NL §	Cont act	TR reqst	New TR reqst?	Notes	Vote	Meeting
Aspirin	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Calcium hypochlorite	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Chlorine dioxide	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
EPA List 4 - Inerts of Minimal Concern	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Flunixin	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Formic Acid	205.603	CBo	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Furosemide	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015
Glucose	205.603	CW		N (07 01)			Summary: Spr 2015 Review: Fall 2015
Glycerine	205.603	TF	N	N (06 03)			Summary: Spr 2015 Review: Fall 2015

Lidocaine	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Magnesium hydroxide	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015
Magnesium sulfate	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015
Methionine	205.603	TF		N			Summary: Spr 2015 Review: Fall 2015
Oxytocin	205.603	CW		N (07 01)			Summary: Spr 2015 Review: Fall 2015
Peracetic acid	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Phosphoric acid	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Poloxalene	205.603	FT		N			Summary: Spr 2015 Review: Fall 2015
Procaine	205.603	JR		N (04 01)			Summary: Spr 2015 Review: Fall 2015
Sodium hypochlorite	205.603	JD	N	N (06 17)			Summary: Spr 2015 Review: Fall 2015
Strychnine	205.604	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015

Sucrose octanoate esters	205.603	FT		N			Summary: Spr 2015 Review: Fall 2015
Trace minerals	205.603	FT		N			Summary: Spr 2015 Review: Fall 2015
Vaccines	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, September 16, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Francis Thicke (FT), Colehour Bondera (CBo), Jean Richardson (JR), Calvin Walker (CW), , Joe Dickson, Vice Chair (JD), Jay Feldman (JFe)

Absent: Mac Stone (MS), Wendy Fulwider (WF)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11.		Proposal Spr 2015
Acidified Sodium chlorite (ASC) Petition Addendum #1 Petition Addendum #2	205.603(a)(b)	JD/FT	2008 TR	Petition sent to LS 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled.		Proposal Spr 2015
Aluminum Sulfate (PDF)	205.603	JR	Y	The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 18 14.		Proposal Spr 2015
Sodium Bisulfate	205.603	JR		Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14. TR request sent to NOP 08 06 14		TBD
Zinc Sulfate	205.603	TF		Petition sent to LS 06 16 14. Q's for petitioner/TR request due 8 19 14. Limited Scope TR request sent to NOP 08 06 14		TBD

Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	N	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD
Aquaculture-Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD
Aquaculture-Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD

Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD
Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD

Other projects					
Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines)	JR/NM	Yes (revised and sent 12/5/11)	Spring 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Proposal Fall 2014
AQ Review Legacy summary	TF		Summary of the AQ review to date.	NA	Update Fall 2014

* **Yellow highlight** indicates committee action needed

Agenda

- Approve notes from September 2, 2014
- Discuss MET proposal and guest speakers for Methionine
- Discuss Adjourn

Discussion

- **Notes from** September 2, 2014 approved with minor formatting changes.
- **MET proposal.** Members discussed the MET proposal and the LS Chair offered a path forward, including a target timeline for completing their review. On the last call the LS hosted a guest speaker who offered information about high MET corn and its entry into the marketplace. The group discussed several potential guest speakers, two of whom have extensive knowledge in the organic feed realm, and each of the members offered to contact various people. A member suggested asking someone from the MET task force as well. The LS Chair will mention the work that is underway at the fall 2014 meeting to keep the public abreast. Suggestions for moving forward for a spring 2015 proposal included an annotation change that provides a transition period that can accommodate and provide incentive for the development of high methionine corn. The NOP noted that earlier comments indicated that the levels previously recommended seemed somewhat arbitrary, and suggested that the NOSB craft a proposal that includes a robust and reasonable justification. The members also discussed adding a preface to the proposal describing the process the LS took to get to this point. The NOP noted that the sunset timeline and the MET Sunset renewal will complicate the timing of this review.
- **Status of AQ legacy document.** The document is in progress and will be presented at the fall 2014 meeting.
- The meeting was adjourned

Previous LS Notes

Future Call Schedule:

Sep 2, 2014 3:00 ET

Guest Speaker: Dr. Walter Goldstein

Methionine proposal (MS). Continue discussion and finalize

Sep 16, 2014 3:00 ET

Methionine proposal (MS) - continue discussion and finalize

Oct 7, 2014 3:00 ET

Methionine proposal (MS) - continue discussion

Review public comment

Oct 21, 2014 3:00 ET

Nov 4, 2014 3:00 ET

Nov 18, 2014 3:00 ET

Fall 2014 Milestones

Target date

NOSB Subcommittee requests technical reports for Sunset 2017 substances	Jul 15, 2014
NOP - Complete tentative agenda	Aug 7, 2014
NOSB - Fall 2014 proposals due to NOP	Aug 27, 2014
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NOSB Subcommittees - submit tentative workplans to NOP	Sept 11, 2014
Discuss workplans on ES call	Sept 12, 2014
Public comment closes	Oct 7, 2014
Workplans finalized on ES call (last call before fall mtg)	Oct 17, 2014
NOP - Send compiled public comments to NOSB	Oct 13, 2014
Fall 2014 NOSB Meeting – Louisville, KY	Oct 27 - Oct 31

2017 Sunsets						
Summary: Spr 2015 Review: Fall 2015						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Butorphanol	205.603	CBo	2002 TR Y	Lower priority		Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD	2010 TR Y	TR requested 08 15 14		
Copper sulfate	205.603	TF	1995 TAP Y Lmtd Scope			
Electrolytes	205.603	CW	1995 TAP			
Ethanol	205.603	TF	Y	TR in development. (Expected Sept 2014)		
Excipients	205.603	CBo	Y			
Fenbendazole	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Moxidectin and Ivermectin)		
Ivermectin	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Fendbendazole and Moxidectin)		
Moxidectin	205.603	FT	2003 TR Y	Y, combined with other paraciticides (Fendbendazole and Ivermectin)		
Hydrated lime	205.603	TF	1995 TAP			
Hydrogen peroxide	205.603	CW		Y Low to med need		
Iodine	205.603 (a)(14) and 205.603 (b)(2)	JR	1994 TAP Y			

Isopropanol	205.603	CW	Y	TR in development. (Expected Sept 2014)		
Mineral oil	205.603	CBo	2002 TR Y			
Vitamins	205.603	CW	Y Lmtd scope			
Tolazoline	205.603	FT	2002 TR Y	Combined w/Xylazine med priority		
Xylazine	205.603	CBo	2002 TR Y	Combined w/Tolazoline med priority		

2017 Sunsets No TR requests

Substance	NL §	Cont act	TR reqst	New TR reqst?	Notes	Vote	Meeting
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Atropine	205.603	TF	N	N (06 03)			
Calcium hypochlorite	205.603	JD	N	N (06 17)			
Chlorine dioxide	205.603	JD	N	N (06 17)			
EPA List 4 - Inerts of Minimal Concern	205.603	TF	N	N (06 03)			
Flunixin	205.603	TF	N	N (06 03)			
Formic Acid	205.603	CBo	N	N (06 17)			
Furosemide	205.603	TF	N	N (06 03)			
Glucose	205.603	CW		N (07 01)			
Glycerine	205.603	TF	N	N (06 03)			
Lidocaine	205.603	JR	N	N (04 01)			
Magnesium hydroxide	205.603	TF		N			
Magnesium sulfate	205.603	TF		N			
Methionine	205.603	TF		N			
Oxytocin	205.603	CW		N (07 01)			
Peracetic acid	205.603	JR	N	N (04 01)			
Phosphoric acid	205.603	JR	N	N (04 01)			
Poloxalene	205.603	FT		N			

Procaine	205.603	JR		N (04 01)			
Sodium hypochlorite	205.603	JD	N	N (06 17)			
Strychnine	205.604	JR	N	N (04 01)			
Sucrose octanoate esters	205.603	FT		N			
Trace minerals	205.603	FT		N			
Vaccines	205.603	JR	N	N (04 01)			

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, October 7, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Colehour Bondera (CBo), Jean Richardson (JR), Calvin Walker (CW), Joe Dickson, Vice Chair (JD), Jay Feldman (JFe), Mac Stone (MS), Carmela Beck (CBe) - sitting in

Absent: Francis Thicke (FT), Wendy Fulwider (WF)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11.		Proposal Spr 2015
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Aluminum Sulfate (PDF)	205.603	JR	Y	The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 18 14.		Proposal Spr 2015
Sodium Bisulfate	205.603	JR		Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14. TR request sent to NOP 08 06 14		TBD
Zinc Sulfate	205.603	TF		Petition sent to LS 06 16 14. Q's for petitioner/TR request due 8 19 14. Limited Scope TR request sent to NOP 08 06 14		TBD

Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	N	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD
Aquaculture-Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD
Aquaculture-Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD

Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
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Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD

Other projects					
Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines)	JR/NM	Yes (revised and sent 12/5/11)	Spring 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Proposal Fall 2014
AQ Review Legacy summary	TF		Summary of the AQ review to date.	NA	Update Fall 2014

* **Yellow highlight** indicates committee action needed

Agenda

- Approve notes from September 16, 2014
- Discuss MET proposal and guest speakers for Methionine
- Adjourn

Discussion

- **Notes from** September 16, 2014 approved with no changes.
- **MET proposal.** The lead reviewer discussed some follow-up conversations he conducted with several stakeholders about high methionine corn. One of the stakeholders, a researcher at University of Kentucky who has been researching this for 10-15 years, felt that there may be issues with high MET corn that could prevent it from being a viable alternative. Since high MET corn has a higher protein content, it might lead to overfeeding of protein resulting in increased ammonia levels in barns. The LS would like to invite her to speak on a call and TF/MA will extend an invitation. MS still has several other folks to contact in an effort to gather more feedback and perspective. The LS Chair has already contacted a wide variety of stakeholders and experts about participating on conference calls, and solicited more suggestions from the members. The group discussed potential questions for the speakers and members will send follow up questions to the LS Chair.
- The 2014 OMRI newsletter was recently published and it contains an article on MET. EBR will locate a pdf of this and forward to the LS.
- **Status of AQ legacy document.** The document is in progress and will be presented verbally at the fall 2014 meeting. The group discussed various aspects addressed in the document and discussed their intention of presenting it as a discussion document at the spring 2015 meeting. The Chair asked that the members send any feedback and comments to her so she can add them to the document.
- **Public comments.** Discussion deferred to next call.
- The meeting was adjourned

Previous LS Notes

Future Call Schedule:

Sep 16, 2014 3:00 ET

Methionine proposal (MS) - continue discussion and finalize

Oct 7, 2014 3:00 ET

Methionine proposal (MS) - continue discussion

Review public comment

Oct 21, 2014 3:00 ET

Discuss updated AQ legacy document

Discuss/schedule guest speakers

Discuss public comment

Nov 4, 2014 3:00 ET (cancelled - Veteran's Day)

Nov 18, 2014 3:00 ET

Guest speaker Sarah Flack - high Methionine corn as a possible replacement for synthetic Methionine

Fall 2014 Milestones	Target date
NOSB Subcommittee requests technical reports for Sunset 2017 substances	Jul 15, 2014
NOP - Complete tentative agenda	Aug 7, 2014
NOSB - Fall 2014 proposals due to NOP	Aug 27, 2014
NOP - Post proposals, Publish FRN, Open public comment	Sep 8, 2014
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Discuss workplans on ES call	Sept 12, 2014
Public comment closes	Oct 7, 2014
Workplans finalized on ES call (last call before fall mtg)	Oct 17, 2014
NOP - Send compiled public comments to NOSB	Oct 13, 2014
Fall 2014 NOSB Meeting – Louisville, KY	Oct 27 - Oct 31

2017 Sunsets TR Requests						
Summary: Spr 2015 Review: Fall 2015						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Butorphanol	205.603	CBo	2002 TR Y	Lower priority		Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD	2010 TR Y	TR requested 08 15 14		
Copper sulfate	205.603	TF	1995 TAP Y Lmtd Scope			
Electrolytes	205.603	CW	1995 TAP			
Ethanol	205.603	TF	Y	Draft TR sent to LS 09 24 14. Suff due 11 24 14		
Excipients	205.603	CBo	Y			
Fenbendazole	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Moxidectin and Ivermectin)		
Ivermectin	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Fenbendazole and Moxidectin)		
Moxidectin	205.603	FT	2003 TR Y	Y, combined with other paraciticides (Fenbendazole and Ivermectin)		
Hydrated lime	205.603	TF	1995 TAP			
Hydrogen peroxide	205.603	CW		Y Low to med need		

Iodine	205.603 (a)(14) and 205.603 (b)(2)	JR	1994 TAP Y			
Isopropanol	205.603	CW	Y	Draft TR sent to LS 09 24 14. Suff due 11 24 14		
Mineral oil	205.603	CBo	2002 TR Y			
Vitamins	205.603	CW	Y Lmtd scope			
Tolazoline	205.603	FT	2002 TR Y	Combined w/Xylazine med priority		
Xylazine	205.603	CBo	2002 TR Y	Combined w/Tolazoline med priority		

2017 Sunsets No TR requests

Substance	NL §	Cont act	TR reqst	New TR reqst?	Notes	Vote	Meeting
Aspirin	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF	N	N (06 03)			
Calcium hypochlorite	205.603	JD	N	N (06 17)			
Chlorine dioxide	205.603	JD	N	N (06 17)			
EPA List 4 - Inerts of Minimal Concern	205.603	TF	N	N (06 03)			
Flunixin	205.603	TF	N	N (06 03)			
Formic Acid	205.603	CBo	N	N (06 17)			
Furosemide	205.603	TF	N	N (06 03)			
Glucose	205.603	CW		N (07 01)			
Glycerine	205.603	TF	N	N (06 03)			
Lidocaine	205.603	JR	N	N (04 01)			
Magnesium hydroxide	205.603	TF		N			
Magnesium sulfate	205.603	TF		N			
Methionine	205.603	TF		N			

Oxytocin	205.603	CW		N (07 01)		
Peracetic acid	205.603	JR	N	N (04 01)		
Phosphoric acid	205.603	JR	N	N (04 01)		
Poloxalene	205.603	FT		N		
Procaine	205.603	JR		N (04 01)		
Sodium hypochlorite	205.603	JD	N	N (06 17)		
Strychnine	205.604	JR	N	N (04 01)		
Sucrose octanoate esters	205.603	FT		N		
Trace minerals	205.603	FT		N		
Vaccines	205.603	JR	N	N (04 01)		

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, October 21, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Colehour Bondera (CBo), Jean Richardson (JR), Francis Thicke (FT), Wendy Fulwider (WF), Mac Stone (MS), Calvin Walker (CW), Carmela Beck (CBe) - sitting in

Absent: Joe Dickson, Vice Chair (JD), Jay Feldman (JFe)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Workplan

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11.		Proposal Spr 2015
Acidified Sodium chlorite (ASC) Petition Addendum #1 Petition Addendum #2	205.603(a)(b)	JD/FT	2008 TR	Petition sent to LS 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled.		Proposal Spr 2015
Aluminum Sulfate (PDF)	205.603	JR	Y	The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 18 14.		Proposal Spr 2015
Sodium Bisulfate	205.603	JR		Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14. TR request sent to NOP 08 06 14		TBD
Zinc Sulfate	205.603	TF		Petition sent to LS 06 16 14. Q's for petitioner/TR request due 8 19 14. Limited Scope TR request sent to NOP 08 06 14		TBD

Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	N	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD
Aquaculture-Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD
Aquaculture-Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD

Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD
Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD

Other projects					
Project	Contact	TR Reqst?	Notes	Vote	Meeting
Vaccines from Excluded Methods (GMO Vaccines)	JR/NM	Yes (revised and sent 12/5/11)	Spring 2012 Proposal TR sent to LC on 6/23/11; Sufficiency response rec'd 10/26/2011; revised TR sent to LC 12/5/11; TR accepted as sufficient on 2/7/12	NA	Proposal Fall 2014
AQ Review Legacy summary	TF		Summary of the AQ review to date.	NA	Update Fall 2014

* **Yellow highlight** indicates committee action needed

Agenda

- Approve notes from October 21, 2014
- Review Aquaculture Legacy Document
- Methionine (MET)
- Adjourn

Discussion

- **Notes from** October 7, 2014 approved with no changes.
- **The aquaculture legacy document** was circulated prior to the call and the group briefly discussed the path forward.
- **MET.** The group discussed scheduling guest speakers to talk about methionine topics. A member provided several recommendations and MA and TF will follow up with them. Jacquie Jacobs of University of KY was invited to speak, and will likely be able to provide other recommendations. The Chair asked that a member forward his specific questions about high Methionine corn, so she could provide them to the speakers ahead of the call.
- **Public comments.** There were many commenters who linked two proposals from two different Subcommittees: the MS's Definition of Excluded Methods and the LS's Vaccines from Excluded Methods. The comments generally directed the NOSB to continue to work on these projects and not pass it along to the USDA. The LS is recommending that the vaccines project get forwarded to the NOP for further consideration because the Board does not have access to the resources needed to take this to the next step. Some commenters recommended guidance about this topic, as opposed to a definition change, since this is a dynamic field that is constantly changing. The LS also suggested the creation of a new working group to focus on this topic.
- **The meeting was adjourned**

Previous LS Notes

Future Call Schedule:

Oct 7, 2014 3:00 ET

Methionine proposal (MS) - continue discussion

Review public comment

Oct 21, 2014 3:00 ET

Discuss updated AQ legacy document

Discuss/schedule guest speakers

Discuss public comment

Nov 4, 2014 3:00 ET (cancelled - Veteran's Day)

Nov 18, 2014 3:00 ET

Guest speaker Sarah Flack - high Methionine corn as a possible replacement for synthetic Methionine

Dec 2, 2014 3:00 ET

Guest Speakers: Jesse LaFlamme (Pete and Jerrys), Chris Pierce (HeritagePMS)

Fall 2014 Milestones	Target date
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NOSB Subcommittee requests technical reports for Sunset 2017 substances	Jul 15, 2014
NOP - Complete tentative agenda	Aug 7, 2014
NOSB - Fall 2014 proposals due to NOP	Aug 27, 2014
NOP - Post proposals, Publish FRN, Open public comment	Sep 8, 2014
NOSB Subcommittees - submit tentative workplans to NOP	Sept 11, 2014
Discuss workplans on ES call	Sept 12, 2014
Public comment closes	Oct 7, 2014
Workplans finalized on ES call (last call before fall mtg)	Oct 17, 2014
NOP - Send compiled public comments to NOSB	Oct 13, 2014
Fall 2014 NOSB Meeting – Louisville, KY	Oct 27 - Oct 31

2017 Sunsets TR Requests						
Summary: Spr 2015 Review: Fall 2015						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Butorphanol	205.603	CBo	2002 TR Y	Lower priority		Summary: Spr 2015 Review: Fall 2015
Chlorhexidine	205.603	JD	2010 TR Y	TR requested 08 15 14		
Copper sulfate	205.603	TF	1995 TAP Y Lmtd Scope			
Electrolytes	205.603	CW	1995 TAP			
Ethanol	205.603	TF	Y	Draft TR sent to LS 09 24 14. Suff due 11 24 14		
Excipients	205.603	CBo	Y			
Fenbendazole	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Moxidectin and Ivermectin)		
Ivermectin	205.603	FT	1999 TR Y	Y, combined with other paraciticides (Fendbendazole and Moxidectin)		
Moxidectin	205.603	FT	2003 TR Y	Y, combined with other paraciticides (Fendbendazole and Ivermectin)		
Hydrated lime	205.603	TF	1995 TAP			
Hydrogen peroxide	205.603	CW		Y Low to med need		
Iodine	205.603 (a)(14) and 205.603 (b)(2)	JR	1994 TAP Y			

Isopropanol	205.603	CW	Y	Draft TR sent to LS 09 24 14. Suff due 11 24 14		
Mineral oil	205.603	CBo	2002 TR Y			
Vitamins	205.603	CW	Y Lmtd scope			
Tolazoline	205.603	FT	2002 TR Y	Combined w/Xylazine med priority		
Xylazine	205.603	CBo	2002 TR Y	Combined w/Tolazoline med priority		

2017 Sunsets No TR requests

Substance	NL §	Cont act	TR reqst	New TR reqst?	Notes	Vote	Meeting
Aspirin	205.603	JR	N	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Atropine	205.603	TF	N	N (06 03)			
Calcium hypochlorite	205.603	JD	N	N (06 17)			
Chlorine dioxide	205.603	JD	N	N (06 17)			
EPA List 4 - Inerts of Minimal Concern	205.603	TF	N	N (06 03)			
Flunixin	205.603	TF	N	N (06 03)			
Formic Acid	205.603	CBo	N	N (06 17)			
Furosemide	205.603	TF	N	N (06 03)			
Glucose	205.603	CW		N (07 01)			
Glycerine	205.603	TF	N	N (06 03)			
Lidocaine	205.603	JR	N	N (04 01)			
Magnesium hydroxide	205.603	TF		N			
Magnesium sulfate	205.603	TF		N			
Methionine	205.603	TF		N			
Oxytocin	205.603	CW		N (07 01)			
Peracetic acid	205.603	JR	N	N (04 01)			
Phosphoric acid	205.603	JR	N	N (04 01)			

Poloxalene	205.603	FT		N			
Procaine	205.603	JR		N (04 01)			
Sodium hypochlorite	205.603	JD	N	N (06 17)			
Strychnine	205.604	JR	N	N (04 01)			
Sucrose octanoate esters	205.603	FT		N			
Trace minerals	205.603	FT		N			
Vaccines	205.603	JR	N	N (04 01)			

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, November 18, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Colehour Bondera (CBo), Jean Richardson (JR), Francis Thicke (FT), Calvin Walker (CW), Jay Feldman (JFe), Mac Stone (MS), Paula Daniels (PD), 2015 NOSB member sitting in, Ashley Swaffar (AS), 2015 NOSB member sitting in

Guest Speaker: John Brunquell, Egg Innovations

Absent: Wendy Fulwider (WF), Joe Dickson, Vice Chair (JD)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Work Agenda

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11.		Proposal Spr 2015
Acidified Sodium chlorite (ASC) Petition Addendum #1 Petition Addendum #2	205.603(a)(b)	JD/FT	2008 TR	Petition sent to LS 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled.		Proposal Spr 2015
Aluminum Sulfate (PDF)	205.603	JR	Y	The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 18 14. (expected Jan 2015)		Proposal Spr 2015
Sodium Bisulfate	205.603	JR		Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14. TR request sent to NOP 08 06 14. (expected Jan 2015)		TBD
Zinc Sulfate	205.603	TF		Petition sent to LS 06 16 14. Q's for petitioner/TR request due 8 19 14. Limited Scope TR request sent to NOP 08 06 14. (expected Dec 2014)		TBD

Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	N	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.	Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.	Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.	Proposal TBD
Aquaculture-Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.	Proposal TBD
Aquaculture-Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.	Proposal TBD

Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD
Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD

Other projects					
Project	Contact	TR Reqst?	Notes	Vote	Meeting
AQ Review Legacy summary	TF		Summary of the AQ review to date.	NA	Disc Doc Spr 2015

* **Yellow highlight** indicates committee action needed

Agenda

- Approve notes from October 21, 2014
- Guest Speaker: John Brunquell, Egg Innovations
- Discuss 2017 Sunset materials
- Adjourn

Discussion

- **Notes from** October 21, 2014 approved with no changes
- The members discussed sending an invitation to the entire Board to participate in calls when there are guest speakers.
- Guest Speaker: John Brunquell, Egg Innovations. Mr. Brunquell delivered testimony at the fall 2014 NOSB meeting and was subsequently asked to address the Livestock Subcommittee about methionine. The Subcommittee members composed some questions prior to the call, and Mr. Brunquell addressed the questions and spoke about methionine levels in feed for broilers and layers. The group discussed data about methionine levels with regard to bird health, and Mr. Brunquell offered to forward these data to the group. Additionally, the NOP offered to forward the NRCS's Natural Resource Council Nutrient Guidelines for Poultry, which are the standards the NOP follows. Members also discussed how to move away from synthetic methionine in a manner that will provide incentive and a reasonable timeline for industry. Mr. Brunquell offered his view that there are three separate issues that may affect the organic poultry industry: a change in requirements for outside access, methionine levels, and GMO's in vaccines, and although all three need to be addressed, he feels they should be taken sequentially and not all at once. He noted that his company supports increasing the requirement for outside access and is willing to participate in the conversation, and be available as a technical resource.
- **2017 Sunset materials - Schedule discussions of TRs, checklists and votes-** deferred to a future call
- **The meeting was adjourned**

Previous LS Notes

Future Call Schedule:

Oct 21, 2014 3:00 ET

Discuss updated AQ legacy document

Discuss/schedule guest speakers

Discuss public comment

Nov 4, 2014 3:00 ET (cancelled - Veteran's Day)

Nov 18, 2014 3:00 ET

Guest Speaker: John Brunquell, Egg Innovations

Dec 2, 2014 3:00 ET

Guest Speakers: Jesse LaFlamme (Pete and Jerry's), Chris Pierce (HeritagePMS)

2017 Sunset materials - Schedule discussions of TRs, checklists and votes

Dec 16, 2014 3:00 ET

Jan 6, 2015 3:00 ET

Jan 20, 2015 3:00 ET

Feb 3 2:00 ET propose moving to Monday Feb 2

Feb 17, 2015 3:00 ET

Mar 3, 2015 3:00 ET

Mar 17, 2015 3:00 ET

Apr 7, 2015 3:00 ET

Apr 21, 2015 3:00 ET

Spring 2015 Milestones

Target date

NOSB Training	Feb 4-5, 2015
NOP - Complete Spring 2015 NOSB meeting tentative agenda	Feb 7, 2015
NOSB - Spring 2015 proposals due to NOP	Feb 25, 2015
NOP - Post proposals, Publish FRN, Open public comment	Mar 9, 2015
Discuss work agendas on ES call	Mar 13, 2015
Public comment closes	Apr 6, 2015
Work agendas finalized on ES call (last call before spring mtg)	Apr 10, 2015
NOP - Send compiled public comments to NOSB	Apr 13, 2015
Spring 2015 NOSB meeting - La Jolla, CA	Week of April 27 - 31

2017 Sunsets TR Requests Summary: Spr 2015 Review: Fall 2015					
Substance	Contact	TR requested	Notes	Vote	Meeting
Chlorhexidine §205.603	JD	2010 TR Y	TR requested 08 15 14. TR expected Jan/Feb 2015		Summary: Spr 2015 Review: Fall 2015
Copper sulfate §205.603	TF	1995 TAP Y Lmtd Scope	TR in development (expected Dec 2014)		
Electrolytes §205.603	CW	1995 TAP	TR expected Jan/Feb 2015		
Ethanol §205.603	TF	Y	Draft TR sent to LS 09 24 14. Suff due 11 24 14		
Excipients §205.603	CBo	Y	TR expected Jan/Feb 2015		
Fenbendazole §205.603	FT	1999 TR Y	Combined with other paraciticides (Moxidectin and Ivermectin). TR expected Jan/Feb 2015		
Ivermectin §205.603	FT	1999 TR Y	Combined with other paraciticides (Fendbendazole and Moxidectin). TR expected Jan/Feb 2015		
Moxidectin §205.603	FT	2003 TR Y	Combined with other paraciticides (Fendbendazole and Ivermectin). TR expected Jan/Feb 2015		
Hydrated lime §205.603	TF	1995 TAP	TR expected Jan/Feb 2015		
Hydrogen peroxide §205.603	CW	Y (for Crops 205.601(a))	TR for Crops expected Jan/Feb 2015		

Iodine 205.603(a)(14) and 205.603 (b)(2)	JR	1994 TAP Y	TR expected Jan/Feb 2015		
Isopropanol §205.603	CW	Y	Draft TR sent to LS 09 24 14. Suff due 11 24 14		
Mineral oil §205.603	CBo	2002 TR Y	TR expected Jan/Feb 2015		
Vitamins §205.603	CW	Y Lmtd scope	TR expected Jan/Feb 2015		

2017 Sunsets (No TRs) Summary: Spr 2015 Review: Fall 2015					
Substance	Contact	New TR reqst?	Notes	Vote	Meeting
Aspirin §205.603	JR	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Atropine §205.603	TF	N (06 03)			
Butorphanol §205.603	CBo	2002 TR Y	New TR requested. Not contracted.		
Calcium hypochlorite §205.603	JD	N (06 17)			
Chlorine dioxide	JD	N (06 17)			
EPA List 4 - Inerts of Minimal Concern §205.603	TF	N (06 03)			
Flunixin §205.603	TF	N (06 03)			
Formic Acid §205.603	CBo	N (06 17)			
Furosemide §205.603	TF	N (06 03)			
Glucose §205.603	CW	N (07 01)			
Glycerine §205.603	TF	N (06 03)			
Lidocaine §205.603	JR	N (04 01)			
Magnesium hydroxide §205.603	TF	N			

Magnesium sulfate §205.603	TF	N			
Methionine §205.603	TF	N			
Oxytocin §205.603	CW	N (07 01)			
Peracetic acid §205.603	JR	N (04 01)			
Phosphoric acid §205.603	JR	N (04 01)			
Poloxalene §205.603	FT	N			
Procaine §205.603	JR	N (04 01)			
Sodium hypochlorite §205.603	JD	N (06 17)			
Strychnine 205.604	JR	N (04 01)			
Sucrose octanoate esters §205.603	FT	N			
Trace minerals §205.603	FT	N			
Vaccines §205.603	JR	N (04 01)			
Tolazoline §205.603	FT	2002 TR Y	New TR requested. Not contracted.		
Xylazine §205.603	CBo	2002 TR Y	New TR requested. Not contracted.		

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, December 02, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Wendy Fulwider (WF), Joe Dickson, Vice Chair (JD), Colehour Bondera (CBo), Francis Thicke (FT), Calvin Walker (CW), Jay Feldman (JFe), Paula Daniels (PD), 2015 NOSB member - sitting in, Ashley Swaffar (AS), 2015 NOSB member - sitting in, Harold Austin – sitting in, Carmela Beck (CB) - sitting in, Tom Chapman (TC) - sitting in

Guest Speakers: Jesse LaFlamme (Co-Owner Pete & Gerry's Organic Eggs), Chris Pierce: President, Heritage Poultry Management Services, Inc., Mel Gehman (Founder, Heritage Poultry Management Services, Inc.), Dr. Regina Harris (Poultry Nutritionist, Heritage Poultry Management Services, Inc.)

Absent: Mac Stone (MS), Jean Richardson (JR)

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR), Scott Updike (SU)

Work Agenda

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11		Proposal Spr 2015
Acidified Sodium chlorite (ASC) Petition Addendum #1 Petition Addendum #2	205.603(a)(b)	JD/FT	2008 TR	Petition sent to LS 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled.		Proposal Spr 2015
Aluminum Sulfate (PDF)	205.603	JR	Y	The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 18 14. (expected Jan 2015)		Proposal Spr 2015
Sodium Bisulfate	205.603	JR	Y	Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14. TR request sent to NOP 08 06 14. (expected Jan 2015)		TBD

Zinc Sulfate	205.603	TF	Y	Petition sent to LS 06 16 14. Q's for petitioner/TR request due 8 19 14. Limited Scope TR request sent to NOP 08 06 14. (expected Dec 2014)		TBD
Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	N	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.		Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.		Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.		Proposal TBD
Aquaculture-Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.		Proposal TBD

Aquaculture- Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.		Proposal TBD
Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD
Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD

2017 Sunsets TR Requests Summary: Spr 2015 Review: Fall 2015					
Substance	Contact	TR requested	Notes	Vote	Meeting
Ethanol §205.603	TF	Y	Draft TR sent to LS 09 24 14. Suff due 11 24 14		
Isopropanol §205.603	CW	Y	Draft TR sent to LS 09 24 14. Suff due 11 24 14		

Chlorhexidine §205.603	JD	2010 TR Y	TR requested 08 15 14. TR expected Jan/Feb 2015		Summary: Spr 2015 Review: Fall 2015
Copper sulfate §205.603	TF	1995 TAP Y Lmtd Scope	TR in development (expected Dec 2014)		
Electrolytes §205.603	CW	1995 TAP	TR expected Jan/Feb 2015		
Excipients §205.603	CBo	Y	TR expected Jan/Feb 2015		
Fenbendazole §205.603	FT	1999 TR Y	Combined with other paraciticides (Moxidectin and Ivermectin). TR expected Jan/Feb 2015		
Ivermectin §205.603	FT	1999 TR Y	Combined with other paraciticides (Fendbendazole and Moxidectin). TR expected Jan/Feb 2015		
Moxidectin §205.603	FT	2003 TR Y	Combined with other paraciticides (Fendbendazole and Ivermectin). TR expected Jan/Feb 2015		
Hydrated lime §205.603	TF	1995 TAP	TR expected Jan/Feb 2015		
Hydrogen peroxide §205.603	CW	Y (for Crops 205.601(a))	TR for Crops expected Jan/Feb 2015		
Iodine 205.603(a)(14) and 205.603 (b)(2)	JR	1994 TAP Y	TR expected Jan/Feb 2015		
Mineral oil §205.603	CBo	2002 TR Y	TR expected Jan/Feb 2015		
Vitamins §205.603	CW	Y Lmtd scope	TR expected Jan/Feb 2015		

Other projects					
Project	Contact	TR Reqst?	Notes	Vote	Meeting
AQ Review Legacy summary	TF		Summary of the AQ review to date.	NA	Disc Doc Spr 2015

* **Yellow highlight** indicates committee action needed

Agenda

- Approve notes from November 18, 2014
- Guest Speakers
- 2017 Sunset materials - Schedule discussions of TRs, checklists and votes
Adjourn

Discussion

- **Notes from** November 18, 2014 were approved with no changes. In response to a question about the lack of detail in the notes when the group hosted a guest speaker, the NOP indicated that it is typical to capture the general theme of the conversation without detail, as members take copious notes.
- The guest speakers introduced themselves and gave some background information about their involvement in organic egg production and the organic community. The primary topic of discussion was methionine in poultry feed. The group viewed a PowerPoint presentation provided by the speakers and discussed animal welfare issues surrounding methionine levels. The LS Chair noted that the NOSB has heard from a variety of stakeholders and received many comments that seem to contradict each other with regard to requirements for MET and productivity.
- 2017 Sunset materials - Schedule discussions of TRs, checklists and votes - deferred to next call
- **The meeting was adjourned**

Previous LS Notes

Future Call Schedule:

Nov 18, 2014 3:00 ET

Guest Speaker: John Brunquell, Egg Innovations

Dec 2, 2014 3:00 ET

Guest Speakers: Jesse LaFlamme (Pete and Gerry's), Chris Pierce (HeritagePMS)

2017 Sunset materials - Schedule discussions of TRs, checklists and votes - deferred to next call

Dec 16, 2014 3:00 ET

2017 Sunset materials - Schedule discussions of TRs, checklists and votes

Jan 6, 2015 3:00 ET

Jan 20, 2015 3:00 ET

Feb 3 2:00 ET propose moving to Monday Feb 2

Feb 17, 2015 3:00 ET

Mar 3, 2015 3:00 ET

Mar 17, 2015 3:00 ET

Apr 7, 2015 3:00 ET

Apr 21, 2015 3:00 ET

Spring 2015 Milestones	Target date
NOSB Training	Feb 4-5, 2015
NOP - Complete Spring 2015 NOSB meeting tentative agenda	Feb 7, 2015
NOSB - Spring 2015 proposals due to NOP	Feb 25, 2015
NOP - Post proposals, Publish FRN, Open public comment	Mar 9, 2015
Discuss work agendas on ES call	Mar 13, 2015
Public comment closes	Apr 6, 2015
Work agendas finalized on ES call (last call before spring mtg)	Apr 10, 2015
NOP - Send compiled public comments to NOSB	Apr 13, 2015

2017 Sunsets (No TRs) Summary: Spr 2015 Review: Fall 2015					
Substance	Contact	New TR reqst?	Notes	Vote	Meeting
Aspirin §205.603	JR	N (04 01)			Summary: Spr 2015 Review: Fall 2015
Atropine §205.603	TF	N (06 03)			
Butorphanol §205.603	CBo	2002 TR Y	New TR requested. Not contracted.		
Calcium hypochlorite §205.603	JD	N (06 17)			
Chlorine dioxide	JD	N (06 17)			
EPA List 4 - Inerts of Minimal Concern §205.603	TF	N (06 03)			
Flunixin §205.603	TF	N (06 03)			
Formic Acid §205.603	CBo	N (06 17)			
Furosemide §205.603	TF	N (06 03)			
Glucose §205.603	CW	N (07 01)			
Glycerine §205.603	TF	N (06 03)			
Lidocaine §205.603	JR	N (04 01)			
Magnesium hydroxide §205.603	TF	N			
Magnesium sulfate §205.603	TF	N			
Methionine §205.603	TF	N			
Oxytocin §205.603	CW	N (07 01)			
Peracetic acid §205.603	JR	N (04 01)			
Phosphoric acid §205.603	JR	N (04 01)			

Poloxalene §205.603	FT	N		
Procaine §205.603	JR	N (04 01)		
Sodium hypochlorite §205.603	JD	N (06 17)		
Strychnine 205.604	JR	N (04 01)		
Sucrose octanoate esters §205.603	FT	N		
Trace minerals §205.603	FT	N		
Vaccines §205.603	JR	N (04 01)		
Tolazoline §205.603	FT	2002 TR Y	New TR requested. Not contracted.	
Xylazine §205.603	CBo	2002 TR Y	New TR requested. Not contracted.	

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

**National Organic Standards Board (NOSB)
Livestock/Aquaculture Subcommittee (LS) Meeting Notes
Tuesday, December 16, 2014 3:00pm ET**

Attending: Tracy Favre, Chair (TF), Jean Richardson (JR), Colehour Bondera (CBo), Francis Thicke (FT), Calvin Walker (CW), Joe Dickson, Vice Chair (JD), Harold Austin (HA) - sitting in, Paula Daniels (PD), 2015 NOSB member - sitting in in

Absent: Mac Stone (MS), Wendy Fulwider (WF), Ashley Swaffar (AS), 2015 NOSB member - sitting in

Staff: Michelle Arsenault (MA), Emily Brown Rosen (EBR)

Work Agenda

Petitioned Materials						
Substance	Nat'l List §	Contact	TR requested	Notes	Vote	Meeting
Methionine in organic poultry feed (MET)-petitioned	205.603	MS	2011 TR	TR received 11 15 11		Proposal Spr 2015
Acidified Sodium chlorite (ASC) Petition Addendum #1 Petition Addendum #2	205.603(a)(b)	JD/FT	2008 TR 2014 TR	Petition sent to LS 06 12 12. Petition found sufficient 09 18. TR requested on 09 18 12. TR sent to LS 05 08 13. TR found suff 07 30 13. Fall 2013 meeting cancelled. Spring 2014 sent back to LS.		Proposal Spr 2015
Aluminum Sulfate (PDF)	205.603	JR	Y	The petitioner requests two related allowances on the NL: (1) treatment of poultry litter (205.603) and (2) application of treated poultry litter to the field (205.601). Sent to LS 03 12 14. TR request sent to NOP 06 18 14. (expected Jan 2015)		Proposal Spr 2015?
Sodium Bisulfate	205.603	JR	Y	Petition sent to LS 05 27 14. Q's for petitioner/TR request due 07 28 14. TR request sent to NOP 08 06 14. (expected Jan 2015)		TBD
Zinc Sulfate	205.603	TF	Y	Petition sent to LS 06 16 14. Q's for petitioner/TR request due 8 19 14. Limited Scope TR request sent to NOP 08 06 14. (expected Dec 2014)		TBD

Aquaculture-CO₂ , (for aquatic plants)	205.609	TF/CBo	N	Petition sent to CS on 5 30 12. Will rqst modification from petitioner (for use pattern). Updated petition was deemed sufficient. TR deemed unnecessary.	Proposal TBD
Aquaculture-Chlorine (for aquatic plants)	205.609	JD	2011 Crops TR 2006 TR 1995 TAP	Petition sent to CS on 5 30 12. Determine petition sufficiency. CS requested clarification from petitioner 11 20 12. 2011 TR deemed suff for this review 11 20 12. Additional aquaculture TR deemed unnecessary. Sent follow up questions to petitioner. Response deemed sufficient.	Proposal TBD
Aquaculture-Micronutrients (for aquatic plants)	205.609	FT	2010 TR (Nickel) 6/2013 Minerals TR	Petition sent to CS on 06 08 12. Petition sufficiency response due 08 08 12? CS sent request to NL Mgr 12 04 12 for additional info. Questions clarified by petitioner. Petition found sufficient 06 18 13 and 07 02 13. TR deemed unnecessary.	Proposal TBD
Aquaculture-Lignin sulfonate (chelating agent for aquatic plants) (for aquatic plants) CAS #s 9009-75-0, 8062-15-5, 8061-51-6	205.609	JR	2/2011 Crops TR 7/2013 TR Aquatic Animals TR	Petition sent to CS on 07 03 12. Petition Sufficiency Response due 09 04 12. CS sent request to NL Mgr 12 04 12 for additional info and TR. Questions clarified by petitioner. Petition found sufficient 6 18 13 and 07 02 13.	Proposal TBD
Aquaculture-Vitamins (B1, B12, H) for aquatic plants	205.609	CW	4/2013 Aquatic Animals TR	Petition sent to CS 08 10 12. Petition Sufficiency response due 10 10 12. Petition found sufficient 06 18 13.	Proposal TBD

Aquaculture - Biologics: Vaccines for Aquatic Animals	205.611	JR	2011 TR (Vaccines made from GMOs)	Petition sent to LS 06 14 12. Petition found sufficient and TR requested on 05 21 13. (NOP note: TR sent to LS 01 24 14. TR deemed sufficient 02 03 14		Proposal TBD
Aquaculture - Chlorine (for aquatic animals)	205.611	JD	No Crops 2011 Crops 2006 Crops 1995 Livestock 2006 Handling 2006	Petition sent to LS on 05 30 12. Petition found sufficient 07 03 12. No TR requested		Proposal TBD
Aquaculture – Tocopherols (for aquatic animals)	205.611	TF/CBo	2013 TR 1995 TAP rvw	Petition sent to LS on 05 30 12. Petition found sufficient 08 06 12. TR requested 08 06 12. Draft TR sent to LS on 04 16 13. TR found sufficient 06 04 13		Proposal TBD
Aquaculture – Vitamins (for aquatic animals)	205.611	CW/FT	Yes 2013 TR	Petition sent to LS on 05 30 12. Response due ~07 30 12. Petition found sufficient 08 06 12. Requested joint TR with Minerals 08 06 12. TR sent to LS 04 29 13. TR found suff 06 18 13.		Proposal TBD
Aquaculture - Trace Minerals (for aquatic animals)	205.611	CW/FT	2013 TR	Petition sent to LS on 06 08 12. Response due ~08 08 12. Petition found sufficient 08 06 12? Requested joint TR with Vitamins 08 06 12. TR sent to LS 06 25 13. Suff due 08 27 13. TR found sufficient 07 16 13. Fall 2013 meeting cancelled.		Proposal TBD

2017 Sunsets TR Requests Summary: Spr 2015 Review: Fall 2015					
Substance	Contact	TR requested	Notes	Vote	Meeting
Ethanol §205.603	TF	Y	Draft TR sent to LS 09 24 14. Suff due 11 24 14		
Isopropanol §205.603	CW	Y	Draft TR sent to LS 09 24 14. Suff due 11 24 14		
Chlorhexidine §205.603	JD/FT	2010 TR Y	TR requested 08 15 14. TR expected Jan/Feb 2015		Summary: Spr 2015 Review: Fall 2015
Copper sulfate §205.603	TF	1995 TAP Y Lmtd Scope	TR in development (expected Dec 2014)		

Electrolytes §205.603	CW	1995 TAP	TR expected Jan/Feb 2015		
Excipients §205.603	CBo	Y	TR expected Jan/Feb 2015		
Fenbendazole §205.603	FT	1999 TR Y	Combined with other paraciticides (Moxidectin and Ivermectin). TR expected Jan/Feb 2015		
Ivermectin §205.603	FT	1999 TR Y	Combined with other paraciticides (Fendbendazole and Moxidectin). TR expected Jan/Feb 2015		
Moxidectin §205.603	FT	2003 TR Y	Combined with other paraciticides (Fendbendazole and Ivermectin). TR expected Jan/Feb 2015		
Hydrated lime §205.603	TF	1995 TAP	TR expected Jan/Feb 2015		
Hydrogen peroxide §205.603	CW	Y (for Crops 205.601(a))	TR for Crops expected Jan/Feb 2015		
Iodine 205.603(a)(14) and 205.603 (b)(2)	JR	1994 TAP Y	TR expected Jan/Feb 2015		
Mineral oil §205.603	CBo	2002 TR Y	TR expected Jan/Feb 2015		
Vitamins §205.603	CW	Y Lmtd scope	TR expected Jan/Feb 2015		

Other projects					
Project	Contact	TR Reqst?	Notes	Vote	Meeting
AQ Review Legacy summary	TF		Summary of the AQ review to date.	NA	Disc Doc Spr 2015

* Yellow highlight indicates committee action needed

Agenda

- Approve notes from December 2, 2014
- 2017 Sunset materials - Schedule discussions of TRs, checklists and votes
 - Ethanol (TF)
 - Copper sulfate (TF)
 - Chlorhexidine (JD) reassigned to FT.
 - Isoproponol (CW)
 - Electrolytes (CW)
 - Hydrogen peroxide (CW)
 - Vitamins (CW)
 - Fenbendazole (FT)
 - Ivermectin (FT)
 - Moxidectin (FT)
 - Iodine (JR)
 - Excipients (CBo)

- Mineral oil (CBo)
- Adjourn

Discussion

- **Notes from** December 2, 2014 were approved with no changes
- **Misc petitioned materials.**
 - **Acidified Sodium chlorite (ASC).** JD will talk offline with FT about transferring the review materials.
 - **Aluminum sulfate** - TR expected in Jan 2015
 - **Sodium Bisulfate** - TR expected in Jan 2015
 - **Zinc Sulfate** -TR expected in Jan 2015
 - **MET proposal.** The LS will finalize the proposal and vote in January. The Lead reviewer/Livestock Chair proposed some changes to the previous version of the proposal based on information and feedback they received from several guest speakers. These changes include the following MET levels: 2.0 lbs for layers, 2.5 lbs for broilers and 3 lbs for turkeys and other poultry, averaged over the life of the birds. The group discussed putting forth a proposal that would allow them to garner more public comment and feedback for the next iteration of the proposal. The Chair acknowledged those members who do not necessarily support this approach, and invited them to submit a minority opinion. She also asked for feedback from those who feel that this will de-incentivize the community from finding alternatives. The lead will conduct more research and re-review past comments in support of the argument for varying the average MET levels over the lifetime of a bird, and the basis for any change in amounts needed for broilers. .
 - **AQ legacy document.** The NOP and CBo will send comments to the LS members and the group will discuss the discussion document on Jan 27.
 - **2017 Sunset materials** - The group scheduled discussions of TRs, checklists and votes for the 2017 sunset materials (see below), and reassigned materials from outgoing member JD to FT. Materials reassigned: Calcium hypochlorite, Chlorine dioxide, and Sodium hypochlorite
- **The meeting was adjourned**

Previous LS Notes

Future Call Schedule:

Dec 2, 2014 3:00 ET

Guest Speakers: Jesse LaFlamme (Pete and Gerry's), Chris Pierce (HeritagePMS)

2017 Sunset materials - Schedule discussions of TRs, checklists and votes - deferred to next call

Dec 16, 2014 3:00 ET

2017 sunset materials - Schedule discussions of TRs, checklists and votes

Jan 6, 2015 3:00 ET

2017 sunsets (TF). Discuss TR sufficiency - Ethanol, Copper sulfate

2017 sunsets (TF/JD). Discuss summary - Calcium hypochlorite, Chlorine dioxide and Sodium hypochlorite

2017 sunsets (CW). Discuss TR sufficiency - Isopropanol

Jan 20, 2015 3:00 ET

2017 sunsets (JR). Discuss summaries - Aspirin, Lidocaine, Peracetic acid, Phosphoric acid, Procaine, Vaccines, Strychnine

2017 sunsets (CW). Discuss TR sufficiency - Electrolytes, Hydrogen peroxide, Vitamins
Discuss summaries - Glucose, Oxytocin

2017 sunsets (JD). Discuss TR sufficiency/reassign - Chlorhexidine
MET discussion

Jan 27, 2015 - additional call

2017 sunsets (JR). Discuss TR sufficiency - Iodine
2017 sunsets (TF). Discuss TR sufficiency - hydrated lime
AQ legacy doc follow up discussion (TF).

Feb 2 2:00 ET. Note: this is a Monday

2017 sunsets (FT). Discuss TR sufficiency - Fenbendazole, Ivermectin, Moxidectin.
Discuss summaries - Poloxalene, Sucrose octanoate esters, Trace minerals,
Tolazoline

2017 sunsets (CBo). Discuss TR sufficiency - Excipients, Mineral oil
Discuss summaries - Butorphanol, Formic Acid, Xylazine

Feb 17, 2015 3:00 ET

2017 sunsets (TF). Discuss summaries - Atropine, EPA List 4 Inerts, Flunixin, Furosemide,
Glycerine, Magnesium hydroxide, Magnesium sulfate, Methionine

Mar 3, 2015 3:00 ET

Mar 17, 2015 3:00 ET

Apr 7, 2015 3:00 ET

Apr 21, 2015 3:00 ET

Spring 2015 Milestones	Target date
NOSB Training	Feb 4-5, 2015
NOP - Complete Spring 2015 NOSB meeting tentative agenda	Feb 7, 2015
NOSB - Spring 2015 proposals due to NOP	Feb 25, 2015
NOP - Post proposals, Publish FRN, Open public comment	Mar 9, 2015
Discuss work agendas on ES call	Mar 13, 2015
Public comment closes	Apr 6, 2015
Work agendas finalized on ES call (last call before spring mtg)	Apr 10, 2015
NOP - Send compiled public comments to NOSB	Apr 13, 2015
Spring 2015 NOSB meeting - La Jolla, CA	Week of April 27 - 30

2017 Sunsets (No TRs) Summary: Spr 2015 Review: Fall 2015

Substance	Contact	New TR reqst?	Notes	Vote	Meeting
Aspirin §205.603	JR	N (04 01)		01 20	Summary: Spr 2015 Review: Fall 2015
Atropine §205.603	TF	N (06 03)			
Butorphanol §205.603	CBo	2002 TR Y	New TR requested. Not contracted.		
Calcium hypochlorite §205.603	TF/JD	N (06 17)			
Chlorine dioxide	TF/JD	N (06 17)			
EPA List 4 - Inerts of Minimal Concern §205.603	TF	N (06 03)			
Flunixin §205.603	TF	N (06 03)			
Formic Acid §205.603	CBo	N (06 17)			
Furosemide §205.603	TF	N (06 03)			
Glucose §205.603	CW	N (07 01)			
Glycerine §205.603	TF	N (06 03)			
Lidocaine §205.603	JR	N (04 01)			
Magnesium hydroxide §205.603	TF	N			
Magnesium sulfate §205.603	TF	N			
Methionine §205.603	TF	N			
Oxytocin §205.603	CW	N (07 01)			
Peracetic acid §205.603	JR	N (04 01)			
Phosphoric acid §205.603	JR	N (04 01)			
Poloxalene §205.603	FT	N			
Procaine §205.603	JR	N (04 01)			
Sodium hypochlorite §205.603	TF/JD	N (06 17)			

Strychnine 205.604	JR	N (04 01)			
Sucrose octanoate esters §205.603	FT	N			
Trace minerals §205.603	FT	N			
Vaccines §205.603	JR	N (04 01)			
Tolazoline §205.603	FT	2002 TR Y	New TR requested. Not contracted.		
Xylazine §205.603	CBo	2002 TR Y	New TR requested. Not contracted.		