Formal Recommendation
From: National Organic Standards Board (NOSB)
To: the National Organic Program (NOP)

Date: October 30, 2020
Subject: 2022 Sunset Reviews - Handling (§§ 205.605, 205.606)
NOSB Chair: Steve Ela

The NOSB hereby recommends to the NOP the following:
Rulemaking Action: X

The NOSB recommends the following sunset substances be removed from the National List:
Reference: 7 CFR §205.606 Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as “organic.”
(d) Colors
  (3) Black currant juice color
  (5) Blueberry juice color
  (6) Carrot juice color
  (7) Cherry juice color
  (10) Grape juice color
  (12) Paprika color
  (13) Pumpkin juice color
  (18) Turmeric extract color

Kelp
Starches: Sweet potato starch for bean thread production only
Turkish bay leaves
Whey protein concentrate

The NOSB recommends the following sunset substances be renewed:
Reference: 7 CFR 205.605 Nonagricultural (Nonorganic) substances allowed as ingredients in or on processed products labeled as “organic” or “made with organic (specified ingredients or food group(s)).”

§205.605(a) Nonsynthetics allowed:
Kaolin
Sodium bicarbonate
Waxes (Wood rosin) (sic. Resin)

§205.605(b) Synthetics allowed:
Ammonium bicarbonate
Ammonium carbonate
Calcium phosphates: monobasic, dibasic, tribasic
Ozone
Sodium hydroxide
Reference: 7 CFR §205.606 Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as “organic.”

Carnauba Wax
(d) Colors
   (1) Beet juice extract color
   (2) Beta carotene extract color
   (4) Black/Purple carrot juice color
   (8) Chokeberry - Aronia juice color
   (9) Elderberry juice color
   (11) Grape skin extract color
   (14) Purple potato juice
   (15) Red cabbage extract color
   (16) Red radish extract color
   (17) Saffron extract color

Glycerin
   Inulin-oligofructose enriched
   Orange Shellac - unbleached
   Starches: Cornstarch (native)

NOSB Vote: See below for votes and rationale supporting each recommendation
Kaolin

Reference: 205.605(a)
Petition(s): N/A
Recent Regulatory Background: Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset renewal notice published 03/21/2017 (82 FR 14420)
Sunset Date: 3/15/2022

Subcommittee Review:

NOSB Review:
Based on the Subcommittee review and public comments that this material is of benefit to organic handlers and is relatively benign with no significant environmental or health concerns, the NOSB finds kaolin compliant with OFPA criteria and does not recommend removal from the National List.

NOSB Vote:
Motion to remove kaolin from §205.605 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Kim Huseman
Seconded by: Asa Bradman
Yes: 0   No: 15  Abstain: 0   Absent: 0   Recuse: 0

Motion failed

Sodium bicarbonate

Reference: 205.605(a)
Petition(s): N/A
Recent Regulatory Background: Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset renewal notice published 03/21/2017 (82 FR 14420)
Sunset Date: 3/15/2022

Subcommittee Review:

NOSB Review:
As noted in the Subcommittee review, commenters support the re-listing of sodium bicarbonate. Stakeholders confirmed wide usage across many categories of products. A commonly used item, stakeholders did not report major environmental concerns; one cited sodium bicarbonate as a great example of a National List eligible substance due to its non-toxic, home kitchen use as a leavening agent.

Certifiers raised a classification question regarding the material produced from Trona deposits versus the use of the Solvay process for formulating Sodium Bicarbonate. Support was expressed for considering re-classifying and/or adding an annotation or some other guidance for clarifying the allowed process for sodium bicarbonate production. Based on the Subcommittee review and public comment,
the NOSB finds sodium bicarbonate compliant with OFPA criteria and does not recommend removal from the National List.

**NOSB Vote:**
Motion to remove sodium bicarbonate from 205.605(a) of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Mindee Jeffery
Seconded by: Asa Bradman
Yes: 0   No: 15  Abstain: 0   Absent: 0   Recuse: 0

Motion failed

**Waxes (Wood rosin) (sic. resin)**

**Reference:** 205.605(a) Nonsynthetics allowed: Waxes—nonsynthetic (Carnauba wax; and Wood resin).
**Technical Report:** 1996 TAP; 2014 TR Carnauba Wax; 2014 TR - Wood Rosin
**Petition(s):** N/A
**Past NOSB Actions:** NOSB minutes and vote 09/1996; 11/2005 sunset recommendation; 10/2010 sunset recommendation; 10/2015 sunset recommendation
**Recent Regulatory Background:** Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset renewal notice published 03/21/2017 (82 FR 14420)
**Sunset Date:** 3/15/2022

**Subcommittee Review:**

**NOSB Review:**
As noted in the Subcommittee review, the NOSB recommends a technical correction to the listing - wood rosin is the accurate listing and resin should be removed. Comments received from stakeholders suggested adding an annotation to include “not extracted using volatile synthetic solvents: contains only ancillary substances approved for organic production.” It was also noted that multiple wax listings are useful for market share since some countries do not allow the use of certain formulations of waxes. Based on the Subcommittee review and public comment, the NOSB finds wood rosin compliant with OFPA criteria and does not recommend removal from the National List.

**NOSB Vote:**
Motion to remove waxes (wood rosin) (sic. resin) from §205.605 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Kim Huseman
Seconded by: Scott Rice
Yes: 0   No: 15  Abstain: 0   Absent: 0   Recuse: 0

Motion failed
Ammonium bicarbonate

Reference: 205.605(b) - for use only as a leavening agent
Petition(s): N/A
Recent Regulatory Background: Sunset renewal notice published 06/06/12 [77 FR 33290]; Sunset renewal notice published 03/21/2017 [82 FR 14420]
Sunset Date: 3/15/2022

Subcommittee Review:

NOSB Review:
Based on the Subcommittee review and public comments indicating its critical functionality as a leavening agent and no organic alternatives, the NOSB finds ammonium bicarbonate compliant with OFPA criteria and does not recommend removal from the National List.

NOSB Vote:
Motion to remove ammonium bicarbonate from 205.605(b) of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Mindee Jeffery
Seconded by: Scott Rice
Yes: 0  No: 15  Abstain: 0  Absent: 0  Recuse: 0

Motion failed

Ammonium carbonate

Reference: 205.605(b) –for use only as a leavening agent
Petition(s): N/A
Recent Regulatory Background: Sunset renewal notice published 06/06/12 [77 FR 33290]; Sunset renewal notice published 03/21/2017 [82 FR 14420]
Sunset Date: 3/15/2022

Subcommittee Review:

NOSB Review:
Stakeholder comments regarding ammonium carbonate reflected mixed views. Some suggested delisting based on little or no use by handlers. Others commented that this material is essential as a leavening agent that it is used in different applications than ammonium bicarbonate and that there are no viable alternatives. Based on the Subcommittee review and public comment, the NOSB finds ammonium bicarbonate compliant with OFPA criteria and does not recommend removal from the National List.

NOSB Vote:
Motion to remove ammonium carbonate from 205.605(b) of the National List based on the following
Motion by: Mindee Jeffery  
Seconded by: Steve Ela  
Yes: 0   No: 15   Abstain: 0   Absent: 0   Recuse: 0  
Motion failed

Calcium phosphates (monobasic, dibasic, and tribasic)

Reference: 205.605(b)  
Petition(s): N/A  
Recent Regulatory Background: Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset renewal notice published 03/21/2017 (82 FR 14420)  
Sunset Date: 3/15/2022

Subcommittee Review:

NOSB Review:
During public comment, stakeholders raised concerns about the cumulative effects on human health associated with the use of phosphorous additives in foods. A previous NOSB review responded to the issue of human health concerns regarding cumulative phosphorous consumption by stating that no single phosphate additive or ingredient can be implicated as an isolated risk factor. The Board also determined that calcium phosphates has no viable organic substitute, particularly in baked products. Based on the Subcommittee review and public comment, the NOSB finds calcium phosphates compliant with OFPA criteria and does not recommend removal from the National List.

NOSB Vote:
Motion to remove calcium phosphates from §205.605 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A  
Motion by: Steve Ela  
Seconded by: Asa Bradman  
Yes: 0   No: 15   Abstain: 0   Absent: 0   Recuse: 0  
Motion failed
**Ozone**

**Reference:** 205.605(b)
**Technical Report:** [1995 TAP](#)
**Petition(s):** N/A
**Past NOSB Actions:** 10/1995 NOSB minutes and vote; 11/2005 sunset recommendation; 10/2010 sunset recommendation; 10/2015 sunset recommendation

**Recent Regulatory Background:** Sunset renewal notice published 06/06/12 ([77 FR 33290](#)); Sunset renewal notice published 03/21/2017 ([82 FR 14420](#))

**Sunset Date:** 3/15/2022

**Subcommittee Review:**

**NOSB Review:**
The NOSB finds that the positive attributes of ozone and its role in food safety programs outweigh the identified possible risks to worker safety. However, several stakeholders commented that ozone should be reviewed in context with other approved sanitizers. Based on the Subcommittee review and public comment, the NOSB finds ozone compliant with OFPA criteria and does not recommend removal from the National List.

**NOSB Vote:**
Motion to remove ozone from §205.605 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Scott Rice
Seconded by: Asa Bradman
Yes: 0  No: 15  Abstain: 0  Absent: 0  Recuse: 0

Motion failed

**Sodium hydroxide**

**Reference:** 205.605(b) - prohibited for use in lye peeling of fruits and vegetables.
**Technical Report:** [1995 TAP](#); 2020 TR IN PROGRESS
**Petition(s):** N/A
**Past NOSB Actions:** 04/1995 NOSB minutes and vote; 11/2005 sunset recommendation; 10/2010 sunset recommendation; 10/2015 sunset recommendation

**Recent Regulatory Background:** Sunset renewal notice published 06/06/12 ([77 FR 33290](#)); Sunset renewal notice published 03/21/2017 ([82 FR 14420](#))

**Sunset Date:** 3/15/2022

**Subcommittee Review:**

**NOSB Review:**
The Subcommittee discussed the wide usage of sodium hydroxide in organic systems. Several brands, certifiers, and a trade association listed wide usage of sodium hydroxide. A trade association further noted that alternatives are insufficient and, if removed, products would lose organic certification as reformulation is not an option. Several commenters suggested an annotation to limit use solely for essential purposes. An environmental group noted that the current annotation only lists prohibitions and requested that the Board investigate essential uses of sodium hydroxide and move towards allowance of essential uses exclusively. Based on the Subcommittee review and public comment, the
NOSB finds sodium hydroxide compliant with OFPA criteria and does not recommend removal from the National List.

**NOSB Vote:**
Motion to remove sodium hydroxide from § 205.605(b) of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Kim Huseman
Seconded by: Mindee Jeffery
Yes: 0   No: 15  Abstain: 0   Absent: 0   Recuse: 0

Motion failed

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**Waxes (Carnauba)**

**Reference:** 205.606 Waxes – nonsynthetic (Carnauba wax; and Wood resin).

**Technical Report:** [1996 TAP](#); [2014 TR - Carnauba Wax](#)

**Petition(s):** N/A

**Past NOSB Actions:** NOSB minutes and vote 09/1996; 11/2005 sunset recommendation; [10/2010 sunset recommendation](#); [10/2015 sunset recommendation](#)

**Recent Regulatory Background:** Sunset renewal notice published 06/06/12 ([77 FR 33290](#)); Sunset renewal notice published 03/21/2017 ([82 FR 14420](#))

**Sunset Date:** 3/15/2022

**Subcommittee Review:**

**NOSB Review:**
As noted in the Subcommittee review, the vote in the Handling Subcommittee was split, based on concerns about the use of volatiles in the production of carnauba wax, the possible availability of organic forms, and the issue of an unlabeled ingredient/additive used on produce. Some stakeholder comments referenced sufficient organic supply and supported delisting. Others commented that the organic form of waxes (carnauba) does not provide a satisfactory result when used as a processing aid. Furthermore, while waxes in general are not always used, they are necessary in specific applications and an array of several waxes for organic use may be needed due to varying export regulations by other countries. Members of the NOSB found merit in both arguments but based on the Subcommittee review and additional public comment, the NOSB finds carnauba compliant with OFPA criteria and does not recommend removal from the National List.

**NOSB Vote:**
Motion to remove waxes (carnauba) from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Availability of organically produced alternatives.
Motion by: Kim Huseman
Seconded by: Scott Rice
Yes: 3   No: 11  Abstain: 1   Absent: 0   Recuse: 0

Motion failed
Colors - Beet juice extract color, Beta Carotene, Black Currant juice color, Black/Purple Carrot Juice color, Blueberry Juice color, Carrot Juice color, Cherry Juice color, Chokeberry/Aronia Juice color, Elderberry Juice color, Grape Juice color, Grape Skin Extract color, Paprika color, Pumpkin Juice color, Purple Potato juice color, Red Cabbage Extract color, Red radish Extract color, Saffron Extract color, Turmeric Extract color

Reference: 205.606(d) Colors derived from agricultural products - Must not be produced using synthetic solvents and carrier systems or any artificial preservative

(1) Beet juice extract color derived from Beta vulgaris L., except must not be produced from sugar beets.
(2) Beta carotene extract color – derived from carrots (Daucus carota L.) or algae (Dunaliella salina)
(3) Black currant juice color derived from Ribes nigrum L.
(4) Black/Purple carrot juice color derived from Daucus carota L.
(5) Blueberry juice color derived from blueberries (Vaccinum spp.)
(6) Carrot juice color derived from Daucus carota L.
(7) Cherry juice color - derived from Prunus avium (L.) L. or Prunus cerasus L.
(8) Chokeberry, Aronia juice color - derived from Aronia arbutifolia (L.) Pers. Or Aronia melanocarpa (Michx.) Elliott.
(9) Elderberry juice color - derived from Sambucus nigra L.
(10) Grape juice color - derived from Vitis vinifera L.
(11) Grape skin extract color - derived from Vitis vinifera L.
(12) Paprika color - derived from dried powder or vegetable oil extract of Capsicum annuum L.
(13) Pumpkin juice color - derived from Cucurbita pepo L. or Solanum tuberosum L
(14) Purple sweet potato juice - derived from Ipomoea batatas L. or Solanum tuberosum L.
(15) Red cabbage extract color - derived from Brassica oleracea L.
(16) Red radish extract color - derived from Raphanus sativus L.
(17) Saffron extract color - derived from Crocus sativus L.
(18) Turmeric extract color - derived from Curcuma longa L.

Technical Report: 2015 TR - Colors (all); 2011 (Beta carotene); 2012 Supplemental TR
Petition(s): 2007 Petition
Recent Regulatory Background: Added to NL effective 06/21/07 (72 FR 35137); Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset renewal notice published 03/21/2017 (82 FR 14420)
Sunset Date (All except beta carotene): 3/15/2022
Sunset Date: Beta carotene extract color: 5/29/2023

Subcommittee Review:

NOSB Review:
The previous NOSB sunset review of colors was contentious in that while the initial Subcommittee proposals were to remove most of the colors, discussion at the full Board meeting as to whether various organic colors were available in all forms (powder as well as liquid) led the Board to vote for continued listing. Collectively, there were a total of 21 comments or presentations given during the Spring/Fall 2020 meeting and about 80% favored relisting. However, only 20% of the commenters (both for or against relisting) responded to individual colors or conversely, 80% of the commenters responded to the whole category with a “relist” or “delist” recommendation. Most comments did not address individual colors
despite pointed questions from the subcommittee about individual colors at both the Spring and Fall meetings.

In public comments, the number one reason given by stakeholders for a recommendation to “relist” or “delist” centered around “suitable commercial availability”, either because organic alternatives were not reliably available in sufficient quantities or the organic alternatives were too variable in form and quality to provide product consistency. Despite increased dialogue with the manufacturing community (both suppliers of organic colors and users of those colors), there are still varying reports of commercial availability. In particular, one large manufacturer claimed they could supply all types and forms of organic colors if requested, but that the cost would be higher. This manufacturer noted that the exception for non-organic forms was potentially limiting the further development of organic colors. Conversely, several end users noted that they were able to find commercial availability of some colors but not all. In some cases, this depended on the size of the end user and/or their specific product needs. Finally, more than a few commenters expressed heightened concern regarding the supply chain due to the current state of the pandemic. In the review of the individual colors, these variabilities of supply led the NOSB to suggest relisting many colors and to recommend delisting others due to findings that those colors were available in organic form.

(1) Beet juice extract color - derived from Beta vulgaris L., except must not be produced from sugar beets.

Based on the Subcommittee review and mixed information from public comments about whether organic forms were available in sufficient form or quantity, the NOSB finds beet juice extract color compliant with OFPA criteria and does not recommend removal from the National List.

**NOSB Vote:**
Motion to remove beet juice extract from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Steve Ela
Seconded by: Mindee Jeffery
Yes: 0   No: 15  Abstain: 0   Absent: 0   Recuse: 0

Motion failed

(2) Beta carotene extract color - derived from carrots (Daucus carota L.) or algae (Dunaliella salina)

Based on the Subcommittee review and information from public comments, both manufacturers and end users, indicating strong concern regarding suitable adequate supply, the NOSB finds Beta carotene extract color compliant with OFPA criteria and does not recommend removal from the National List.

**NOSB Vote:**
Motion to remove beta carotene extract from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Steve Ela
Seconded by: Asa Bradman
Yes: 0   No: 15  Abstain: 0   Absent: 0   Recuse: 0

Motion failed
(3) Black currant juice color - derived from *Ribes nigrum* L.

Public comments from Spring and Fall 2020 were mixed with several commenters recommending relisting and one end user of this color commenting that they had adequate supply of this color in organic forms. Several manufacturers commented that supply is adequate and removing the substance from the National List will not create market disruption. Although the vote in the Handling Subcommittee was split, the NOSB voted to remove black currant juice color based on commercial availability of the organic form.

**NOSB Vote:**
Motion to remove black currant juice color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Alternatives (availability of organic black currant juice color, 7 U.S.C. 6518(m)(6)
Motion by: Steve Ela
Seconded by: Mindee Jeffery
Yes: 15  No: 0  Abstain: 0  Absent: 0  Recuse: 0

Motion passed

(4) Black/Purple carrot juice color - derived from *Daucus carota* L.

Public comments from Spring and Fall 2020 were mixed, but indicated that organic supply may not be adequate or has variable quality based on color variation of different batches. Based on the Subcommittee reviews and information from public comments about the lack of consistent availability of organic forms, the NOSB finds black/purple carrot juice color compliant with OFPA criteria and does not recommend removal from the National List.

**NOSB Vote:**
Motion to remove black/purple carrot juice color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Steve Ela
Seconded by: Asa Bradman
Yes: 0   No: 15  Abstain: 0   Absent: 0   Recuse: 0

Motion failed

(5) Blueberry juice color - derived from blueberries (Vaccinium spp.)

Public comments from Spring and Fall 2020 were mixed with several commenters recommending relisting and others commenting that they had adequate supply of this color in organic forms. Several manufacturers commented that supply is adequate and removing the substance from the National List will not create market disruption. There was also a comment noting that there has been a large increase in the organic blueberry supply since the last review of this color. Although the vote in the Handling Subcommittee was split, the NOSB recommends removing blueberry juice color based on commercial availability of the organic form.

**NOSB Vote:**
Motion to remove blueberry juice color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Alternatives (availability of organic blueberry juice color), 7 U.S.C. 6518(m)(6)
Motion by: Steve Ela  
Seconded by: Mindee Jeffery  
Yes: 13 No: 2 Abstain: 0 Absent: 0 Recuse: 0  

Motion passed  

(6) Carrot juice color - derived from *Daucus carota* L.  

The NOSB received many comments on carrot juice color at both the Spring and Fall 2020 meetings. Comments were mixed. While one commenter argued for retaining carrot juice color on the National List because of specific aspects of suitability, *i.e.*, batch to batch conformity of color and strength of color, most commenters indicated a suitable organic supply. The Subcommittee acknowledged that while there may be some difficulties sourcing supply to provide the desired characteristics, a possible solution could be contract growing aimed at specific attributes. Other commenters noted that growers often had alternative markets for their crops and would not take the risk of growing for the color market. However, if higher prices were paid for carrots needed for the color market, this risk might be mitigated or disappear.  

However, based on the information about the commercial availability of organic forms, the NOSB finds carrot juice color no longer compliant with OFPA criteria due to the adequate availability of the alternative (*i.e.*, organic forms) and recommends removal from the National List.  

**NOSB Vote:**  
Motion to remove carrot juice color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Alternatives (availability of organic carrot juice color), 7 U.S.C. 6518(m)(6)  
Motion by: Steve Ela  
Seconded by: Scott Rice  
Yes: 15 No: 0 Abstain: 0 Absent: 0 Recuse: 0  

Motion passed  

(7) Cherry juice color - derived from *Prunus avium* (L.) L. or *Prunus cerasus* L.  

The vote in the Handling Subcommittee was split, however based on the Subcommittee review and comments from both the Spring and Fall 2020 about adequate supply of organic forms, the NOSB finds cherry juice color no longer compliant with OFPA criteria due to organic forms being commercially available and recommends removal from the National List.  

**NOSB Vote:**  
Motion to remove cherry juice color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Alternatives (availability of organic cherry juice color), 7 U.S.C. 6518(m)(6)  
Motion by: Steve Ela  
Seconded by: Kim Huseman  
Yes: 14 No: 0 Abstain: 0 Absent: 1 Recuse: 0  

Motion passed

Based on the Subcommittee review and information from public comments, which was scant, the NOSB determined that the organic supply is variable and not adequate to meet demand in either form or quantity. The NOSB finds chokeberry-aronia juice color compliant with OFPA criteria and does not recommend removal from the National List.

NOSB Vote:
Motion to remove chokecherry – aronia juice color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Steve Ela
Seconded by: Mindee Jeffery
Yes: 0   No: 14  Abstain: 0   Absent: 1   Recuse: 0

Motion failed

(9) Elderberry juice color – derived from Sambucus nigra L.

The NOSB received comments at both the Spring and Fall 2020 meetings in support of continued relisting of this color, noting the limited organic supply. Based on the Subcommittee review and information from public comments noting that this material is not available in sufficient quantity or form, the NOSB finds elderberry juice color compliant with OFPA criteria and does not recommend removal from the National List.

NOSB Vote:
Motion to remove elderberry juice color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Steve Ela
Seconded by: Asa Bradman
Yes: 0   No: 14  Abstain: 0   Absent: 1   Recuse: 0

Motion failed

(10) Grape juice color – derived from Vitis vinifera L.

Based on the information about the commercial availability of organic forms, the NOSB voted to remove grape juice color from §205.606. Similar to comments the NOSB received for carrot juice color, there appears to be variability between batches, which would require coordinating with growers to obtain a supply with more conformity. However, organic availability is not a limitation. Based on the Subcommittee review and public comments about adequate supply of organic forms, the NOSB finds grape juice color no longer compliant with OFPA criteria due to sufficient organic supply and recommends removal from the National List.

NOSB Vote:
Motion to remove grape juice color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Alternatives (availability of organic grape juice color), 7 U.S.C. 6518(m)(6)
Motion by: Steve Ela
Seconded by: Asa Bradman
Yes: 15 No: 0 Abstain: 0 Absent: 0 Recuse: 0

Motion passed

(11) Grape skin extract color – derived from Vitis vinifera L.

Public comments from Spring and Fall 2020 were mixed, and the vote in Subcommittee was split. Based on the Subcommittee review, the supply source is tied to the wine industry, where additional organic supply may be limited. There was not adequate evidence presented that there was sufficient supply of organic quantities or forms. Based on the Subcommittee review and public comments, the NOSB finds grape skin extract color compliant with OFPA criteria and does not recommend removal from the National List.

**NOSB Vote:**
Motion to remove grape skin extract color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Steve Ela
Seconded by: Scott Rice
Yes: 0 No: 15 Abstain: 0 Absent: 0 Recuse: 0

Motion failed

(12) ) Paprika color – derived from dried powder or vegetable oil extract of Capsicum annuum L.

Public comment was mixed, however several manufacturers noted they had adequate organic supply available and several end users noted they could purchase organic forms of this material. Based on subcommittee review and public comments, the NOSB finds paprika color no longer compliant with OFPA criteria due to commercial availability and recommends removal from the National List.

**NOSB Vote:**
Motion to remove paprika color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Alternatives (availability of organic paprika color), 7 U.S.C. 6518(m)(6)
Motion by: Steve Ela
Seconded by: Kim Huseman
Yes: 15 No: 0 Abstain: 0 Absent: 0 Recuse: 0

Motion passed

(13) Pumpkin juice color – derived from Cucurbita pepo L. or Solanum tuberosum L.

Public comment was mixed, however several manufacturers noted they had adequate organic supply available and several end users noted they could purchase organic forms of this material. Based on subcommittee review and public comments, the NOSB finds pumpkin juice color no longer compliant with OFPA criteria due to organic commercial availability and recommends removal from the National List.
NOSB Vote:
Motion to remove pumpkin juice color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Alternatives (availability of organic pumpkin juice color), 7 U.S.C. 6518(m)(6)
Motion by: Steve Ela
Seconded by: Mindee Jeffery
Yes: 15  No: 0  Abstain: 0  Absent: 0  Recuse: 0

Motion passed

(14) Purple sweet potato juice – derived from Ipomoea batatas L. or Solanum tuberosum L.

Based on the Subcommittee review and information from public comments, indicating that there is not an adequate organic supply of purple potato juice, the NOSB finds purple potato juice compliant with OFPA criteria due to lack of organic supply and does not recommend removal from the National List.

NOSB Vote:
Motion to remove purple sweet potato juice extract from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Steve Ela
Seconded by: Asa Bradman
Yes: 0  No: 15  Abstain: 0  Absent: 0  Recuse: 0

Motion failed

(15) Red cabbage extract color – derived from Brassica oleracea L.

Based on the Subcommittee review and information from public comments, indicating that there is not an adequate organic supply of red cabbage extract color, the NOSB finds red cabbage extract color compliant with OFPA criteria due to lack of organic supply and does not recommend removal from the National List.

NOSB Vote:
Motion to remove red cabbage extract color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Steve Ela
Seconded by: Mindee Jeffery
Yes: 0  No: 15  Abstain: 0  Absent: 0  Recuse: 0

Motion failed

(16) Red radish extract color – derived from Raphanus sativus L.

Public comments from Spring and Fall 2020 meetings were mixed. One manufacturer asked for relisting while another asked for delisting. One end user that uses organic colors in other products asked for relisting of this color. Based on the previous sunset review, the current Subcommittee review, and information from public comments, the NOSB finds red radish extract color compliant with OFPA criteria due to lack of organic supply and does not recommend removal from the National List.
NOSB Vote:
Motion to remove red radish extract color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Steve Ela
Seconded by: Kim Huseman
Yes: 0   No: 15  Abstain: 0   Absent: 0   Recuse: 0

Motion failed

(17) Saffron extract color – derived from *Crocus sativus* L.

Public comments from both the Spring and Fall 2020 meetings were mixed. One manufacturer asked for delisting noting they had adequate supply to meet market demand, while another manufacturer did not specifically address this color. One end user that uses organic colors in other products asked for relisting of this color. Since adequate commercial availability of the organic form could not be confirmed, the NOSB finds saffron extract color compliant with OFPA criteria and does not recommend removal from the National List.

NOSB Vote:
Motion to remove saffron extract color from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Steve Ela
Seconded by: Asa Bradman
Yes: 0   No: 15  Abstain: 0   Absent: 0   Recuse: 0

Motion failed

(18) Turmeric extract – derived from *Curcuma longa* L.

Based on the Subcommittee review and information from public comments, including end users and manufacturers indicating that there is adequate organic supply of turmeric extract, the NOSB finds turmeric extract not compliant with OFPA criteria due to organic commercial availability and recommends removal from the National List.

NOSB Vote:
Motion to remove turmeric extract from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Alternatives (availability of organic turmeric extract), 7 U.S.C. 6518(m)(6)
Motion by: Steve Ela
Seconded by: Kim Huseman
Yes: 11   No: 4  Abstain: 0   Absent: 0   Recuse: 0

Motion passed
Glycerin

Reference: 205.606(h) Glycerin (CAS # 56-81-5)—produced from agricultural source materials and processed using biological or mechanical/physical methods as described under §205.270(a).


Petition(s): 1995 N/A, Glycerin (2012 Petition to remove)


Recent Regulatory Background: Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset renewal notice published 03/21/2017 (82 FR 14420)

Subcommittee Review:

NOSB Review:
Glycerin is widely used as a binder, humectant, solvent, and carrier. During subcommittee review and public comments, no suitable organic commercially viable alternative was found to be available. There was some concern on the NOSB about the extractants used to produce glycerine and whether any remained in the final product. Based on Subcommittee review and public comment, the NOSB finds glycerin compliant with OFPA criteria and does not recommend removal from the National List.

NOSB Vote:
Motion to remove glycerin from § 205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Jerry D’Amore
Seconded by: Kim Huseman
Yes: 2  No: 13  Abstain: 0  Absent: 0  Recuse: 0

Motion failed

Inulin-oligofructose enriched

Reference: 205.606(j) Inulin-oligofructose enriched (CAS # 9005-80-5)

Technical Report: 2015 TR

Petition(s): 2007 Petition

Past NOSB Actions: 04/2007 recommendation; 2010 NOSB sunset recommendation; 10/2015 sunset recommendation

Recent Regulatory Background: Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset renewal notice published 07/06/17 (82 FR 31241)

Subcommittee Review:
NOSB Review:
Public comments received from stakeholders were mixed, however, a majority supported relisting citing the widespread use of this material, examples of its unique functionality, and that the alternative (fructooligosaccharharide) has a lack of functionality in terms of fiber and sweetness in some applications. Due to the widespread use these commenters expressed concern about the commercial availability of the organic forms. Those against relisting cited adequate organic supply but with little or no documentation. Based on the Subcommittee review and public comment, the NOSB finds inulin-oligofructose compliant with OFPA criteria due to lack of evidence supporting commercial availability of the organic form and does not recommend removal from the National List.

NOSB Vote:
Motion to remove inulin-oligofructose enriched from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Jerry D’Amore
Seconded by: Scott Rice
Yes: 0   No: 15  Abstain: 0   Absent: 0   Recuse: 0

Motion failed

Kelp
Reference: 205.606(k) Kelp—for use only as a thickener and dietary supplement.
Petition(s): N/A
Recent Regulatory Background: Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset renewal notice published 03/21/2017 (82 FR 14420); Sunset renewal notice published 03/21/2017 (82 FR 14420)
Sunset Date: 3/15/2022

Subcommittee Review:

NOSB Review:
Kelp is a term used for seaweeds belonging to the brown algae (Phaeophyceae) class in the order Laminariales. Some forms of kelp have more specific names, for instance, wakame or kombu. Most kombu is from the species Saccharina japonica (Laminaria japonica). However, some edible kelps in the family Laminariaceae are not always called kombu, such as arame, kurome (Ecklonia kurome) or Macrocystis pyrifera. The name "wakame" was derived from the Japanese name wakame. Starting in the 1960s, the word "wakame" started to be used widely in the United States and the product (imported in dried form from Japan) became widely available at natural food stores and Asian-American grocery stores. There has been some confusion around the separate listings on the National List for wakame and kombu, both forms of edible seaweeds. Several commenters requested the delisting of kelp because of the ambiguity of the listing and suggested that kelp used as a thickener or dietary supplement be certified under §205.207 - the organic wild crop certification. Other commenters suggested relisting with an annotation. The NOSB also discussed, in relation to the listing of kelp, the proposal regarding standards for the harvesting of marine materials. Because the marine materials
proposal will ultimately affect all marine materials, including kelp, there was uncertainty about how to proceed with kelp and other seaweeds that will have to be better defined, preferably as a group since many of the terms such as kelp can include other separate listings. Several Board members also supported the concept of listing kelp under the organic wild crop certification (§205.207). Ultimately, the NOSB decided to recommend removal of kelp from 205.606 because of ongoing confusion about the separate listings and ambiguity. The Board also felt that continued use of kelp in handling be evaluated in the context of the marine macroalgae proposal that addressed use of marine materials under the Crops Subcommittee.

**NOSB Vote:**
Motion to remove kelp from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): § 6518(m)(6) alternatives to using the substance in terms of practices or other available materials
Motion by: A-dae Briones
Seconded by: Steve Ela
Yes: 11  No: 4  Abstain: 0  Absent: 0  Recuse: 0

Motion passed

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**Orange shellac**

Reference: 205.606(o) Orange shellac-unbleached (CAS # 9000-59-3).
Petition(s): N/A

**Past NOSB Actions:** 10/1999 NOSB minutes and vote; 10/2010 NOSB sunset recommendation; 10/2015 sunset recommendation

**Recent Regulatory Background:** Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset renewal notice published 03/21/2017 (82 FR 14420)
**Sunset Date:** 3/15/2022

**Subcommittee Review:**

**NOSB Review:**

Stakeholders submitting comments overwhelming supported relisting of this material. However, a number suggested adding an annotation that would require labeling of fruits and vegetables that may have had orange shellac applied. This is, in part, due to some individuals showing allergic symptoms and that some vegetarians may consider this material an animal product not suitable for consumption. Other commenters pointed out that while alternatives do exist, variability in shine and permeability may make mean that certain waxes work better in some applications while others perform better in other applications. The lack of information about whether its use in organic products is widespread or necessary as well as the dearth of public comments on this material led the Board to consider delisting, however, there was not adequate evidence demonstrating that non-synthetic substances are adequate alternatives. Based on the Subcommittee review and public comment, the NOSB finds orange shellac compliant with OFPA criteria and does not recommend removal from the National List.

**NOSB Vote:**
Motion to remove orange shellac from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A
Motion by: Kim Huseman
Seconded by: Jerry D’Amore
Yes: 0   No: 15  Abstain: 0   Absent: 0   Recuse: 0

Motion failed

Starches: cornstarch

Reference: 205.606(s) Starches.
   (1) Cornstarch (native).


Petition(s): N/A - Cornstarch; 2007 Petition - Sweet Potato Starch

Past NOSB Actions: 10/1995 NOSB minutes and vote; 10/2010 sunset recommendation on cornstarch; 10/2015 sunset recommendation

Recent Regulatory Background: Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset renewal notice published 03/21/2017 (82 FR 14420);

Sunset Date: 3/15/2022

Subcommittee Review:

NOSB Review:
During subcommittee review and public comment a number of stakeholders noted that there is adequate commercial availability of organic forms of cornstarch. However a number of commenters noted that if cornstarch were delisted, baking powder, a multi-ingredient product that includes small percentages of cornstarch, may not be certifiable. The Board wants to encourage policies that increase use of organically sourced cornstarch and suggests that the listing for cornstarch be annotated to only those few uses in which organic forms are not available and the use of cornstarch in baking powder.

Based on subcommittee review and public comments, the Board finds cornstarch compliant with OFPA criteria and does not recommend removal from the National List.

NOSB Vote:
Motion to remove starches: cornstarch from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): N/A Motion by: Asa Bradman
Seconded by: Scott Rice
Yes: 6   No: 9  Abstain: 0   Absent: 0   Recuse: 0

Motion failed

Starches: sweet potato

Reference: 205.606(s) Starches.
   (2) Sweet potato starch - for bean thread production only.


Petition(s): N/A – Cornstarch; 2007 Petition - Sweet Potato Starch

Past NOSB Actions: 10/1995 NOSB minutes and vote; 10/2010 sunset review Sweet potato starch; 10/2015 sunset recommendation

Recent Regulatory Background: Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset
Sunset Date: 3/15/2022

**Subcommittee Review:**

**NOSB Review:**
Only limited public comment was submitted for this material with only a few users reporting use of sweet potato starch. One manufacturer suggested pea starch as a viable alternative to sweet potato starch. Other commenters noted that the listing of this material inhibits production of organic forms. Given the extremely limited support by stakeholders for relisting, very small amount of documented use, readily available alternatives and production of organic forms, the NOSB recommends removal of sweet potato starch from §205.606.

**NOSB Vote:**
Motion to remove starches: sweet potato starch from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Alternatives (availability of organic sweet potato starch), 7 U.S.C. 6518(m)(6)

Motion by: Asa Bradman
Seconded by: Jerry D’Amore
Yes: 11 No: 3 Abstain: 0 Absent: 1 Recuse: 0

Motion passed

### Turkish bay leaves

**Reference:** 205.606(u) Turkish bay leaves.
**Technical Report:** N/A
**Petition(s):** 2006 Petition
**Past NOSB Actions:** 04/2007 recommendation; 10/2010 NOSB sunset recommendation; [10/2015 sunset recommendation](#)

**Recent Regulatory Background:** Sunset renewal notice published 06/06/12 ([77 FR 33290](#)); Sunset renewal notice published 07/06/17 ([82 FR 31241](#))

**Sunset Date:** 6/27/2022

**Subcommittee Review:**

**NOSB Review:**
During the previous review of Turkish bay leaves in 2015, the NOSB recommended removal of this material from the National List due to adequate commercial availability of the organic form. However, during rulemaking, the Program received extensive comments that there was not adequate commercial organic supply and all forms were not available organically. Specifically, while whole leaves were available in organic form, ground bay leaves were not available organically.

During this review, public commenters overwhelmingly supported the removal of Turkish bay leaves from the National List. Of particular note, one organic handler that uses Turkish bay leaves in a wide range of canned soups stated there is full availability of organic forms. The handler further noted there would be no impact from removal of this material because organic forms can be used and are available. Of the certifiers submitting comments on 205.606 materials, only one noted inclusion of non-organic forms in four organic system plans. Furthermore, the Organic Integrity Database contains records of 62
certified handlers and crop producers listing “bay leaf”, 86 records listing “bay leaves” and 4 records listing “Turkish bay leaves”. In the time between the 2015 review and this review, the organic supply appears to have increased in both quantity and form. There appears to be a sufficient quantity of organic Turkish bay leaves in the market to support this removal and the use of nonorganic Turkish bay leaves in organic products is no longer essential.

Based on these comments and the wide availability of organic sources, the NOSB recommends removal of Turkish bay leaves from 205.606 due to adequate organic commercial availability.

**NOSB Vote:**
Motion to remove Turkish bay leaves from §205.606 of the National List based on the following criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Alternatives (availability of organic Turkish bay leaves), 7 U.S.C. 6518(m)(6)
Motion by: Scott Rice
Seconded by: Steve Ela
Yes: 15   No: 0   Abstain: 0   Absent: 0   Recuse: 0

Motion passed

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**Whey protein concentrate**

Reference: 205.606(w) Whey protein concentrate.
Technical Report: 2015 TR
Petition(s): 2007 Petition
Recent Regulatory Background: Sunset renewal notice published 06/06/12 (77 FR 33290); Sunset renewal notice published 07/06/17 (82 FR 31241)
Sunset Date: 6/27/2022

**Subcommittee Review:**

**NOSB Review:**
During the previous review by the NOSB of whey protein concentrate, the Board recommended delisting of this material due to adequate commercial availability of organic supplies. However, during rulemaking, public comments in favor of keeping whey protein concentrate on the list led to the relisting of this material.

During this review, widespread commercial availability of organic whey protein concentrate led the NOSB to unanimously vote to delist whey protein concentrate. Stakeholders overwhelming commented that organic product was widely available and used. One processor noted that the organic processing infrastructure has grown dramatically since it was originally placed on the National List. They further stated that organic processors are established throughout the United States for both finished products and condensed whey. At this point the organic whey protein concentrate supply exceeds demand and large volumes are sold on the conventional market. Another processor also commented that they had adequate organic product available to meet demand and there is no need to use a conventional alternative. Another commenter noted that organic whey-based products are offered from international partners making the supply chain quite robust. Furthermore, at least one organic certifier commented that all their handlers were currently using organic forms of whey protein concentrate.
The NOSB asked stakeholders at both the Spring and Fall 2020 meetings specifically whether there was
any type or form of whey protein concentrate that was not available in organic form, and received only
affirmative responses that there are adequate organic supplies of all forms. Due to widespread
comments that there is adequate organic supply and no comments that noted any form or type that was
not available organically, the NOSB recommends delisting due to adequate commercial availability of
organic whey protein concentrate.

**NOSB Vote:**
Motion to remove whey protein concentrate from §205.606 of the National List based on the following
criteria in the Organic Foods Production Act (OFPA) and/or 7 CFR 205.600(b): Alternatives (availability of
organic whey protein concentrate), 7 U.S.C. 6518(m)(6)
Motion by: Steve Ela
Seconded by: Jerry D’Amore
Yes: 15   No: 0   Abstain: 0   Absent: 0   Recuse: 0

Motion passed