



Sunset 2015 Review List - Request for Public Comment Crops Substances

***Reviewed and revised: February 26, 2014.**

Introduction

As part of the [Sunset Process](#), the National Organic Program (NOP) announces substances on the National List of Allowed and Prohibited Substances (National List) that are coming up for sunset review by the National Organic Standard Board (NOSB). The following list announces substances that are on the National List for use in organic crop production that must be reviewed by the NOSB and renewed by the NOP before their sunset dates in 2015. This list provides the substance's current status, use description, references to past technical reports, past NOSB actions, and regulatory history, as applicable. If a new technical report has been requested for a substance, this is noted in this list. To see if any new technical report is available, please check for updates under the substance name in the [Petitioned Substances Database](#).

Request for Comments

While the NOSB will not complete its review and any recommendations on these substances until the fall 2014 public meeting, the NOP is requesting that the public provide comments about these substances as part of the spring 2014 NOSB public meeting. These comments should be provided through www.regulations.gov by [April 8, 2014](#) as explained in the meeting notice published in the [Federal Register](#) on March 10, 2014

The Crops Subcommittee has posed specific questions to solicit public comments regarding the substances due for sunset review by 2015. These questions are included in the listing for each substance below.

It is important for the public to engage in the Sunset Process early. We strongly encourage submission of comments on these substances in advance of or at the spring 2014 meeting. Providing your comments early is important to: 1) ensure that the NOSB has adequate time and information to develop any proposals to remove substances based on this information before its Fall 2014 meeting; and, as such 2) provide stakeholders adequate opportunity to comment on any proposals to remove substances before NOSB votes and makes a recommendation at its fall 2014 meeting.

These comments are necessary to guide the NOSB's review of each substance against the criteria in the Organic Foods Production Act (7 U.S.C. 6518(m)) and the USDA organic regulations (7 CFR 205.600). The substances currently on the National List were originally recommended by the NOSB based on evidence available at the time of their last review that demonstrated that the substances were found to be: (1) not harmful to human health or the environment, (2) necessary because of the unavailability of wholly nonsynthetic alternatives, and (3) consistent and compatible with organic practices.

Public comments should focus on providing new information about a substance since its last NOSB review. Such information could include research or data that may support a change in the NOSB's determination for a substance.

Guidance on Submitting Your Comments

Comments should clearly indicate your position on continuing the allowance of substances on this list and explain the reasons for your position. You should include relevant information and data to support your position (e.g., scientific, environmental, manufacturing, industry impact information, etc.).



For Comments That Support Substances Under Review:

If you provide comments in support of an allowance of a substance on the National List, you should provide new information demonstrating that the substance is:

- (1) not harmful to human health or the environment;
- (2) necessary to the production of the agricultural products because of the unavailability of wholly nonsynthetic substitute products; and
- (3) consistent with organic production.

For Comments That Do Not Support Substances Under Review:

If you provide comments that do not support a substance on the National List, you should provide reasons why the use of the substance should no longer be allowed in organic production or handling. Specifically, comments that support the removal of a substance from the National List should provide new information since its last NOSB review to demonstrate that the substance is:

- (1) harmful to human health or the environment;
- (2) unnecessary because of the availability of alternatives; and
- (3) inconsistent with organic production.

For Comments Addressing the Availability of Alternatives:

Comments may present information about the viability of alternatives for a substance under sunset review. Viable alternatives include, but are not limited to:

- Alternative management practices that would eliminate the need for the specific substance;
- Other currently exempted substances that are on the National List, which could eliminate the need for this specific substance; and
- Other organic or nonorganic agricultural substances.

Your comments should address whether any alternatives have a function and effect equivalent to or better than the allowed substance, and whether you want the substance to be allowed or removed from the National List. Assertions about alternative substances, except for those alternatives that already appear on the National List, should, if possible, include the name and address of the manufacturer of the alternative. Further, your comments should include a copy or the specific source of any supportive literature, which could include product or practice descriptions; performance and test data; reference standards; names and addresses of producers or handlers who have used the alternative under similar conditions and the date of use; and an itemized comparison of the function and effect of the proposed alternative(s) with substance under review. The following table can help you describe recommended alternatives in place of a current substance that you do not want to be continued.

Table 1. Guidance on submitting comments for alternatives to substances on the National List.

If the currently listed substance is used in...	And is a...	Then the recommended alternative should be a (an)...
Crop Production	Synthetic substance	<ul style="list-style-type: none"> - Another currently listed synthetic substance; - Nonsynthetic substance; or - Management practice.

Written public comments will be accepted through April 8, 2014 via www.regulations.gov. Comments received after that date may not be reviewed by the NOSB before the meeting.



SUNSET 2015: CROPS SUBSTANCES

Aqueous potassium silicate (Listing 1 of 2 – 205.601(e))

Synthetic

Use – As an insecticide (including acaricides or mite control).

Listing: Aqueous potassium silicate (CAS # 1312-76-1)—The silica, used in the manufacture of potassium silicate, must be sourced from naturally occurring sand.

Technical Reports: [2003 \(PDF\)](#); [2014 \(PDF\)](#)

Petition(s): [Potassium Silicate \(PDF\)](#) (2004), [Potassium Silicate Supplemental \(PDF\)](#) (2006)

Past NOSB Actions: NOSB review and recommendation for addition to the National List - [11/30/07](#).

Regulatory Background: Proposed rule (including justification) published 6/3/2009 (74 FR 26591). Added to National List 12/13/2010 (75 FR 77521).

Sunset Date: 12/14/2015

Specific Questions from Subcommittee

1. Potassium silicate makes plants more resistant to disease and herbivory, at least in part by concentrating silica. Humans and livestock are herbivores who might be consuming the treated plants. The 2014 Technical Report (TR) discusses how the foliar application of silicate can affect availability of micronutrients (TR 471-473), make plant tissues less tender and less digestible to humans and livestock (477-481 & 497-502), and lead to other morphological changes (487-490). Does the foliar application of potassium silicate in the quantity and frequency needed for insect and disease control have impacts on the nutritive value of treated foods that would exceed the impacts of silica obtained by the plant from natural soils? Are users employing mitigation strategies in consideration of these impacts? How should the NOSB weigh this impact on the nutritive value of treated plants?

2. Can organic management systems conserve and build available silicon in the soil in a ways that can be alternatives to potassium silicate? The 2014 TR suggests the following alternative practices: soilscaping, choice of variety and planting time, balancing silica accumulators and non-accumulators, moisture management, choice of mulch and ground cover, and scouting (661-689). Other forms of silica are also suggested as alternative materials (592-605). The subcommittee is interested in comments concerning nonsynthetic materials and practices being used in the field that would build comparable resistance to insects and fungi, while precluding the need for synthetic potassium silicate.

Reference: 7 CFR 205.601(e)

Aqueous potassium silicate (Listing 2 of 2 – 205.601(i))

Synthetic

Use – As plant disease control.

Listing: Aqueous potassium silicate (CAS # 1312-76-1)—The silica, used in the manufacture of potassium silicate, must be sourced from naturally occurring sand.

Technical Reports: [2003 \(PDF\)](#); [2014 \(PDF\)](#)

Petition(s): [Potassium Silicate \(PDF\)](#) (2004), [Potassium Silicate Supplemental \(PDF\)](#) (2006)

Past NOSB Actions: Recommended for addition to the National List on [11/30/07](#).

Regulatory Background: Proposed rule (including justification) published 6/3/2009 (74 FR 26591).



Added to National List 12/13/2010 (75 FR 77521).

Sunset Date: 12/14/2015

Reference: 7 CFR 205.601(i)

Sodium carbonate peroxyhydrate

Synthetic

Use – As an algacide.

Listing: Sodium carbonate peroxyhydrate (CAS # 15630-89-4)—Federal law restricts the use of this substance in food crop production to approved food uses identified on the product label.

Technical Reports: [2006 \(PDF\)](#); [2014 \(PDF\)](#)

Original Petition: [Sodium Carbonate Peroxyhydrate \(PDF\)](#) (2005)

Past NOSB Actions: Recommended for addition to the National List on [11/30/07](#).

Regulatory Background: Proposed rule (including justification) published 6/3/2009 (74 FR 26591).

Added to National List 12/13/2010 (75 FR 77521).

Sunset Date: 12/14/2015

Specific Questions from Subcommittee

1. The subcommittee is seeking input on the comparison of this material to copper sulfate for control of algal scum in rice production and whether it can replace copper sulfate for that use.

Reference: 7 CFR 205.601(a)

Sulfurous acid

Synthetic

Use – As plant or soil amendment.

Listing: Sulfurous acid (CAS # 7782-99-2)—for on-farm generation of substance utilizing 99% purity elemental sulfur per paragraph (j)(2) of this section.

Technical Reports: [2010 \(PDF\)](#); [2014 \(PDF\)](#)

Original Petition: [Sulfurous Acid \(PDF\)](#) (2008)

Past NOSB Actions: Recommended for addition to the National List on [5/09](#)

Regulatory Background: Proposed rule (including justification) published 1/12/2010 (75 FR 1555).

Added to National List 7/6/2010 (75 FR 38693).

Sunset Date: 7/7/2015

Specific Questions from Subcommittee

1. The Crops Subcommittee is interested in the conditions under which sulfurous acid undergoes the transformation to sulfate, and conditions under which that sulfate is available as a plant nutrient. The 2014 TR describes the chemistry of sulfurous acid in the soil at lines 64-67, 140-149, and 261-264. The subcommittee seeks comments that address the following questions: Are there specific soil and ecological (e.g., moisture) conditions under which the transformation to sulfate would be made and the sulfate made available? On the other hand, are there soil and ecological conditions that would result in the build-up of hydrogen sulfite, sulfate, or other products of sulfurous acid? Are there management practices that can be used by the grower to affect whether the transformation occurs and the sulfate is available to crops? Are there evaluation tools that can be used by farmers and certifiers to determine



which of the above soil conditions are present?

2. The subcommittee would like public input on whether sulfurous acid is used to remedy conditions resulting from unsustainable agricultural practices. If so, how can this be evaluated by the NOSB in the sunset review of this material?

Reference: 7 CFR 205.601(j)