

**National Organic Standards Board  
Handling Committee  
Proposed Discussion Document  
Petition to Remove Silicon Dioxide from National List**

**March 8, 2011**

**Committee Summary**

Silicon dioxide is common additive in the production of foods, where it is used primarily as a flow agent in powdered foods, to absorb water in hygroscopic applications, and in some cases used to suppress foaming in liquids under agitation. It is the primary active component of diatomaceous earth which has many uses ranging from filtration to insect control.

Review of the original recommendation, historical documents, and public comments does not reveal unacceptable risks to the environment, human, or animal health as a result of the use or manufacture of silicon dioxide, though it does require special handling due to inhalation risks; limitations on its use and handling are governed by worker safety protocols and Good Manufacturing Practices.

Silicon dioxide was voted by the NOSB at the fall 2010 meeting to be re-listed under the sunset review process, with the knowledge that a petition to remove silicon dioxide was in process of NOP review at that time.

In 2007 (docket TM-04-07) public comment asserting that the inclusion of silicon dioxide on the National List was no longer necessary due to the availability of a certified organic alternative substance. This comment was provided by the manufacturer of the proposed alternative substance and since has been amended twice with additional information, all of which has been provided via written and oral public comment. At that time and since that time, some evidence has been provided to demonstrate the utility of an alternate in some applications where silicon dioxide is presently used. Several public comments supported re-listing silicon dioxide prior to the April 2010 NOSB meeting as part of the sunset review process.

Two key features emerged from the discussions among the Handling committee:

1. The Handling Committee has discussed and collectively agrees that there is the need to encourage the growth of agricultural--and preferably organic--alternatives to nonagricultural substances presently allowed on the National List for use in organic handling operations, and considers this to be just such an opportunity.
2. Public comment indicates that while organic alternatives exist that may replace silicon dioxide as currently listed, the Handling Committee is concerned that alternatives do not exist for all uses and applications of silicon dioxide.

The Handling Committee wants to elicit public comment to identify where alternatives to silicon dioxide are or may be used effectively and appropriately. Specifically, what alternatives to silicon dioxide are available and effective for use as:

- An anti-caking agent in foods and animal feeds
- A stabilizer in beer production
- An adsorbent in tableted foods for special dietary use.
- A carrier, such as a component of microcapsules for flavoring oils.
- A defoaming agent.
- Other uses allowed under FDA

Comments from food manufacturers are particularly needed in order for the Handling Committee to assess the conditions under which silicon dioxide may be removed from the National List to promote the use of agricultural and organic alternatives and without causing undue burdens to manufacturers and consumers.

### **Committee Vote**

Motion: To accept the discussion document

Motion by: Katrina Heinze

Yes: 7      No: 0      Absent: 0

Second: John Foster

Abstain: 0      Recuse: 0