Formal Recommendation by the
National Organic Standards Board (NOSB)
to the National Organic Program (NOP)

Date: **October 28, 2010**

Subject: **Sunset review of chlorine materials on National List**

Chair: **Daniel G. Giacomini**

The NOSB hereby recommends to the NOP the following:

Rulemaking Action X
Guidance Statement
Other

Statement of the Recommendation (Including Recount of Vote):

Chlorine compounds are the most common equipment and food contact sanitizers used in the food processing and handling and are recognized by the FDA as being appropriate for their intended use. The NOSB makes the following recommendation to re-list chlorine materials on 7 CFR §205.605(b):

Chlorine materials—disinfecting and sanitizing food contact surfaces, *Except,* That, residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act (Calcium hypochlorite; Chlorine dioxide; and Sodium hypochlorite).

The NOSB unanimously passed the motion to relist chlorine materials as stated by a vote of 14-0.

Rationale Supporting Recommendation (including consistency with OFPA and NOP):

The recommendation to re-list chlorine materials in 7 CFR §205.605(b) was made in accordance with the National Organic Program and the NOSB's Policy & Procedures Manual. The substance is consistent with OFPA 1990 and NOP regulations and evaluation criteria.

NOSB Vote:

Moved: John Foster		**Second: Tracy Miedema**		
Yes: 14	**No: 0**	**Abstain: 0**	**Absent: 0**	**Recusal: 0**

National Organic Standards Board
Handling Committee
Sunset Recommendation – 2012
Chlorine Materials

October 28, 2010

List: 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))."

(b) Synthetics allowed

Chlorine materials

Committee Summary

Along with fluorine, bromine, iodine, and astatine, chlorine is a member of the halogen series that forms the group 17 of the periodic table—the most reactive group of elements. It combines readily with nearly all elements. Chlorine is a member of the salt-forming halogen series and is extracted from chlorides through oxidation often by electrolysis. With metals, it forms salts called chlorides. As the chloride ion, Cl^-, it is also the most abundant dissolved ion in ocean water. In nature, chlorine is found primarily as the chloride ion, a component of the salt that is deposited in the earth or dissolved in the oceans — about 1.9% of the mass of seawater is chloride ions. Even higher concentrations of chloride are found in the Dead Sea and in underground brine deposits. In industry, elemental chlorine is usually produced by the electrolysis of sodium chloride dissolved in water.

Chlorine compounds are the most common equipment and food contact sanitizers used in the food processing and handling and are recognized by the FDA as being appropriate for their intended use. The health and environmental hazards associated with its manufacture and use are well researched and are mitigated through worker protection protocols, Good Manufacturing Practices, and oversight by local, state and federal agencies. The food processing community, pre-NOP certification programs, and past NOSB decisions have determined that—coupled with these mitigating features—the proven efficacy and reliability of these chlorine materials in support of food safety concerns outweighs the risks.

Federal register notice of the sunset of chlorine materials brought forth no public comments against re-listing. Several commenters supported re-listing this material.

Review of the original recommendations, 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 these materials, though there are various health hazards associated with their use as noted above. There is no new information contradicting the original recommendation which were the basis for the previous NOSB decisions to list and re-list these materials.

The Handling Committee anticipates that in the near future the NOP will provide to the industry further guidance and clarification regarding the use of these materials.

Committee Recommendation(s)

The handling committee recommends the renewal of the following substance in this use category as published in the final rule:

Chlorine materials—disinfecting and sanitizing food contact surfaces, *Except,* That, residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act (Calcium hypochlorite; Chlorine dioxide; and Sodium hypochlorite).

Committee Vote

Motion: John Foster Second: Steve DeMuri
Yes: 6 No: 0 Abstain: 0 Absent: 1