



# BEYOND PESTICIDES

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April , 2026

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National Organic Standards Board  
USDA-AMS-NOP  
1400 Independence Ave. SW.,  
Room 2648-S, Mail Stop 0268  
Washington, DC 20250-0268

**Docket ID # AMS-NOP-25-0914**

## **Re. LS: Chlorine materials annotation**

These comments to the National Organic Standards Board (NOSB) on its Fall 2025 agenda are submitted on behalf of Beyond Pesticides. Founded in 1981 as a national, grassroots, membership organization that represents community-based organizations and a range of people seeking to bridge the interests of consumers, farmers, and farmworkers, Beyond Pesticides advances improved protections from pesticides and alternative pest management strategies that eliminate a reliance on pesticides. Our membership and network span the 50 states and the world.

Beyond Pesticides supports the purpose of the petition to clarify the use of chlorine materials in organic livestock production. We have frequently pointed to the inadequacy of annotations of National List materials relative to the requirement in the Organic Foods Production Act (OFPA) §6517(b) “The list established under subsection (a) shall contain ***an itemization, by specific use or application***, of each synthetic substance permitted under subsection (c)(1) or each natural substance prohibited under subsection (c)(2).” The petition that is the subject of this discussion document is yet another example of the problem. Chlorine materials also appear in §601 and §605(b). In §601, the listing is also not clear. Since it is under “As algicide, disinfectants, and sanitizer, including irrigation system cleaning systems,” does it apply to irrigation water? On the other hand, the listing in §605 spells out various uses including “in water used as an ingredient in organic food handling.”

Of the three listings, only the handling annotation is clear that chlorine materials may be used for sanitizing/disinfectant purposes at concentrations above the limit for residual chlorine in SDWA standards. Since that chlorine concentration is set by the U.S. Environmental Protection Agency (EPA) to maintain the condition of drinking water that is already disinfected, it is unlikely to be high enough to perform any disinfection functions.

We have also asked the NOSB to perform an assessment of sanitizers and disinfectants—and the need for them—in organic production and handling. Such an assessment would inform further sunset discussions of chlorine materials, as well as other sanitizers and disinfectants. We believe that much of the information in the discussion document is relevant to such an assessment.

However, the main question raised by the petition appears to be whether organic livestock can be fed chlorine-treated water. Those livestock producers who are on public water systems may have no choice if the provider uses chlorine to disinfect drinking water. Fortunately, such water should comply with requirements of the Safe Drinking Water Act (SDWA) and thus residual chlorine—the chlorine in delivered water—would be below SDWA limits. Livestock producers who source water from wells, surface water, or cisterns do have choice as to whether to use a disinfectant in livestock drinking water, which to use, and how to use it. These choices may affect the degree to which the chlorine creates toxic disinfection byproducts, contaminates water resources, harms nontarget organisms in the surrounding environment, and affects livestock.

We urge the NOSB to perform a comprehensive review of cleaning, disinfecting, and sanitizing materials that can support annotations for these materials on the National List. The listings of chlorine materials on §§601 and 603 need to be clarified, but all three listings must be reconsidered in light of the comprehensive review. We attach our comments from 2019 outlining our conception of such a review.

Meanwhile, we raise some concerns regarding the revised annotation proposed by the Livestock Subcommittee. The proposed listing is: “Chlorine materials—disinfecting and sanitizing facilities, and equipment, **and livestock drinking water**. Residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act.” The crucial issues to address regarding water quality for livestock drinking water are (1) that the water is safe for the livestock and (2) that treating the water source does not result in contamination of soil, surface or groundwater, or air. Clarity would be served by separating the use for disinfecting and sanitizing facilities and equipment from the use for providing safe water for livestock. We suggest something like the following:

Chlorine materials allowed for use in disinfecting and sanitizing facilities, equipment, and livestock drinking water. Residual chlorine levels on disinfected and sanitized facilities and equipment shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act. If chlorine is used to disinfect or sanitize livestock drinking water, the water at its point of use by livestock, residual chlorine must not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act.

- (i) Calcium hypochlorite.
- (ii) Chlorine dioxide.
- (iii) Hypochlorous acid—generated from electrolyzed water.
- (iv) Sodium hypochlorite

We do not intend this annotation to trigger testing whenever chlorine is used for disinfecting livestock water. Rather, testing should be required when the certifier or inspector observes conditions indicating misuse or overuse of chlorine. We suggest that the NOSB propose guidance and/or instructions for certifiers regarding the application of this use in the various situations faced by livestock producers, including “shocking” wells.

Thank you for your consideration of these comments.

Sincerely,



Terry Shistar, Ph.D.  
Board of Directors

#### **Appendix 1.**

#### **Chlorine materials listings at §§601, 603, and 605(b)**

**601(a)** As algicide, disinfectants, and sanitizer, including irrigation system cleaning systems.

(2) Chlorine materials—For pre-harvest use, residual chlorine levels in the water in direct crop contact or as water from cleaning irrigation systems applied to soil must not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act, except that chlorine products may be used in edible sprout production according to EPA label directions.

- (i) Calcium hypochlorite.
- (ii) Chlorine dioxide.
- (iii) Hypochlorous acid—generated from electrolyzed water.
- (iv) Potassium hypochlorite—for use in water for irrigation purposes.
- (v) Sodium hypochlorite.

**603(a)** As disinfectants, sanitizer, and medical treatments as applicable.

(10) 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.

- (i) Calcium hypochlorite.
- (ii) Chlorine dioxide.
- (iii) Hypochlorous acid—generated from electrolyzed water.
- (iv) Sodium hypochlorite

**605(b) (12)** Chlorine materials—disinfecting and sanitizing food contact surfaces, equipment and facilities may be used up to maximum labeled rates. Chlorine materials in water used in direct crop or food contact are permitted at levels approved by the FDA or EPA for such purpose, provided the use is followed by a rinse with potable water at or below the maximum residual disinfectant limit for the chlorine material under the Safe Drinking Water Act. Chlorine

in water used as an ingredient in organic food handling must not exceed the maximum residual disinfectant limit for the chlorine material under the Safe Drinking Water Act.

(i) Calcium hypochlorite.

(ii) Chlorine dioxide.

(iii) Hypochlorous acid—generated from electrolyzed water.

(iv) Sodium hypochlorite.

**Appendix 2.**

**Beyond Pesticides 2019 comments on comprehensive review of cleaning and sanitizing materials**

**Attached.**

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