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

Re. CS: Ozone

These comments to the National Organic Standards Board (NOSB) on its Fall 2016 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 reduce or eliminate a reliance on pesticides. Our membership and network span the 50 states and the world.

In reviewing this substance, the NOSB must apply the criteria in the Organic Foods Production Act (OFPA), that its use—
(i) would not be harmful to human health or the environment;
(ii) is necessary to the production or handling of the agricultural product because of the unavailability of wholly natural substitute products; and
(iii) is consistent with organic farming and handling.¹

The listing under review is:  
**205.601(a)(5) Ozone gas—for use as an irrigation system cleaner only.**

Ozone has high acute toxicity. Concentrations above 0.1 mg/L by volume average over an eight hour period may cause nausea, chest pain, reduced visual acuity and pulmonary edema. Inhalation of >20 ppm for at least an hour may be fatal. In terms of chronic effects, ozone may have deleterious effects on the lungs and cause respiratory disease.² The use of ozone may be seriously detrimental to the health of humans who work with it, and those exposed indirectly, downwind of use. As a known and problematic air pollutant its use as a tool in organic farming questionable.³

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¹ OFPA §6517(c)(1)(A). Further details at OFPA §6518(m).
³ TAP lines 695-697.
The NOSB needs to take a comprehensive look at all sanitizers, their needs, and evaluate whether all needs can be met with materials that have low impacts on human health and the environment.

Conclusion
In view of the dangers associated with the use of ozone, the NOSB should examine its hazards in the context of all materials and methods that are available to meet the sanitation needs of organic production. The NOSB should recommend annotations to protect farmers and workers where needed.

Thank you for your consideration of these comments.

Sincerely,

Terry Shistar, Ph.D.
Board of Directors