March 18, 2024

Ms. Michelle Arsenault  
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-23-0075

Re. CS: CO2 Petition

These comments to the National Organic Standards Board (NOSB) on its Spring 2024 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 recommendation of the Crops Subcommittee (CS) to deny the petition because synthetic carbon dioxide is not necessary for organic production. We also agree with the statement: “The Subcommittee recognizes that this petition highlights the lack of clear standards pertaining to indoor and container production, and prevents the NOSB from fully evaluating petitions for substances used in this type of production.” Synthetic substances should not be added to the National List to support forms of production that are not supported by clear production standards.

The petitioned use of carbon dioxide is not compatible with organic production.

The petition makes it clear that the intended uses of CO₂ include use as a plant growth enhancer, which is not appropriate for a synthetic material, as stated in §6517(c)(1) of the Organic Foods Production Act (OFPA):

The National List may provide for the use of substances in an organic farming or handling operation that are otherwise prohibited under this chapter only if—

(A) the Secretary determines, in consultation with the Secretary of Health and Human Services and the Administrator of the Environmental Protection Agency, that the use of such substances—

(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;
(B) the substance—
(i) is used in production and contains an active synthetic ingredient in the following categories: copper and sulfur compounds; toxins derived from bacteria; pheromones, soaps, horticultural oils, fish emulsions, treated seed, vitamins and minerals; livestock parasiticides and medicines and production aids including netting, tree wraps and seals, insect traps, sticky barriers, row covers, and equipment cleansers; or
(ii) is used in production and contains synthetic inert ingredients that are not classified by the Administrator of the Environmental Protection Agency as inerts of toxicological concern; and
(C) the specific exemption is developed using the procedures described in subsection (d).

The proposed use has environmental impacts.
First, as stated by the CS, “In the atmosphere, CO2 absorbs longwave radiation coming from the earth’s surface, causing warming known as “the greenhouse effect.” Greenhouses usually have a CO2-use efficiency of less than 60%, meaning that over 40% of the CO2 that is added is released into the atmosphere without being ever incorporated into plant biomass.”

The petition says, “Most of the sources of carbon dioxide are reclaiming the substance from other primary processes. That is to say, it is recycling substances that would otherwise be given off into the atmosphere.” However, there is nothing in the petition that requires the use of CO2 produced as a byproduct of other processes. If this is the intention of the NOSB, then it needs to be in an annotation. In addition, it should be noted that when this issue has been discussed during previous cycles, the point has been made that organic production should not rely on the byproducts of polluting industries. To do so is to accept polluting practices that organic has sought to end by accessing the impacts of allowed substances from cradle-to-grave—from production, use, to disposal. Clearly stated in the history of organic law and policy is the intent that organic systems “enhance” environmental protection and the complex biological communities that sustains life. To, in effect, incorporate a reliance on polluting practices runs contrary to the critical role that organic is playing and must play in incentivizing alternative non-polluting practices.

Conclusion
Beyond Pesticides supports the recommendation of the Crops Subcommittee (CS) to deny the petition because synthetic carbon dioxide is not necessary for organic production. We also agree with the statement: “The Subcommittee recognizes that this petition highlights the lack of clear standards pertaining to indoor and container production, and prevents the NOSB from fully evaluating petitions for substances used in this type of production.” Synthetic substances should not be added to the National List to support forms of production that are not supported by clear production standards.
Thank you for your consideration of these comments.

Sincerely,

Terry Shistar, Ph.D.
Board of Directors