



BEYOND PESTICIDES

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March 27, 2014

National Organic Standards Board
Spring 2014 Meeting
San Antonio, TX

Re. CS: Magnesium oxide

These comments are submitted on behalf of Beyond Pesticides. 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, 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 groups around the world.

Beyond Pesticides opposes the Crops Subcommittee proposal to list magnesium oxide only to control the viscosity of a clay suspension agent for natural humates. We support the minority position to list with a 5-year expiration date annotation.

We are unable to support this petition because existing concerns about potential environmental impacts, however minimal they are perceived to be currently, will require ongoing and increased scrutiny within the five-year sunset review period provided for in the Organic Foods Production Act (OFPA). The sunset review, as historically conducted by the National Organic Standards Board (NOSB), is structured in the law to require an updated assessment of health and environmental impacts as well as essentiality. With this assessment, the Board at sunset has historically determined whether a listed use continues to meet the evaluation criteria of OFPA 7 USC 6518 (m) and is still compatible with organic production, and therefore should be relisted at the end of the sunset period. The new National Organic Program (NOP) sunset process, which went into force on September 17, changes this sunset policy, removes the intent and efficiency of sunset, eliminates adequate transparency and public input, and creates an unreasonable burden to alter the annotation if alternative manufacturing methods (in the case of magnesium oxide), less reliant on toxic inputs, become available. Given that the new policy eliminates the historical sunset process (78 FR 56811), prohibits annotations during the new review process, and undermines the premise of continuous improvement in the statute and the rule, we believe it would be inappropriate at this time to support a listing that raises potential health, safety, and essentiality issues that may require removal or annotation in the future.

Magnesium oxide is a relatively benign substance that has a wide range of uses. In this case, a small addition of magnesium oxide to a clay suspension agent prevents the settling of finely ground humates in liquid. The approval of magnesium oxide would permit the use of natural humates in a liquid formulation, but it is still preferable to add humates through soil-building practices (including composting), and we urge that the certification of organic system plans recognize that tools like this should not become a crutch on which there is continuous reliance.

Moreover, although magnesium oxide is relatively benign, its manufacture creates pollution or depends on polluting industries. The process of using salt brine depends on additions of sulfuric or hydrochloric acids, which relies on industries creating sulfuric acid pollution or the chlorine industry, and organic production should not be reliant on those industries, which do not embrace the core values and principles of organics. On the other hand, the process using dolomite limestone requires high inputs of fossil fuel energy and results in releases of carbon dioxide into the atmosphere both from combustion and from the gas driven off from the limestone. Per our statement above, we may want to support an annotation sometime in the future when we know more about these processes, but the new NOP sunset process would make it virtually impossible to change the status of the listing and make it unlikely that an annotation could be added during sunset. Therefore, we must oppose this petition.

We oppose the petition in spite of the recognition of some need. Beyond Pesticides board member Chip Osborne of Osborne Organics is a nationally-recognized expert on organic land care. Here are his comments on the importance of liquid humates in organic and transitional land care:

Many of the programs that I am developing involve the use of liquid humate, such as my work with municipalities, school districts, and the National Park Service. It is my experience that when I am trying to develop programs to reduce and eliminate pesticide use, it is important that we also eliminate synthetic fertilizer use. It is my opinion and observation that the repeated use of synthetic fertilizers ultimately creates a dependence upon the synthetic control products.

So, in order for me to be successful from the pesticide aspect, I need to move nutrition to the organic perspective. A combination of no pesticides while using synthetic fertilizers usually meets with less than satisfactory outcomes. As we all know in organics of any kind, we are talking about creating and building a system as opposed to arbitrarily putting down a series of product inputs. We are trying to be proactive as opposed to being reactive.

The nutritional programs that I have been working with the last couple of years are all programs that focus on low dose applications of nitrogen and phosphorus. I am working on the principle that "less is more." I find that I can use an organic source of nitrogen, either liquid or granular and use it at low dose as long as I have other inputs that address other aspects of that system. Traditionally, nitrogen has been used as the direct stimulus for growth. From the organic perspective, we certainly need to address the

needs of the plant, but we also need to address soils and soil health. This is where the humate comes in.

I have had great success by combining low dose applications of nitrogen, kelp, humates, reconstituted sea minerals, and molasses. This combination has allowed me to meet nutritional requirements because I am influencing aspects of the system without using nitrogen in large amounts. I am using soluble humate to address the health of soils and improve interactions within the organic matter fraction. This fraction ultimately supports much of the biological life in the soil, which in turn is fundamental for success in mineralizing an organic source of nitrogen to the inorganic (ammonium or nitrate).

I have multiple projects and trials underway in various regions of the country that involve liquid programs similar to what I have outlined here. They range in scale from small to large. All of these, for the most part, rely on a formulation of humic acid as part of that liquid application. In my programs it is no one input that creates success, but rather a combination of low dose inputs that all work together to assist in the creation of a healthy system.

We create healthy, vigorously growing plants in order to outcompete pest pressures--insects, weeds, and disease. Building a healthy system is much more than just applying a bag of fertilizer. It is critical that the needs of the plants and the needs of the soil both be met upfront. It is in this framework that liquid humate is important to me. I would love to be able to design organic nutritional programs where I could say that all inputs are OMRI approved.

The NOP's new sunset process has compelled us to take the position of opposing the listing of magnesium oxide to control the viscosity of a clay suspension agent for natural humates unless the listing is annotated with an expiration date. We believe the NOP directed process violates the intent, spirit, and letter of the statute, and will therefore not subject magnesium oxide to the same threshold for re-listing in the future as is required by the petition process. Therefore, we sincerely urge NOSB members to oppose this petition and any others where removal or annotation might conceivably be needed for health, environmental, and essentiality reasons until the sunset policy of OFPA and, historically, the Board is reinstated.

Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry Shistar". The signature is fluid and cursive, written in a professional style.

Terry Shistar, Ph.D.
Board of Directors