



BEYOND PESTICIDES

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April 3, 2015

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. HS: Boiler Chemicals: Octadecylamine, Diethylaminoethanol, Cyclohexylamine

These comments to the National Organic Standards Board (NOSB) on its Spring 2015 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 groups around the world.

Beyond Pesticides agrees with the Handling Subcommittee (HS) proposal to delist the boiler chemicals octadecylamine, diethylaminoethanol, and cyclohexylamine because they fail the OFPA criteria for health and environmental impacts, essentiality, and compatibility with organic handling practices. Documents prepared for the NOSB include TAP reviews for each chemical and a paper on “Steam Generation in Organic Processing.”

1. Health and Environmental Impacts

In terms of environmental impacts, the Technical Advisory Panel reviews of three chemicals found them to be toxic, volatile, and carried in the steam, so the local environment is likely to be affected, especially in the case of a boiler blowout. All are manufactured by chemical processes using toxic precursors and high energy inputs. They are all considered hazardous enough to require special precautions in the case of spills.

All three chemicals are moderately to highly toxic by multiple routes of exposure and severe irritants. The chemicals cannot be separated from the steam, so they are carried by the steam into the materials being sterilized, and can therefore end up in organic food products.

The NOSB has not determined the extent to which these amines, which are known to be carried in the steam, are present on sterilized containers and in processed food. This is a critical piece of information that is necessary to support the compromise annotation, “for use only as a boiler water additive for packaging sterilization.” In addition, the TAP reviews did not consider

information relating to worker exposure, including occupational illness and asthma caused by exposure to the chemicals.¹

2. Essentiality

The TAP studied these chemicals and their uses. The panel's conclusions were adamantly opposed to their use in organic processing, citing both hazards and lack of essentiality. Some quotations will convey their conclusions regarding essentiality:

“Justification of the [substances' use] by the petitioners is based on the constraints of their particular boiler and steam systems as they currently exist, and on the financial and/or logistical challenges involved with changing those systems so as to avoid contact of the organic food by [the substance]. However, economic considerations are clearly not one of the criteria (either in OFPA or the final NOP rule) for determining the suitability of materials used in organic production systems.

“History shows that quite often it has been the case that an organic operator (producer or handler) has had to make substantial changes to their system in order to be compliant with organic standards. These changes often involved redesigning of systems, practices, and techniques. In many cases, such changes resulted in the need for financial investment, as well as an investment in time. Some creativity on the part of the operator was often needed, to devise a new system. This has indeed been the case for certain processors, who made adjustments to their boiler systems or manufacturing practices in order to comply with the prohibition of contact of organic foodstuffs by synthetic boiler chemicals. The inconvenience of having to retool or readjust systems should not be the determining factor in whether or not such materials are added to the National List.” (TAP reviewer #2)

“The justification for use of [the materials] is no different than trying to justify the use of a synthetic herbicide like Round-Up for organic farming, just because it provides a cheaper alternative to weed control and does not leave any detectable residue.” (TAP reviewer #3)

3. Compatibility

The use of these synthetic amines as boiler chemicals is not compatible with organic processing. Again, we cite the TAP review:

“Organic principles are precautionary when evaluating synthetic substances used in food. Volatile amines in general do not appear to be compatible with the principles of

¹ Gadon, Margaret E. MD; Melius, James M. MD; McDonald, Gerald J. AS; Orgel, David MD, 1994. New-Onset Asthma after Exposure to the Steam System Additive 2-Diethylaminoethanol. *Journal of Occupational Medicine* 36(6); Centers for Disease Control and Prevention, 1990. Workplace Exposures to Corrosion-Inhibiting Chemicals from a Steam Humidification System -- Ohio, 1988. *Morbidity and Mortality Weekly Report* 39(47);863-865.

organic handling...Food processors generated and used steam for a long time without these chemicals.”

4. Conclusion

Beyond Pesticides opposes the relisting of the boiler chemicals octadecylamine, diethylaminoethanol, and cyclohexylamine because they fail the OFPA criteria for health and environmental impacts, essentiality, and compatibility with organic handling practices.

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, with a long horizontal stroke at the end.

Terry Shistar, Ph.D.
Board of Directors