



# BEYOND PESTICIDES

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March 1, 2013

National Organic Standards Board  
Spring 2013 Meeting  
Portland, OR

## Re. HS: 1,3-Dibromo-5,5-dimethylhydantoin (DBDMH)

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 listing of DBDMH on the National List. We are surprised that the Handling Committee accepted the petition as sufficient, since large sections were redacted as Confidential Business information (CBI) without the required explanation. In particular, half a page under "Effects on human health" was redacted. We find it unacceptable to process a petition with human health effects information withheld as CBI.

### 1. DBDMH is hazardous to human health and the environment.

Despite the fact that manufacturing information is not sufficient to allow the evaluation of health and environmental impacts of manufacture, and despite the fact that a large section of information about human health effects is withheld as CBI, there is enough information provided by the Material Safety Data Sheet and Technical Review (TR) to determine that DBDMH does cause adverse health effects. DBDMH "Causes irreversible eye damage. Causes burns. May be absorbed through the skin in harmful amounts. Harmful by inhalation. May be fatal if swallowed." (MSDS) In addition, "Other byproducts and breakdown products, including organobromine disinfection byproducts, bromide, and bromate<sup>4</sup>, could also remain as residues on food treated with aqueous solutions of DBDMH. Specifically, bromate is a likely human carcinogen by the oral route of exposure." (TR lines 364-367) Furthermore, "Disinfection byproducts, like dibromoacetic acid, are formed when DBDMH is combined with chlorinated water. One study reported increased cancer in rats and mice exposed for 2 years to dibromoacetic acid in drinking water (Melnick et al., 2008)." (TR lines 371-373)

In addition to the hazards to human health, it is not possible to discount harm to ecological systems. No information about manufacture is provided in petition. DBDMH is applied as a wash in meat packing, though the directions on the label are not very complete. In particular, it is not clear what happens to effluent. It is very toxic to aquatic organisms. (MSDS) The MSDS warns against discharge into drains or the environment. However, the petition says, "We do not

expect any DBDMH or its by-products to be released to the environment due to its manufacture or use. During use the hypobromous acid is converted to an inactive bromide ion. The DMH remains in the water and is carried out in the waste stream.” Furthermore, although DBDMH is claimed to decompose before the meat reaches the consumer, workers using the chemical would be exposed to hazardous liquid and fumes requiring protective equipment including face shield, goggles, chemical-resistant gloves, a respirator, and other “suitable protective clothing.” (MSDS)

**2. DBDMH is incompatible with organic production and handling.**

It is a broad-spectrum, dangerous biocide with halogen chemistry. It is unnecessary. (See below.)

**3. DBDMH is not essential for organic production and handling.**

The TR cites several alternative materials. It also states that hot water spray treatment is more effective than DBDMH. (TR lines 398-412)

For these reasons, we urge the NOSB to reject the petition for DBDMH. We also urge the board to be more careful in accepting petitions with CBI redacted.

Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry Shistar".

Terry Shistar  
Board of Directors