



# BEYOND PESTICIDES

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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 and LS: List 4 inerts and NPEs

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.

We support the proposal of the Crops Subcommittee (CS) to annotate the listing for List 4 inerts to eliminate the use of nonylphenol ethoxylates (more properly termed alkylphenol ethoxylates). Since the CS is the only subcommittee considering inerts, and List 4 inerts are listed on §205.603(e) for use in livestock products as well as on §205.601(m) for crop products, the proposal should apply to both listings.

### **Nonylphenol ethoxylates (NPEs) are toxic environmental pollutants with safer alternatives.**

Because the major use of NPEs is as a surfactant, most studies have concentrated on impacts on aquatic and semi-aquatic species. NPEs are highly acutely toxic to aquatic organisms, medium to high in chronic toxicity, medium to high in persistence, and exert estrogenic effects on a wide range of organisms. Breakdown products, especially nonylphenols (NPs), are much more toxic than NPEs;<sup>1,2</sup> and are also estrogenic.<sup>3</sup> EPA rates persistence medium to high; degradation

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<sup>1</sup> EPA, 2011. DfE Alternatives Assessment for Nonylphenol Ethoxylates.

<sup>2</sup> Andrea Lani, 2010. Basis Statement for Chapter 883, Designation of the Chemical Class Nonylphenol and Nonylphenol Ethoxylates as a Priority Chemical and Safer Chemicals Program Support Document for the Designation as a Priority Chemical of Nonylphenol and Nonylphenol Ethoxylates, Bureau of Remediation and Waste Management, Maine Department of Environmental Protection.

<sup>3</sup> Mark R. Servos, 1999. Review of the Aquatic Toxicity, Estrogenic Responses

products are persistent and toxic.<sup>4</sup> Nonylphenol ethoxylates (NPEs) can react with chlorine to form chlorinated nonylphenols that are mutagenic.<sup>5</sup> In aerobic systems, additional carboxylic acid compounds, that are also toxic, are produced.<sup>6</sup> NPEs inhibit the growth of young terrestrial and aquatic plants or trees at 10 ug/L, which is the contamination level frequently found in streams as a result of contamination from sewage sources. Concentrations of 20-500 mg/L inhibited or restricted growth of soil bacteria.<sup>7</sup> NPs and NPEs act as xenoestrogens in human cells.<sup>8</sup>

Because of concerns about the adverse health and environmental effects of NPEs, EPA's Design for the Environment (DfE) recently completed an alternatives assessment for synthetic surfactants, like NPEs, that are not endocrine disrupting chemicals. DfE's goal is to assist in the voluntary phase-out of NPEs used in industrial detergents. The DfE assessment for NPEs reviewed several alternatives to NPE surfactants that are comparable in cost, readily available, and rapidly biodegrade to non-polluting, lower hazard compounds in aquatic environments.<sup>9</sup>

### **The NOSB must not allow the process unanimously supported by the NOSB to be stalled.**

We applaud the CS for taking the action—to review and propose removal of NPEs as so-called inert ingredients in pesticides. So-called “inert” ingredients in pesticide products are neither chemically nor biologically inert. They are designed to enhance the pesticidal activity of pesticide products and can have toxic properties that do not meet the standards of the Organic Foods Production Act (OFPA). They serve as a good example of why the NOSB, as it previously determined, cannot accept the previously EPA-classified List 4 materials as acceptable for listing under OFPA without scrutinizing the individual materials, either individually or in groups with chemicals of common mechanisms of toxicity and chemical composition. The NOSB must move forward with its review of inerts to ensure that materials in use in organic production comply with the standards of OFPA. Starting with NPEs is an important first step.

Active ingredients in pesticide products have been carefully screened to ensure that they meet the requirements of OFPA. Because of the thorough investigation by the NOSB and the additional

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and Bioaccumulation of Alkylphenols and Alkylphenol Polyethoxylates, Water Qual. Res. I. Canada, Volume 34, No. 1, 123-177. A support document for Environment Canada's environmental assessment under the Canadian Environmental Protection Act.

<sup>4</sup> EPA, 2011. DfE Alternatives Assessment for Nonylphenol Ethoxylates.

<sup>5</sup> A. Michael Warhurst, 1995. An Environmental Assessment of Alkylphenol Ethoxylates and Alkylphenols, Friends of the Earth, UK.

<sup>6</sup> P. Whitehouse, 2002. Environmental Impacts of Alkylphenol Ethoxylates and Carboxylates. Part 1: Proposals for the Development of Environmental Quality Standards. R&D Technical Report P2-115/TR3. Environment Agency, Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol BS32 4UD.

<sup>7</sup> Sylvia S. Talmage, 1994. Environmental And Human Safety Of Major Surfactants: Alcohol Ethoxylates and Alkylphenol Ethoxylates, A report to The Soap and Detergent Association, Lewis Publishers: Boca Raton, Ann Arbor, London, Tokyo. Pp. 288-289.

<sup>8</sup> Mark R. Servos, 1999. Review of the Aquatic Toxicity, Estrogenic Responses and Bioaccumulation of Alkylphenols and Alkylphenol Polyethoxylates, Water Qual. Res. I. Canada, Volume 34, No. 1, 123-177. A support document for Environment Canada's environmental assessment under the Canadian Environmental Protection Act.

<sup>9</sup> EPA, 2011. DfE Alternatives Assessment for Nonylphenol Ethoxylates.

scrutiny given by the public in written and oral comments, the active ingredients that are allowed in organic agriculture present little hazard to people and ecosystems, from their manufacture through their use and disposal.

So-called “inert” ingredients, on the other hand, have not received the same level of scrutiny to ensure that they meet OFPA standards. Reliance on the registration of pesticide products with inert ingredients by the U.S. Environmental Protection Agency does not ensure that the standards of OFPA are met, given that the reviews and use allowances under the agency’s authorizing legislation (the Federal Insecticide, Fungicide and Rodenticide Act) are based on different, and often incompatible, standards. In addition, many pesticide product formulations are composed mostly of “inert” ingredients. As a result, the most hazardous part of pesticide products used in organic production may actually be the so-called “inert” ingredients.

The NOSB recognizes these facts and has sought to address them. A short history was presented in the Fall 2012 Crops Subcommittee proposal:

In 2006, EPA reassessed all inert ingredients used in pesticide formulations allowed on food crops, including former Lists 3, 4A, and 4B inerts, to ensure that they met the tolerance reassessment requirements of the Food Quality Protection Act. Inerts allowed for use in EPA registered pesticides applied to food now must either have a residue tolerance level or an exemption from tolerance level codified at 40 CFR Part 180. As a result of this reclassification, NOP regulations concerning allowed inert ingredients are out-of-date when compared with current EPA regulations, since EPA eliminated its list categories when it completed its tolerance reassessment. The NOSB recommended in April 2010 that NOP establish a task force in collaboration with EPA and the NOSB to examine this problem and provide a recommendation to the Board for re-evaluation of former List 3 and List 4 inerts. In October 2010, the NOSB recommended the renewal until October 21, 2017 of the current exemption on the National List permitting former List 4 inerts “pending review by the program of inerts individually and as a class of materials.” In May 2012, the NOSB recommended an expiration date of October 21, 2017 for the current exemption that permits former List 3 inerts in passive pheromone dispensers, to coincide with the sunset date for List 4 inerts.

The NOSB-NOP-EPA working group was established in June 2010, known as the Inerts Working Group (IWG). Current members include: Jay Feldman (NOSB), Zea Sonnabend (NOSB), Chris Pfeifer (EPA Biopesticides and Pollution Prevention Division), Kerry Leifer (EPA Registration Division), Emily Brown Rosen (NOP), and Lisa Brines (NOP). The group has collected information regarding current classification of the former List 3 and 4 inerts and presented a discussion document at the November 2011 NOSB meeting.

At the fall 2012 NOSB meeting, following up on the NOSB recommendation of spring 2010, the Board unanimously passed a recommendation that was to put in motion the long-anticipated review of “inert” or “other” ingredients in pesticide products used in organic production:

The NOSB proposes this language to replace the current listing at section 205.601(m) and 205.603(e). The NOSB recommends that this change, including the listing of any approved (inert) ingredients, be completed prior to the October 21, 2017 sunset date for List 4 inerts:

Current language at sections 205.601(m) and 205.603(e): As synthetic inert ingredients as classified by the Environmental Protection Agency (EPA), for use with nonsynthetic substances or synthetic substances listed in this section and used as an active pesticide ingredient in accordance with any limitations on the use of such substances.

Replace the language at sections 205.601(m) and 205.603(e) with:

As synthetic other (“inert”) ingredients in pesticide formulations as classified by the Environmental Protection Agency (EPA) for use with nonsynthetic substances or synthetic substances listed in this section that are used as an active pesticide ingredient in accordance with any limitations on the use of such substances.

(i) Substances permitted for use in minimal risk products exempt from pesticide registration under FIFRA section 25(b);

(ii) Reserved (for list of approved other (“inert”) ingredients)

And now, as “List 4 inerts” appear on the sunset review workplan for the Crops and Livestock Subcommittees, no progress has been made since the fall 2012 meeting, and the only progress since the passage of the spring 2010 recommendation has been to form the Inerts Working Group, and four years later, sign the MOU requested in the 2010 recommendation. The NOP reported on meetings with EPA to engage the agency’s *Design for the Environment* program in the review of “inerts,” but despite the fact that the Inerts Working Group has now been working as an interagency group for four years, and that a memorandum of understanding authorizing this joint venture was signed a year ago, action is at a standstill. The National Organic Program (NOP) has still not issued a notification to manufacturers and users of products with a request for information on current inert ingredients in use. This ‘data call-in notice’ was intended to capture inert ingredients that may not be on the comprehensive list of 126 priority “inert” ingredients and 87 “minimal risk” substances eligible for registration under FIFRA section 25(b) used in formulations allowed in organic production, which was generated by the Inerts Working Group based on data from Material Review Organizations and provided to the public as categories at the Fall 2012 meeting of the NOSB. The notice is overdue and should be issued without further delay.

Since, as stated above, so-called “inert” ingredients likely pose more hazards than other materials used in organic production, their review deserves a higher priority than it is being given by NOP. These comments urge that the NOSB raise the priority level of inerts review to ensure compliance with the law.

All so-called “inerts” –especially those not on EPA’s 25(b) list– are desperately in need of review for compliance with OFPA criteria. We support the proposed action on the first group. In spite of our support for this proposal, it would violate the intention of the Board to allow the indefinite

extension of the listing for any of the so-called “inerts.” Therefore, we request that all other substances falling under these listings be annotated with expiration dates.

**We request that the NOSB and NOP implement the change in the listing as recommended unanimously by the National Organic Standards Board in its recommendations of April 2010 and October 2012:**

Replace the language at sections 205.601(m) and 205.603(e) with:

As synthetic other (“inert”) ingredients in pesticide formulations as classified by the Environmental Protection Agency (EPA) for use with nonsynthetic substances or synthetic substances listed in this section that are used as an active pesticide ingredient in accordance with any limitations on the use of such substances.

(i) Substances permitted for use in minimal risk products exempt from pesticide registration under FIFRA section 25(b);

(ii) Reserved (for list of approved other (“inert”) ingredients)

**Under (ii) above, list all “inerts,” except the “minimum risk” 25(b) substances, known to be used in organic production, as determined by the Inerts Working Group, each annotated with an expiration date between June 27, 2018 and June 27, 2022. The APEs/NPEs should be removed from the list, as proposed by the Crops Subcommittee. This approach will allow the board to systematically review the inerts in groups over a five year period, as the board has previously voted to do.**

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