

Seattle City Light

We appreciate the opportunity to comment on the draft modification of the Aquatic Noxious Weed Management NPDES General Permit.

One of the proposed new adjuvants contains 4-nonyl phenol. WSDA has limits on alkyl phenol ethoxylates because they degrade into the persistent, bioaccumulative, aquatic toxins (PBTs) called alkyl phenols. 4-nonyl phenol is one of the best studied of these PBTs. We recommend against approving an alkyl phenol containing adjuvant for aquatic application and see no need for it in our own work.

The EPA published the "Nonylphenol (NP) and Nonylphenol Ethoxylate (NPE) Action Plan" in 2010 (RIN 2070-ZA09). The concern was due to "widespread release to the aquatic environment". EPA also states "NP is persistent in the aquatic environment, moderately bioaccumulative and extremely toxic to aquatic organisms." EPA has established water quality criteria for NP for both acute and chronic exposure. Environment Canada has established a concern level for NP in water. Canada and the EU have regulated NP and NPEs. The United Nations Environmental Program has identified NP as a chemical of global concern.

Health Canada and Environment Canada conducted an assessment for Nonylphenol and its Ethoxylates in 2001 (ISBN 0-662-29248-0). This statement is found in section 2.4.1 of the Canadian assessment: "APEs also affect the growth of testes, alter normal steroid metabolism, disrupt smoltification and cause intersex (ova-testes) in fish." In other words, APEs can interfere with fish reproduction.

The Southern Resident Orca Task Force report indicates that chinook salmon survival is important for orca survival and recommends increasing chinook abundance.

According to the Manufacturer label, Antero-EA contains 4-nonylphenol. We encourage the Department of Ecology to exclude persistent, bioaccumulative aquatic toxins from the NPDES general permit.

For future consideration, manufacturer labels and Safety Data Sheets for these adjuvants list alkylphenol ethoxylates as ingredients.

AgriSolutions Inergy/1381-13001

Antero-EA/2935-18001

Chempro A-10/46059-16001

Dyne-Amic/5905-50071

Turbulence/1381-13008

Winfield Solutions Inergy/1381-13002

A US Forest Service document titled Analysis of Issues Surrounding the Use of Spray Adjuvants with Herbicides also indicates that Cygnet Plus contain alkylphenol ethoxylates. Neither the label or SDS confirmed that information.

We encourage the Department of Ecology to reconsider permitting the aquatic use of products that contain chemicals that can disrupt fish reproduction.