Summary of the Ecological and Human Health Assessment of Poly(oxy-1,2-ethanediyl), alpha- monoalkyl ethers- omega-mono-(hydrogen maleate) Pursuant to the *New Substances Notification Regulations (Chemicals and Polymers)* of the *Canadian Environmental Protection Act, 1999*

Substance Identity

The notified substance is a polymer identified as poly(oxy-1,2-ethanediyl), alpha-monoalkyl ethers- omega-mono-(hydrogen maleate).

Notified Use and Quantities

The notified substance is imported into Canada in quantities greater than 10,000 kg/year to be used as a component in paints, coatings and plastics.

Environmental Fate

Based on the physical and chemical properties, if released to the environment, the notified substance is expected to readily partition to, or end up in, an aquatic compartment with some affinity to soil and sediment. The substance is expected to degrade in the environment and is not considered to bioaccumulate.

Ecological Assessment

Acceptable acute ecotoxicity data was available for green algae. Overall, ecotoxicity to aquatic biota was found to be low.

The potential releases from the notified activities of formulation, transportation, use and disposal were considered in the estimation of the potential environmental concentrations. The assessment considers an expansion of uses beyond that which have been notified.

Based on the potential exposure from notified and other activities in Canada, the notified substance is not expected to pose significant ecological risk.

Human Health Assessment

Based on the available toxicological information, the notified substance has a low potential for acute oral toxicity, is a potential eye irritant and is a skin sensitizer.

For the notified use, the general population may come into contact with products containing low levels of the notified substance; however, the potential for direct exposure to the notified substance is low since the substance is expected to form part of a stable polymer matrix from which residues will not be released. The potential for indirect exposure from environmental

media such as drinking water is expected to be low. Therefore, no significant health risks for the general population are anticipated for the notified use.

The notified substance has potential to be used as a surfactant in a wide variety of other consumer applications where potentially significant exposure of the general population may occur. Additional information will be needed to assess potential human health risks in these scenarios.

Regulatory Conclusions

Based on available information, the substance is not considered to be persistent or bioaccumulative according to the *Persistence and Bioaccumulation Regulations* (Canada Gazette, Part II, Vol. 134, No. 7 - March 29, 2000, SOR/2000-107, March 23, 2000).

Under the provisions for Substances and Activities New to Canada in Part 5 of the *Canadian Environmental Protection Act, 1999* (CEPA, 1999), and pursuant to section 83 of that Act, the Ministers of Environment Canada and Health Canada have assessed the available information on the notified substance and have determined that the substance is not anticipated to enter the environment in a quantity or concentration or under conditions that (a) have or may have an immediate or long-term harmful effect on the environment or its biological diversity; (b) constitute or may constitute a danger to the environment on which life depends; or (c) constitute or may constitute a danger in Canada to human life or health. Therefore, the notified substance is not considered to be "harmful to human health or environment" as defined in section 64 of CEPA, 1999.

It is anticipated that a significant new activity may result in the substance becoming "harmful to human health or environment . Therefore a Significant New Activity (SNAc) Notice (SNAc No. 15786) has been issued with respect to the substance, pursuant to section 85 of the CEPA, 1999 requiring re-notification for activities specified in the Notice. The SNAc Notice has been published in the Canada Gazette Part I, Vol. 144, No. 34, August 21, 2010.