



## Environment

Product Stewardship is becoming increasingly recognized as "the responsible and ethical management of the health, safety and environmental aspects of a product throughout its total life cycle." By defining and pursuing common goals throughout the supply chain, the chemical industry believes it can be beneficial at all levels. No company operates in isolation. All parties involved in the production, handling, use and disposal of chemicals have a shared responsibility to ensure their safe management and use. By adopting a programme of Product Stewardship, every company can play a part in protecting humans and the environment from potential harm.



The vast majority of emissions of bromine happen during the manufacturing process in particular, the manufacturing of plastics and textiles. Even though industrial waste plants control the disposal of chemical waste, significant quantities of chemical emission often escape into the environment.

[VECAP](#) is a Responsible Care voluntary program that substantially goes beyond legally required emissions controls. VECAP was developed in 2004 in the United Kingdom textile coating industry. The program was so effective that it achieved a 97% reduction of emissions of bromine into water of the common flame retardant Deca-BDE, within three years. Similar improvements have subsequently been achieved by the textiles and plastic industries in other member states. Today, VECAP has been extended to other flame retardants, instituted in the European Union, and introduced in North America and Japan.

VECAP initiatives are carried out by the chemical industry in cooperation with consumer industries. Further VECAP initiatives include: data collection on workplace conditions, consumer exposure and end-product recycling, as well as, conducting environmental monitoring programmes and providing workplace best practices.