ACT 146

H.B. NO. 2013

A Bill for an Act Relating to Polybrominated Diphenyl Ethers.

Be It Enacted by the Legislature of the State of Hawaii:

SECTION 1. The legislature finds that consumer product manufacturers commonly add flame-retardant chemicals to plastics and other flammable materials to reduce the risk of fire. One of the most common flame-retardant chemicals is brominated flame retardant. Brominated flame retardants are chemicals that reduce the spread of fire in a variety of common products such as electronic casings, polyurethane foam, and commercial textiles. The most studied of these flame retardants are polybrominated diphenyl ethers, or PBDEs. Although useful as a flame retardant, PBDEs escape into the environment during the manufacture, use, and disposal of products containing this chemical.

The legislature further finds that three different mixtures of PBDEs are commercially available: pentabrominated diphenyl ethers (pentaBDEs), octabrominated diphenyl ethers (octaBDEs), and decabrominated diphenyl ethers (decaBDEs). PentaBDEs are mainly used as an additive in polyurethane foams that are widely used in upholstered products ranging from home furniture to seats in airplanes and automobiles. Some components are resistant to biodegradation and

persist in the environment. These components of the pentaBDE product are insoluble in water and concentrate in the fatty tissue of living organisms.

OctaBDEs are primarily used as an additive to acrylonitrile-butadienestyrene, a plastic used in housings for office and medical electronics, interior and exterior trim on automobiles, telephone handsets, and other products. The octaBDE product shares similar properties with the pentaBDE and accumulates in living organisms as well.

DecaBDEs are mainly added to high-impact polystyrene plastic, including housings for televisions, computers, stereos, and other products such as plastic furniture and toys. It, too, escapes into the environment because it is not chemically bound to the materials in which it is used. Although industry scientists assert that the chemicals found in the decaBDE product are too large to be efficiently taken up by living organisms, some evidence is turning up that decaBDE has been found in the tissue of living organisms in Europe.

Disturbingly, recent U.S. studies show the presence of PBDEs in human breast milk at an average level seventy-five times higher than those found in Europe. The PBDE levels found during this study were the highest worldwide recorded levels of PBDE in human tissue to date. In response to the release of these studies, a director from the Environmental Protection Agency stated that "levels of PBDE's are doubling in humans every two to five years", showing the pervasiveness and growth of a relatively unknown contaminant.

The legislature also finds that substantial public and private efforts to eliminate brominated flame retardants have made numerous alternatives available that are safe to human health and compliant with the strictest of fire safety standards. It is the purpose of this Act to phase out the use of PBDEs in the State of Hawaii.

SECTION 2. The Hawaii Revised Statutes is amended by adding a new chapter to be appropriately designated and to read as follows:

"CHAPTER POLYBROMINATED DIPHENYL ETHERS

- § -1 **Definitions.** As used in this chapter:
- "OctaBDE" means octabrominated diphenyl ether.
- "PentaBDE" means pentabrominated diphenyl ether.
- **§** -2 Restriction on manufacture or distribution. On or after January 1, 2006, a person may not manufacture, process, or distribute in commerce a product, or a flame-retarded part of a product, containing more than one-tenth of one per cent, by mass, of pentaBDE, octaBDE, or any other chemical formulation that is part of these classifications.
- § -3 Exception. The term "process," as used in section -2, does not include the processing of metallic recyclables containing pentaBDE, octaBDE, or any other chemical formulation that is part of these classifications that is conducted in compliance with all applicable federal, state, and local laws."

SECTION 3. This Act shall take effect upon its approval.

(Approved June 24, 2004.)