

[Company logo]

## To Our Suppliers

*[Company name] is committed to minimizing the environmental footprint of our products.*

*We recognize that some of the components and materials used in and on our custom boats may contain chemicals targeted for elimination and/or reduction.*

*We encourage our value-chain suppliers to partner with us in reducing or eliminating use of these chemicals.*

*This series of three Fact Sheets and Supplier Feedback Request Form provide context and guidance in this endeavor.*

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[www.pprc.org](http://www.pprc.org)

Funded by:



U.S. Environmental Protection Agency

Published September 2005

# Fact Sheet # 2

## PBDE – Current Legislation

### Problem

Fire safety standards for boats and marine vessels are stringent. In order to meet these standards, fire retardants are added to many components and furnishings, especially electrical equipment, electronics, plastics, polyurethane foams, and textiles. One commonly used group of retardants are halogenated bromine fire retardants, and in particular polybrominated diphenyl ethers (PBDE).

Current research shows that PBDEs are persistent, bioaccumulative and toxic (PBT) chemicals. Their levels in human blood samples, fat tissues and breast milk have risen sharply since the 1970s. The highest levels of PBDEs in people have been found in Canada and in the U.S., the largest producers and consumers of PBDE products. Studies link PBDEs to serious health effects including memory impairment, learning and behavioral problems, disruption of thyroid hormone balance, non-Hodgkin's lymphoma in humans, and a variety of cancers in rodents.

Penta- and Octa- brominated diphenyl ethers were phased out of U.S. production in 2004. Decabrominated diphenyl ether remains in use and accounted for almost 75% of over 33 metric tons of the 2001 PBDE market in North and South America.

### Legislation

The following covers current national and international legislation and movements towards elimination of PBDEs.

#### Washington State

- An Executive Order issued January 2004 required development of a chemical action plan to reduce the threat of PBDEs in the environment;
- Washington State PBDE Interim Chemical Action Plan, December 2004; and,
- Washington State PBDE Final Chemical Action Plan, due December 2005, which is expected to recommend the following:
  - An analysis on feasible alternatives to Decabrominated diphenyl ether (DecaBDE);
  - If documented safer alternatives exist, a recommendation to ban or phase-out the use of DecaBDE in electronic enclosures and certain textile applications by 2008;
  - Establish appropriate disposal and recycling practices for products containing PBDE by July 2006;
  - Require state agencies to purchase PBDE-free products; and,
  - Label products that contain PBDEs and other toxic flame retardants.

#### Other US States

California, Hawaii, New York, Maine, Massachusetts, Michigan, New Jersey, and Pennsylvania are other U.S. states where legislation has either passed or is pending, prohibiting or restricting the manufacture, processing, or distribution of certain PBDEs.

## [Company name]

### *PBDE Restrictions Issued:*

#### *U.S. States*

*Washington  
California  
Hawaii  
Maine  
Massachusetts  
Michigan  
New Jersey  
New York  
Pennsylvania*

#### *Canada*

#### *European Union*

#### *Germany*

#### *Sweden*

#### *Organization for Economic Cooperation and Development (OECD)*

#### *United Nations*

### *Federal*

The EPA is developing a PBDE Action Plan for release in 2005.

### *Canada*

- In 2004, Environment Canada released a draft “Environmental Screening Assessment Report on PBDEs,” stating that DecaBDE is toxic under section 64 of the Canadian Environmental Protection Act of 1999 (CEPA 1999) and “Track 1” substances under the Toxic Substances Management Policy. (“Track 1” substances are PBTs resulting primarily from human activity and are targeted for virtual elimination from the environment.)
- In 2004, Health Canada released a “Screening Assessment Report - Health: Polybrominated Diphenyl Ethers,” identifying PBDEs considered to be toxic as defined in Section 64 of CEPA 1999.

### *European Union (EU)*

- The EU Directive 2002/95/EC, “Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment,” requires that new electrical and electronic equipment put on the market after July 1, 2006 is PBDE-free.
- The EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment, effective December 2006, requires separation of plastic containing PBDEs prior to recycling, energy recovery, or disposal.

### *Germany*

In 1989, the members of the Chemical Industry Association and the Association of the Plastics Producing Industry voluntarily agreed to discontinue the production and further use of PBDEs. This agreement covers many companies in the plastic and textile industry.

### *Sweden*

In May 2004, Sweden commissioned the national chemicals inspectorate to draft plans for banning DecaBDE, in advance of the EU ban. The inspectorate is considering a national ban on all brominated fire retardants.

### *Organization for Economic Cooperation and Development (OECD)*

As part of the OECD’s Risk Reduction Programme, a risk assessment of PBDEs was published in 1994. This led producers of PBDEs to enter into a voluntary agreement with the OECD in 1995 to minimize the risk of production spills, and for industry to refrain from producing PBDEs other than those already on the market. Joint meetings between the OECD and industry oversee implementation of the commitments.

### *United Nations*

In May 2003 in Kiev, 36 countries and the European Community signed a new protocol on Pollutant Release and Transfer Registers. The PBDE emission threshold is 1 kilogram per plant per year to water and land respectively.