



## Polybrominated Diphenyl Ethers (PBDEs)



# Reply to Comments Received in Submissions on the Proposed *Polybrominated Diphenyl Ethers Regulations* Published on December 16, 2006, in Part I of the *Canada Gazette*

Environment Canada

July 2008

---

### Table of Contents

Introduction  
Parties Providing Submissions  
Comments and Reply  
    Manufacturing Prohibition on DecaBDE  
    Risk Management Strategy  
    Harmonization with European Union  
    Impacts on Recycling Industry  
    Regulatory Impact Analysis Statement (RIAS)  
Notice of Objection

---

### Introduction

As part of the ongoing consultations with stakeholders on risk management actions for polybrominated diphenyl ethers (PBDEs), Environment Canada has collected and assessed comments on the proposed *Polybrominated Diphenyl Ethers Regulations* that were published in Part I of the *Canada Gazette*, on December 16, 2006. The proposed Regulations are available on Environment Canada's Website at:

<http://www.ec.gc.ca/toxiques-toxics/Default.asp?lang=En&n=98E80CC6-1&xml=D698F467-0E9B-402D-BB99-81254364BAC3>

The Risk Management Strategy for PBDEs and comments received provided the framework for the proposed *Polybrominated Diphenyl Ethers Regulations*.

This document has been prepared to present the comments and issues raised by stakeholders on the proposed PBDE Regulations with Environment Canada's responses. All comments have been noted and considered, however they may not be reported verbatim as similar comments have been combined and paraphrased for brevity.

### Parties Providing Submissions

Submissions on the proposed Regulations were received from the following associations:

- Bromine Science and Environmental Forum
- Canadian Vehicle Manufacturers' Association
- Electro-Federation Canada
- Electronics Product Stewardship Canada

A Notice of Objection was also received from the following environmental group:

- Sierra Legal Defence Fund on behalf of the David Suzuki Foundation, Environmental Defence and the Canadian Environmental Law Association

## Comments and Reply

This section provides a summary of comments received grouped by themes and Environment Canada's response.

### Manufacturing Prohibition on DecaBDE

#### **Comment:**

- ***DecaBDE should not be included in the manufacturing ban of the proposed regulatory action as it is not warranted based on the nature and extent of the danger posed by decaBDE. Environment Canada should wait until the risk assessment on decaBDE is complete and the necessary justification for regulatory action is provided.***
- ***The proposed regulatory action to prohibit the manufacture of decaBDE could impact consumers and the auto industry because vehicle manufacturers use decaBDE in order to comply with both Canadian and U.S. fire safety standards.***

Response: The summary of the final ecological and human health screening assessment report was published in the *Canada Gazette*, Part I, on July 1<sup>st</sup>, 2006, and concluded that all seven PBDE congener groups that were assessed, including decaBDE, have or may have an immediate or long-term harmful effect on the environment or its biological diversity. The ecological screening assessment report indicated that while concentrations of congeners found in commercial DecaBDE measured at the time of publication did not appear to exceed known effect thresholds, concerns remained based on their overall persistence and potential transformation to bioaccumulative forms and observed commercial and environmental trends. Based on this evidence, the Final Order adding PBDEs, including decaBDE, to the List of Toxic Substances was published in the *Canada Gazette*, Part II on December 27<sup>th</sup>, 2006. Environment Canada continues to examine newly published science on decaBDE to determine whether there is a need for additional risk management actions.

Environment Canada has adopted a risk management approach which addresses the use and release of PBDEs from all sources. As one of the first measures of this approach, these Regulations prohibit the manufacture of seven PBDE congener groups, including decaBDE. While decaBDE has never been manufactured in Canada, the prohibition on manufacture of decaBDE was included to prevent the introduction of its manufacture in Canada. The import, sale, offer for sale and use of decaBDE is not prohibited under these Regulations. Therefore, the use of DecaBDE commercial mixture, which is composed primarily of decaBDE congeners, will not be impacted.

### Risk Management Strategy

#### **Comment:**

- ***The risk management strategy for PBDEs is flawed as it establishes a manufacturing ban as the risk management objective, when a prohibition on manufacture is a risk management tool. The risk management objective is not based on any best available processes, products or techniques used by the sector, and is a departure from previous Risk Management Strategies completed by Environment Canada.***

Response: The intent of the risk management objective should be seen in the larger context of the environmental objective as outlined in the risk management strategy. The environmental objective is to "...reduce the concentration of PBDEs in the Canadian environment to the lowest level possible." To achieve the environmental objective, more specific risk management objectives were developed. The risk management objective for all seven PBDE congener groups, as stated in the risk management strategy, is to "...prevent the introduction of their manufacture in Canada and to minimize their releases into the environment from all sources in Canada". Therefore, Environment Canada believes that these Regulations, by prohibiting the manufacture of PBDEs, ensures that there are no future releases from this source. In addition, to achieve the risk management objectives, Environment Canada will be developing risk management options to address the different life-cycle stages from use to disposal of PBDEs.

#### Harmonization with European Union

##### Comment:

- ***Due to the nature of global supply chains in the electronics manufacturing industry, Environment Canada should harmonize its Risk Management Strategy and any regulations that emerge from it with the work done by the European Union's "restriction of the use of certain hazardous substances in electrical and electronic equipment" (RoHS) Directive. This would include harmonizing product thresholds for PBDEs (0.1%) and limiting the scope of its PBDE restrictions to those products covered under the RoHS Directive, including current exemptions, and a mechanism to add exemptions.***

Response: Environment Canada agrees that harmonization with environmental legislation of international jurisdictions, notably the RoHS Directive, is a useful objective. Environment Canada will endeavour to harmonize future PBDE risk management measures with RoHS and other international legislation. The advantages and appropriateness of the extent of harmonization will be determined within the Canadian context.

#### Impacts on Recycling Industry

##### Comment:

- ***It is important that Environment Canada does not impact the responsible recycling of plastics from the large amounts of unprocessed e-waste currently in Canada. Care should also be taken to ensure that any regulatory changes do not adversely impact the refurbishment industry, or adversely impact the ability of the existing industry to extend the useful life of electronics.***

Response: Refurbished and recycled products containing PBDEs are not subject to the *Polybrominated Diphenyl Ethers Regulations*. Environment Canada is currently in the process of developing management measures that would address products containing PBDEs. As part of the risk management development process, Environment Canada will consult with stakeholders to address any potential adverse impacts.

#### Regulatory Impact Analysis Statement (RIAS)

##### Comment:

- ***The manufacturing ban on decaBDE is unnecessary and unreasonable, the Regulatory Impact Analysis Statement (RIAS) accompanying the Proposed Regulation fails to consider the impacts that a manufacturing ban on decaBDE will have on legitimate business interests of brominated flame retardants manufacturers, as international jurisdictions may adopt a similar manufacturing ban without a rigorous analysis.***

Response: The purpose of the RIAS is to assess the costs and benefits of regulatory measures to industry, government and public in Canada. The analysis excludes any impacts that accrue outside of Canadian geographic boundaries. Therefore, impacts on business interests that may result from other jurisdictions adopting Canadian standards are beyond the scope of the RIAS. Moreover, it should be noted that Canada, when harmonizing regulatory measures with other jurisdictions (e.g. US), adapts the requirements to the Canadian context.

The RIAS has been modified to include the revisions to the regulatory text. The section on "International Actions on PBDE" has been revised to reflect the current status of the measures taken by international jurisdictions.

## Notice of Objection

A Notice of Objection has been filed by the Sierra Legal Defense Fund on behalf of the David Suzuki Foundation, Environmental Defense and the Canadian Environmental Law Association requesting a Board of Review be established to examine:

- the basis for Environment Canada's determination that decaBDE does not meet the criteria for bioaccumulation as set out in Section 4 of the *Persistence and Bioaccumulation Regulations*, in consideration of the evidence presented in the Screening Assessment, the actual tests in the Regulations and the appropriate application of the precautionary principle;
- the intent of the *Persistence and Bioaccumulation Regulations* and the limitations of these regulations in identifying bioaccumulation in the terrestrial food chain and addressing precursors to known bioaccumulative substances, and to make recommendations for updating the regulations;
- new evidence concerning decaBDE bioaccumulation, and whether measures should be recommended to address timing issues surrounding the issuance of Screening Assessments, the publication of studies, the period for public comment and the use of such Screening Assessments for making determinations under CEPA 1999; and
- the effectiveness of the proposed *Polybrominated Diphenyl Ethers Regulations* in banning persistent, bioaccumulative, and toxic substances (as required by CEPA 1999), in light of the broad Section 5(2)(b) exemption for PBDEs or resins, polymers or mixtures containing such a substance intended for disposal or recycling.

Environment Canada has conducted a comprehensive review of newly published science (post-2005) on decaBDE, resulting in the preparation of a draft State of the Science Report on the Bioaccumulation and Transformation of Decabromodiphenyl Ether. A scientific peer review of this draft report ended on 8 January, 2008. It is anticipated that the draft report will be released for public comment in the summer of 2008, thereby ensuring transparent consultation with all stakeholders. When finalised, the Report will assist the Minister with his decision on whether to establish a Board of Review, and whether further controls on decaBDE are required. These Regulations are being implemented as a first step in the PBDE risk management strategy. Furthermore, a number of actions have already been taken to respond to issues raised in the Notice, including a revision to the Regulations with respect to the exemption for recycling of raw materials containing PBDEs.

Further information on the Notice of Objection and Government of Canada response will be posted on the CEPA Registry at the following link: [www.ec.gc.ca/CEPARRegistry/participation/object.cfm](http://www.ec.gc.ca/CEPARRegistry/participation/object.cfm)