



DEC 29 2025

Mr. Hartley R. Harris
Chairman

Energy Industry Electrical Engineering Associates

hartley@catchengineering.com; slpede2@shaw.ca; todd.keevill@arcticsands.ca

Dear Mr. Harris:

This letter is in response to your Notice of Objection to the publication of the proposed Prohibition of Certain Toxic Substances Regulations, 2022 (proposed Regulations), which was received by Environment and Climate Change Canada on June 20, 2023. The proposed Regulations were published in the *Canada Gazette*, Part I, on May 14, 2022.

As outlined in subsection 332(2) of the *Canadian Environmental Protection Act, 1999*, notices of objection may be filed within 60 days of the publication of proposed instrument (i.e. the proposed Regulations). While your Notice of Objection was submitted after this period, I cannot grant your request. However, even if your Notice of Objection had been filed within the legal timeframe, I would have reached the same conclusion based on my careful consideration of the issues and comments in your Notice of Objection with respect to decabromodiphenyl ethane (DBDPE). Please find my response below and in the Annex to this letter.

Responses to comments in your Notice of Objection related to the outcomes of the screening assessment for DBDPE, which concluded that there is a risk of harm to the environment due to the persistence and widespread occurrence of DBDPE in the environment along with the potential for bioaccumulation and toxicity of its transformation products, are provided in the Annex.

The comments in your Notice of Objection regarding the development of the proposed Regulations have been considered alongside other comments received on these regulations. The specific points you have raised on the proposed Regulations and how they will be addressed are also summarized in the Annex to this letter. Your Notice of Objection raised specific concerns on the proposed

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exemptions for DBDPE, and to address these concerns, the proposed timeline of the DBDPE exemptions will be extended by an additional 10 years (i.e. extended from 5 years to 15 years for new products and from 20 years to 30 years for replacement parts) and the scope of these exemptions will be broadened to include all manufactured items and additional intermediate materials. This extended timeline will allow all stakeholders additional time for the research and development of alternatives, testing and certification, and transitioning their manufacturing and supply chains. Broadening the scope of the DBDPE exemptions will help to reduce the risk of prohibiting critical components, reduce the need to apply for permits under the proposed Regulations for non-exempted parts, and reduce compliance burden of stakeholders throughout the supply chain.

Please note that the comments on the proposed Regulations will be summarized in the Regulatory Impact Analysis Statement that will be published with the final *Prohibition of Certain Toxic Substances Regulations, 2025* (2025 Regulations) in the *Canada Gazette*, Part II, which describe how these matters have been addressed.

I appreciate your bringing your concerns to my attention. Please accept my best regards.

Yours truly,

A handwritten signature in blue ink, appearing to read 'Julie Dabrusin', with a stylized flourish at the end.

The Honourable Julie Dabrusin, P.C., M.P.

Att.

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Minister of Environment and Climate Change Canada Detailed Responses to Notice of Objection Comments

The following list provides a summary of comments in your Notice of Objection and the responses from the Department:

- 1. In your Notice of Objection, you commented that the basis for Environment and Climate Change Canada (ECCC) determining that DBDPE meets the criteria set out under paragraph 64(a) of the *Canadian Environmental Protection Act, 1999* (CEPA) is flawed. The conclusions are derived from simulations and synthetic conditions that do not occur in the real world.**

Relevant and well-established models (i.e. “simulations”), readily used by other jurisdictions, industry, and academia have been applied. The generated model results were evaluated to ensure reliability in order to inform the assessment and were applied in a weight-of-evidence approach, together with empirical data, an analogue approach, and information submitted by industry, to reduce uncertainties associated with any one line of evidence. Thus, model results are considered a robust and realistic line of evidence and were used in the assessment with consideration of any underlying uncertainties.

Regarding any laboratory or other “synthetic conditions” that were used to generate data uses in the [DBDPE screening assessment](#), in the absence of “real world” or field based data, CEPA assessments focus on utilization of reliable laboratory data that are relevant to one or many exposure scenarios in the Canadian environment. Such approaches are applied to many aspects of an assessment including but not limited to laboratory toxicity and biodegradation data. In addition, this assessment also relied upon some “real world” data as presented in section 7 of the [DBDPE screening assessment](#) entitled “Measured Environmental concentrations”. Thus, the assessment conclusions were not only reliant upon data generated using modelling and laboratory conditions.

- 2. In your Notice of Objection, you commented that DBDPE is used as a flame retardant to meet critical flammability standards and safety requirements in products such as wire and cable used in electrical and electronic equipment.**

Flame retardant substances are generally used to meet performance-based flammability requirements. These requirements do not specify what chemical flame retardants need to be used; rather they may require a product or component to pass a laboratory test such as a cigarette smolder or open flame ignition test (ASTM 2014). Using chemical flame retardants such as DBDPE in products is one of the ways by which companies can meet flammability requirements for their products. Alternate substances as well as non-chemical-based alternatives may also be used to replace the use of DBDPE as a flame retardant in various applications.

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In addition to the concerns you have raised in your Notice of Objection, a number of similar comments were received during the public comment period for the proposed Regulations. To address these concerns, the proposed timeline of the DBDPE exemptions will be extended by an additional 10 years (i.e. extended from 5 years to 15 years for new products and from 20 years to 30 years for replacement parts) and the scope of the DBDPE exemptions will be broadened to include all manufactured items and additional intermediate materials. This extended timeline will allow all stakeholders additional time for the research and development of alternatives, testing and certification, and transitioning their manufacturing and supply chains. Broadening the scope of the DBDPE exemptions will help to reduce the risk of prohibiting critical components, reduce the need to apply for permits under the Regulations for non-exempted parts, and reduce compliance burden of stakeholders throughout the supply chain.

- 3. In your Notice of Objection, you provided comments that due to the lack of available alternatives for DBDPE in some products and that significant time and costs are associated with switching to alternatives which would require manufacturers to research, re-engineer, and re-certify products with an unknown alternative. In addition, you commented that the prohibition of DBDPE proposed in Canada poses a challenge to industries, including the energy industry and to supply chains and that the proposed prohibition of DBDPE will result in cost increases and delays on future energy industry projects, including energy transition projects.**

Please refer to the response to point 2 (above) respecting the extended timeline for, and broadened scope of the DBDPE exemptions.

- 4. In your Notice of Objection, you noted that Canada's prohibition on DBDPE is not aligned with global regulations and there are no other known nations pursuing similar regulations.**

Canada has been one of the first countries to lead action on flame retardants and was the first country to complete a risk assessment and propose risk management of DBDPE; however, Canada is not alone and since then international action for DBDPE has been underway or has been finalized.

In March 2023, the European Union (EU), under the [European Chemicals Agency \(ECHA\)](#) published their [Regulatory strategy for flame retardants](#), which has a focus on brominated flame retardants and their prioritization for restriction, including DBDPE. This document noted that:

For decabromodiphenyl ethane (EC 284-366-9, DBDPE) data was requested regarding potential bioaccumulation under substance evaluation and has been assessed by the PBT expert group. The available data, including field studies,

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appear to confirm the Persistent, bioaccumulative and toxic (PBT) properties of the substance.

Furthermore, on October 31, 2024, ECHA updated the [substance evaluation status for DBDPE](#) as ‘Concluded’ and published a [Substance Evaluation Conclusion and Evaluation Report](#) that considers DBDPE to meet the [Regulation on the registration, evaluation, authorisation and restriction of chemicals \(REACH\)](#) Annex XIII very persistent and very bioaccumulative criteria, wide dispersive use and high aggregated tonnage concerns and the need for follow-up regulatory action at the EU level. The report notes the restriction of aromatic brominated flame retardants as proposed in ECHA’s Regulatory strategy for flame retardants appears as a logical continuation following a formal hazard identification as very persistent and very bioaccumulative for DBDPE.

On June 27, 2025, ECHA published a [proposal](#) for identification of DBDPE as a substance of very high concern (SVHC) on the basis of the criteria set out in REACH Article 57. A [REACH Annex XV report](#) was prepared by Sweden to support the proposal for identification of DBDPE as a SVHC.

In the United States (US), DBDPE is listed as a new chemical and is subject to a [Significant New Use Rule](#), which requires manufacturers and processors to notify the US [Environmental Protection Agency \(EPA\)](#) before a new use for the manufacture, import or processing of DBDPE begins. In June 2021, the EPA made [DBDPE subject to a Final Health and Safety Data Reporting rule](#) pursuant to the [Toxic Substances Control Act \(TSCA\)](#) as part of a grouping of 30 organohalogen flame retardants being evaluated for risks by the [Consumer Product Safety Commission \(CPSC\)](#). In January 2024, the CPSC published [Organohalogen Flame Retardant Scope Document: Polyhalogenated Benzene Aliphatic and Functionalized Subclass](#) report (the PHBzAF subclass, which includes DBDPE) which concludes that “the PHBzAF subclass has sufficient data to proceed with risk assessment”. Furthermore, DBDPE is restricted in some consumer products under general flame retardant restrictions in some states, such as [California](#), [Maine](#), and [New Hampshire](#).

In August of 2021, Australia published their [assessment of DBDPE](#) and found that DBDPE:

meets the persistence, bioaccumulation, adverse effects in aquatic and terrestrial organisms and long-range transport criteria of Annex D of the Stockholm Convention on Persistent Organic Pollutants. Therefore, on the basis of the current hazard information available, the assessed chemical could pose an unreasonable risk to the environment.

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The Australian report also recommended control measures be developed under the [Industrial Chemicals Environmental Management \(Register\) Act 2021](#).

On June 26, 2025, the Australian government finalized its risk management of DBDPE after publishing a statutory public consultation on the proposed risk management for DBDPE in April 2025. The [Industrial Chemicals Environmental Management Standard for decabromodiphenyl ethane \(DBDPE\)](#) is a final scheduling decision to list DBDPE to Schedule 6 of the [Industrial Chemicals Environmental Management \(Register\) Instrument 2022](#). Schedule 6 of this instrument lists “Relevant industrial chemicals that are likely to cause serious or irreversible harm with essential uses” and specifies the risk management measures, including prohibitions and restrictions, that apply to the relevant industrial chemical or a mixture or article containing such a chemical (Australia, 2025).

Canadian risk management for DBDPE takes into consideration actions taken in jurisdictions, including the EU and the US, with the possibility of aligning where appropriate.

- 5. In your Notice of Objection, you commented that you commented that there was no merit, no benefit and no practical rationale for the proposed risk management measures for DBDPE and urged that that the proposed prohibition of DBDPE should be reconsidered and rejected.**

The [DBDPE screening assessment](#) concludes that DBDPE is toxic, persistent and results predominantly from human activities and that DBDPE is expected to contribute to the formation of persistent, bioaccumulative and inherently toxic transformation products, such as lower brominated diphenyl ethanes, in the environment.

As such, at the time the [risk management approach for DBDPE](#) was published, DBDPE met the criteria outlined in the Government of Canada’s Toxic Substances Management Policy for virtual elimination from the environment (Canada, 1995).

Upon the coming into force of the [Strengthening Environmental Protection for a Healthier Canada Act \(S.C. 2023, c. 12\)](#) in June 2023, the virtual elimination provisions of CEPA were replaced with a new regime that remains risk based. In developing a proposed regulation or instrument respecting preventive or control actions in relation to substances added to Part 1 of Schedule 1 of the Act, priority will be given to the total, partial or conditional prohibition of activities in relation to the substance or of releases of the substance into the environment. For substances added to Part 2 of Schedule 1, priority will be given to pollution prevention actions, which may include prohibition, when managing risks posed by those substances.

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An [Order adding DBDPE to Part 2 of Schedule 1 to the Canadian Environmental Protection Act, 1999](#) was published in the *Canada Gazette*, Part II, on February 26, 2025.

As indicated in the risk management approach for DBDPE, the environmental objective for DBDPE is to reduce its concentrations in the Canadian environment to the greatest extent practicable, and the risk management objective for DBDPE is to achieve the lowest level of release of the substance into the Canadian environment, taking into account social, economic and technical matters.

The high importation volumes of DBDPE into Canada, along with information on its uses, indicate potential for widespread release into the Canadian environment. Aquatic exposure to DBDPE is expected through activities such as formulation, either directly to receiving surface water or to a wastewater treatment system that discharges its effluent to a receiving surface water body. In addition, products containing DBDPE have the potential to release DBDPE at various stages of their lifecycle, including use (see house dust studies referred to in Section 10.1.1.2 and Appendix D of the DBDPE screening assessment) and disposal. Once released into the environment, DBDPE will be found mainly in sediment and soil, where it may persist for long periods of time, resulting in DBDPE build-up, as seen by rapid doubling times in sediment in the Great Lakes.

Given the above, regulatory prohibition is the best approach to meet the risk management objective for DBDPE, which is to achieve the lowest level of release of the substance into the Canadian environment, taking into account social, economic and technical matters.