

**Response to *Canada Gazette* Part I, Vol. 144, No.
31 (July 31, 2010) - NGO comments on
Publication of Final Decision after Screening
Assessment of Substances — Batch 8**

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1. INTRODUCTION

The Canadian Environmental Law Association (CELA) and Chemical Sensitivities Manitoba (CSM) are submitting the following comments in response to the *Canada Gazette*, Part I, Vol.144, No.31 – July 31, 2010, release of the proposed risk management approach reports for selected substances identified under the Chemicals Management Plan (CMP), Batch 8 of the Industry Challenge.

CELA (www.cela.ca) is a non-profit, public interest organization established in 1970 to use existing laws to protect the environment and to advocate for environmental law reform. It is also a legal aid clinic that provides legal services to citizens or citizens' groups who are unable to afford legal assistance. In addition, CELA also undertakes substantive environmental policy and legislation reform activities in the area of access to justice, pollution and health, water sustainability and land use issues since its inception. Under its pollution and health program, CELA has been actively involved in matters that promote the prevention and elimination of toxic chemicals addressed in the *Canadian Environmental Protection Act*, including the categorization process and implementation of the CMP.

Chemical Sensitivities Manitoba (CSM), a volunteer organization, was founded in 1997 by four individuals who saw the need to address the effects of toxic chemicals on human health and the possible link between the onset of chemical sensitivities and chemical exposure and, in particular, chronic low-level exposure. CSM raises awareness of the presence of toxic chemicals in the home and the environment and strongly advocates for the safe substitution of these toxins.

Our respective organizations along with other Canadian environmental and health non-governmental organizations (NGOs) have submitted substantial comments on assessment results and proposed management options for substances in Batches 1 through 10, including the final assessments and draft risk management options for Batches 1 to 7.

For Batch 8 substances, our organizations are focused on the proposals to require application of Significant New Activity notifications for six substances and provide substantial comments on the proposed management measures for two of the 4 substances found to be toxic under the *Canadian Environmental Protection Act, 1999* (CEPA 1999). Our initial submission in response to the draft screening assessment results dated March 31, 2010 elaborated on the gaps and limitations on specific aspects of the risk assessments and the proposed management instruments for specific chemicals. Some of these issues have continued to impact the type of management measures proposed by government. In this submission, we developed substantial recommendations to address these gaps and limitations.

2. APPLICATION OF SIGNIFICANT NEW ACTIVITY FOR SELECTED CHEMICALS UNDER BATCH 8

We would like to provide the following commentary on the government's proposal to apply Significant New Activity (SNACs) on the following substances from Batch 8:

The substances listed below have been assessed as being persistent, bioaccumulative and inherently toxic to non-human organisms. The government of Canada issued "a *Notice with Respect to Selected Substances Identified as Priority for Action* pursuant to paragraphs 71(1)(a) and (b) of CEPA 1999. The Notice was published in Part I of the *Canada Gazette* on March 4, 2006. Based on the response to the survey "there were no reports of industrial activity (import or manufacture) with respect to CAS RN 626-39-1 in Canada, above the reporting threshold of 100 kg, for the specified reporting year of 2005."¹ That said, Benzene, 1,2,3,4-tetrachloro-5,6-dimethoxy-(CAS RN 944-61-6) and Fatty acids, C6-19-branched, zinc salt (CAS RN 68551-44-0) were reportedly used in 2005 above the threshold of 100 kg/year in 2005.²

A similar notice under Section 71 of CEPA was conducted in 2009 for these three substances. The results of the survey revealed no reports of industrial activity (import or manufacture) with respect to these substances in Canada, above the reporting threshold of 100 kg, for the specified reporting year of 2006. These results indicate that currently, these substances are not in use above the specified reporting threshold, and therefore the likelihood of exposure to humans or the environment from these substances in Canada resulting from commercial activity is low.³

Any new activities intended for the above three substances could result in these substances meeting the criteria as outlined in section 64, CEPA 1999. With addition to the DSL, changes in activities for these substances would result in SNAC provisions as specified under subsection 81(3) of CEPA 1999.

While any current use of these substances will not be targeted for management measures since they fall below the use threshold of 100 kg/ year any new manufacture, import or use of any of these substances in quantities greater than 100 kg/year must be notified and will undergo ecological and human health risk assessments as specified in section 83 of the *Act* prior to the substance being introduced into Canada.

In addition, the following Challenge chemicals, 2- Nitropropane - (CAS RN): 79-46-9; Benzene, 1-methyl-2-nitro(2-Nitrotoluene) – (CAS RN): 88-72-2; and Methylum, [4-(dimethylamino)phenyl]bis[4-(ethylamino)-3-methylphenyl]-, acetate(MAPBAP acetate) - (CAS RN): 72102-55-7, have been found to meet the

¹Environment Canada and Health Canada. Screening Assessment for the Challenge: 626-39-1; 944-61-6; 68551-44-0. July 2010. Accessed at <http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=27DE4BBC-1>.

² Ibid.

³ Ibid.

criteria of section 64 of CEPA and, as part of the measures for risk management are targeted for SNAc provisions.⁴ The proposal to apply a SNAc to these three CEPA toxic chemicals will permit the current use and release of these chemicals. Through the screening assessment chemicals with 2-Nitropropane - (CAS RN): 79-46-9; and Benzene, 1-methyl-2-nitro(2-Nitrotoluene) – (CAS RN): 88-72-2 were determined to be carcinogenic, while MAPBAP acetate (CAS RN): 72102-55-7 is a possible carcinogen. Based on their impacts to human health, it is important to require stringent management measures that ensure full protection of human health and the environment from these chemicals. The government's approach should aim to develop further management measures seeking prevention of use of these chemicals which will reduce the levels of these CEPA toxic chemicals rather than simply targeting future uses for the consideration of management measures.

In previous submissions responding to the implementation of the CMP, our organizations have outlined our concerns with using the SNAc provisions. We note these concerns again as they continue to be relevant for all six chemicals targeted for SNAcs:

a) Toxic under CEPA 1999:

These substances should be considered toxic under CEPA despite evidence that they are not in use in Canada beyond the 100 kg/use threshold (particularly for CAS RNs: 626-39-1; CAS RN 944-61-6; and CAS RN 68551-44-0) and lack other data (uses, volume, historical data) submitted by industry through the application of Section 71 of the Act. By designating these substances toxic under CEPA, a signal would be sent to any other potential users and importers that these chemicals are toxic and should not be permitted re-entry into the Canadian market. Government could use other tools under CEPA to ensure that future uses of these substances are not permitted in Canada, such as adding these substances to the *Prohibition of Certain Toxic Substances Regulation*. The application of SNAc provisions as proposed by government has limits and could not guarantee that these substances would be prohibited from future use in Canada.

b) Reporting threshold of 100 kg:

With the reporting threshold for the s. 71 survey set at 100 kg/year, the surveys conducted cannot account for the number of possible users that fall below the threshold and who are not required to report to the surveys. The aggregate use of these chemicals has not been addressed and this raises significant concerns as to the legitimacy of applying SNAcs to manage these chemicals. We view the application of the 100 kg threshold for reporting as a gap in the government approach.

⁴See Screening Assessments for the following chemicals: 2-Nitropropane - (CAS RN): 79-46-9; Benzene, 1-methyl-2-nitro(2-Nitrotoluene) – (CAS RN): 88-72-2; and Methylum, [4-(dimethylamino)phenyl]bis[4-(ethylamino)-3-methylphenyl]-, acetate(MAPBAP acetate) - (CAS RN): 72102-55-7. Access at <http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/batch-lot-8/index-eng.php>.

In the case of the three substances that do not meet the criteria in s. 64 of CEPA 1999, we are particularly worried as it is uncertain how many facilities are using these chemicals below the current threshold. We are also concerned about the location of these facilities. Should several facilities be clustered in one region of Canada, for example the Great Lakes region, these facilities together may contribute significantly to the pollution levels already released in the region. This may result in additional concern for potential exposure from hazardous chemical found in that particular region. This level of information would be informative in the development of management measures that address the protection of a specific community from pollution sources.

c) Assessment under Schedule 6 of NSNR – lack consideration of adequate chronic toxicity and other hazard data:

The application of SNAcs is inappropriate for these high priority chemicals as it does not result in a preventative approach but rather a ‘wait and see’ approach. A SNAc application will not guarantee that the Canadian environment and human populations will not be exposed to these substances in the future, despite the requirements by future notifiers to fulfill requirements outlined under Schedule 6 of the New Substances Notification Regulations (NSNR).

The schedule outlined in the New Substances Notification Regulations is not sufficiently comprehensive with its call for toxicity data to address existing substances identified for SNAcs. The list of toxicity data is minimal as notifiers will **not** be required to submit data for chronic toxicity or indications of endocrine disruption or neurodevelopmental toxicity. The government should ensure that notifiers interested in re-introducing these substances are required to demonstrate that these chemicals do not result in such health impacts. Even at a low volume usage, it is our view that revisions to the New Substances program are necessary to accommodate the future assessment of chemicals that are listed under the DSL and found to meet the criteria outlined for categorization. The level of accountability for users, importers and manufacturers to provide data for assessment should be at the highest level before due consideration of use is given by government on these substances. This should include requiring data that are not currently required under the proposed Schedule.

d) Lack of public comment under NSN regulations:

We have an on-going concern that the application of SNAcs on these substances will mean that the public will not have opportunities to engage in the assessment process as any subsequent assessments under the NSN regulations do not include such a provision. The public should have access to this process, particularly as it has now been expanded to address substances that were originally on the DSL.

Further to the comments above, we provided (see section 3.2) additional comments related to the management of 2-nitropropane (CAS RN): 79-46-9, a chemical found to be toxic under CEPA 1999.

3. COMMENTS ON SELECTED CEPA “TOXIC” CHEMICALS⁵

3.1 Phenol, 2,6-bis(1,1-dimethylethyl)-4-(1-methylpropyl): CAS RN 17540-75-9

Based on the government’s decision to conclude that DTBSBP is toxic under CEPA, appropriate management should be developed to protect the environment as required under CEPA. It is our view that the most stringent measures to manage DTBSBP should be considered by the government because this substance has been found to meet the requirements of the Persistence and Bioaccumulation Regulations under CEPA 1999 and it is considered to be persistent, bioaccumulative and toxic. The government’s management regime for DTBSBP should address industrial applications and consumer products alike. We have provided substantial comments in response to the draft assessment on DTBSBP in March 2010.⁶ We will not reiterate all the concerns with respect to the scope of the assessment but mention a few important issues that continue to require the government’s attention in conducting its risk based assessments. It is our view that the government’s approach to address the following issues may have significant implications for the final measures developed for managing DTBSBP effectively.

1) Vulnerable populations

Through our past submissions on Challenge substances, including our preliminary comments to the draft screening assessment for DTBSBP, our organizations have submitted substantial comments with respect to the lack of consideration regarding the exposure of chemicals to specific vulnerable populations. While there has been some focus on considering children’s exposure through the administration of questionnaires in the Challenge process, the consideration of workers, communities located in remote northern regions, people with chemical sensitivities and people of low income have not been adequately considered in the process to develop risk management measures.

We recognize that CEPA 1999 does not cover occupational settings in the process of conducting assessments. This responsibility lies with provincial governments. However, based on the experience gathered through the CMP implementation, there continues to be significant information gaps in toxicity to environment and human health. For some chemicals, such as 2-nitropropane and DTBSBP, where limited toxicity data exist, the data collected from occupational settings offers an insight into the potential impacts expected from exposure to these chemicals and warrant further consideration. Hence, the government should establish a transparent process that will provide a fulsome

⁵ These chemicals have met the criteria for a toxic designation as outlined under section 64 of CEPA, 1999.

⁶ Chemical Sensitivities Manitoba and Canadian Environmental Law Association. “NGO comments on Draft Assessment and Risk Management Scope for selected substances in Batch 8 of the Industry Challenge of the Chemicals Management Plan- A Response to Canada Gazette Part I, Vol. 144, No. 5” — January 30, 2010. March 31, 2010. Accessed at http://www.cela.ca/sites/cela.ca/files/719.CELA_CSM_resp_draft_RA_batch_8.pdf.

discussion between federal and provincial decision-makers to explore these matters. This process should include public engagement.

With respect to the other vulnerable populations, such as children and northern communities, focus on specific management measures relies on the level of response received through the questionnaire (for children), in part. For northern communities and other aboriginal communities, proposed actions have not been considered unless there is a potential for long range transport for the targeted chemical.

2) Use of analogues

We have raised the issue of analogues in numerous submissions responding to the implementation of the Chemicals Management Plan. While we see the need to use analogues in the assessment process, there are on-going concerns about:

- the overall process for identifying the analogues for a particular chemical,
- criteria used to determine which analogue is selected, and
- the rationale of selecting several rather than relying on one analogue to make determination on a chemical's toxicity, persistence and bioaccumulation, etc.

The screening assessment for DTBSBP provides a good example where several analogues have been considered for completing the environmental and health assessments. For the environmental assessment, two analogues had been deemed suitable but one analogue, CAS RN 732-26-3 was more appropriate for quantifying the determination of persistence and bioaccumulation on DTBSBP. However, for the health assessment, five analogues were considered, including the two used for the determination of persistence and bioaccumulation. Since it was determined that CAS RN 732-26-3 was the more appropriate analogue for the determination of persistence and bioaccumulation of DTBSBP, it would be assumed that the same analogue would be used to determine the toxicity to human health. While it is understood that a wider range of analogues gives the opportunity to compare toxicity data between the analogues, a decision was already made by the government on an analogue that was deemed the best fit structurally. The analogues also lacked details regarding their toxicity. The process for selecting analogues for specific information on the chemical is very subjective and raises the level of uncertainty when determining its impact on the environment and human health.

3) Potential for long range transport

The approach to determine the long range transport for a chemical has been based on concluding that the chemical is persistent in the environment. In addition, a model has been used to determine the potential of long range transport because of the very limited data available for the long range transport of chemicals. There are some chemicals that are considered as having low potential for long range transport based on the application of the model but meet the criteria for persistence and bioaccumulation (e.g. DTBSBP). DTBSBP is highly persistent in soil and sediment and is extensively used in consumer

products, such as brake fluid and perhaps, foam products that are available and utilized by Canadians across the country, including the northern communities. Despite the lack of evidence for long range transport as concluded in the final assessment of DTBSBP, PBiT chemicals are potentially dangerous in the colder northern communities, even if found in low levels. They may end up affecting the food chain as these chemicals build up over time in the sediment and soil, which are part of the ecosystem that wildlife species depend on for food sources. There is great concern about the effectiveness of disposal methods and end-of-life management of products that may contain PBiT chemicals and particularly, in remote northern regions. Therefore, we emphasize, the need for developing regulations that achieve prohibition of these substances.

Recommendation: We support the government's conclusion that DTBSBP meets the criteria of section 64 of CEPA 1999.

Recommendation: We support the finding that DTBSBP is a persistent, bioaccumulative, and inherently toxic chemical and should be targeted for virtual elimination as outlined in the Persistent and Bioaccumulative Regulations under CEPA 1999.

Recommendation: We support the government position to add DTBSBP to the List of Toxic Substances (Schedule 1) of CEPA 1999.

Table 1 provides comments on specific elements of the proposed management measures. (See below)

Table 1: DTBSBP (CAS RN: 17540-75-9): Comments and recommendations to specific risk management proposals

Specific sections of risk management scope for DTBSBP (CAS RN: 17540-75-9):	Summary of proposed government measures & other measures	CELA & CSM – Comments	Recommendations
Section 1.3 proposed measure	The final screening assessment report concluded that DTBSBP meets the virtual elimination criteria set out in subsection 77(4) of CEPA 1999. As a result, the government has proposed virtual elimination (VE) for DTBSBP.	<ul style="list-style-type: none"> • There is general agreement that DTBSBP meets the criteria as set out in subsection 77(4) of CEPA 1999, for virtual elimination (VE). • While we support the government's approach to apply VE to persistent toxic substances, in keeping with Annex 12 of the <i>Great Lakes Water Quality Agreement</i> which states that the "philosophy adopted for control inputs of persistent toxic substances shall be zero discharge."⁷ DTBSBP should be targeted for VE. However, one of the requirements for VE as outlined in CEPA 1999, is the determination of a "limit of quantification" (LoQ). The process for establishing LoQ has proven to be contentious and creates obstacles for effectively eliminating these substances. Hence, determining a LoQ for a chemical takes significant time and relies on using available technology and methodology to decide on a LoQ. We strongly urge the government to seek the ultimate phase out of DTBSBP through a regulation which aims to prohibit its use, manufacture, sale, disposal, import and export for products and industrial processes. This regulation would achieve the goals of elimination without requiring the need for establishing LoQ. Very few PBiT chemicals have been managed using the VE list. • Furthermore, there are several PBiT chemicals, such as several brominated flame retardants and perfluorinated surfactants that have been managed through regulations aimed at prohibition. 	<p>Rec.: We support the government's proposal for virtual elimination of DTBSBP but without any exemptions. However, we urge the government to develop specific regulations that aim to prohibit the use, manufacture, sale, disposal, import and export of this chemical covering industrial uses and consumer products.</p> <p>Rec.: We do not support the determination of Limit of Quantification to achieve virtual elimination. We would support a regulatory approach to achieve virtual elimination through prohibition.</p>
Section 6.1 Existing	In Canada, there are no known risk	<ul style="list-style-type: none"> • Because there are no known risk management measures for DTBSBP in Canada, virtual elimination may not adequately deal with the full life 	Rec.: To achieve virtual elimination (i.e. phase out or

⁷ Consolidated by the International Joint Commission. Revised Great Lakes Water Quality Agreement of 1978. As Amended by Protocol Signed November 18, 1987.

Specific sections of risk management scope for DTBSBP (CAS RN: 17540-75-9):	Summary of proposed government measures & other measures	CELA & CSM – Comments	Recommendations
Canadian risk management	<p>management measures for DTBSBP.</p> <p>Used brake fluids some of which may contain DTBSBP and empty containers - sent to appropriate disposal facilities in many locations.</p>	<p>cycle of the chemical, which may pose a threat to the environment or human health. In particular, the issue of end of life or disposal methods associated with this substance or its presence in consumer products would not be effectively addressed through the VE approach. It would appear that the present disposal systems in place for brake fluids are not adequate if DTBSBP is present, as there is no assured way of knowing its presence. Furthermore, it is unknown how the disposal of containers for brake fluid is undertaken and if such disposal methods lead to contamination in the landfill or production of other toxic chemicals through incineration or recycling processes. The management approach should consider all phases of the full life cycle of this chemical (cradle to grave to cradle) to ensure that DTBSBP is not used in the production of other products through recycling or incineration.</p> <ul style="list-style-type: none"> • Currently, the Extended Producers Responsibility Program in Canada primarily targets the recycling and packaging of products. There has been particular focus on electronic sector but also includes used oil. This program should be strengthened and better linked to the development of management measures intended for chemicals found to be toxic under CEPA. Particularly, there are opportunities for the Extended Producers Responsibility program in Canada to expand to increase greater responsibility by industry for the products that are produced in Canada and ensure that CEPA toxic chemicals found in products may be addressed effectively.⁸ 	<p>elimination) of DTBSBP, the government should have explicit plans to adequately deal with DTBSBP and address its full life cycle.</p> <p>Rec.: The government should ensure full recovery of DTBSBP in products, including brake fluids and other products, for the purpose of its full destruction at the end of its life cycle.</p> <p>Rec.: Methods for recovery and destruction of DBTSP and empty brake fluid containers that would have contained DTBSBP, should include enhance application of Extended Producers Responsibility. Take back programs to permit producers for the complete destruction of DTBSBP is warranted.</p>
Section 6.1 Existing Canadian risk management	There is no definite list that will identify unsafe chemicals for materials used for packaging foods	<ul style="list-style-type: none"> • It is unacceptable for the government, under the <i>Foods and Drug Act</i> (FDA), not to have a list that outlines all chemicals that are considered <i>unsafe</i> for use in food packaging. There are now a number of chemicals assessed under the Chemicals Management Plan which are used in food packaging materials (BPA, siloxanes, etc.) and have been 	Rec.: Under the <i>Food and Drug Act</i>, government should clearly identify through a list, all substances that are unacceptable to be used in food

⁸ For further discussion on Extended Producers Responsibility, see: Canadian Environmental Law Association. European and Canadian Environmental Law: Best Practices and Opportunities for Co-operation. January 2007. Accessed at http://www.cela.ca/sites/cela.ca/files/555_EU.pdf. See Chapter 2.

Specific sections of risk management scope for DTBSBP (CAS RN: 17540-75-9):	Summary of proposed government measures & other measures	CELA & CSM – Comments	Recommendations
Food packaging	under Division 23, Section B.23.0001, of the Food and Drug Regulations. As a result, ingredients and packaging materials intended for use with foods may be submitted voluntarily to the Food Directorate for a premarket assessment of their chemical safety in relation to Section B.23.001. This includes finished products, such as laminated films (Canada 1985).	<p>found to be CEPA toxic. However, no efforts have been proposed to prevent or prohibit the use of these chemicals in these applications. Given the progress made under the CMP to complete assessments of almost 200 chemicals since 2007, it is timely that the government considers revisions to the FDA in this area and should require the development of a “prohibition list” as it relates to food packaging.</p> <ul style="list-style-type: none"> For example, mandatory requirement to submit information to the Food Directorate on chemicals for a premarketing assessment should be required rather than conduct the assessment as a voluntary initiative. This is crucial for CEPA toxic chemicals and more so, for any chemical that is targeted for VE. This approach supports a precautionary approach that is more protective of the environment and human health. Chemicals on the list, particularly CEPA toxic chemicals, should be targeted for prohibition to prevent the potential release or contamination of food products via food packaging or ingredients. 	<p>packaging. This list should include all CEPA toxic substances.</p> <p>Rec.: Require mandatory reporting to the Food Directorate with respect to pre-market assessment of ingredients and packaging food materials rather than a voluntary approach.</p> <p>Rec.: Establish a list under the Food and Drug Regulations for prohibited chemicals in food packaging and application, including all CEPA toxic substances (e.g. DTBSBP)</p> <p>Rec.: The <i>Food and Drug Act</i> should be amended to reflect the mandatory reporting requirements for ingredients and food packaging.</p>
Section 7.1 Alternative chemicals or substitutes	Some substances in this same broad category of hindered phenolic substances could be substitutes for DTBSBP but they could be either less or more toxic to the environment. Some of these substances	<ul style="list-style-type: none"> VE was proposed for DTBSBP since the draft assessment was released for public comment by government. Additional efforts should have been directed to the compilation of a more comprehensive list of possible alternatives or substitutes. Unfortunately, this much needed information has not been supplied by industry. The government should raise its level of support and commitment towards the identification and promotion of alternatives that do not exhibit toxic properties in the course of conducting its assessment work. The 	<p>Rec.: In support of the virtual elimination of DTBSBP, the government should require the development of an inventory of all possible alternatives (chemical and technology) to this chemical. This inventory should be prepared as part of the risk management process.</p>

Specific sections of risk management scope for DTBSBP (CAS RN: 17540-75-9):	Summary of proposed government measures & other measures	CELA & CSM – Comments	Recommendations
	<p>will be assessed in an upcoming phase of the Chemicals Management Plan.</p> <p>DTBSBP is used as an alternative to BHT in several applications citing a benefit in lower overall capital cost for control technologies, and reduces the exposure potential of workers to dust invariably created in solids handling activities. (SI Group 2009).</p>	<p>voluntary questionnaire has proven to be unsuccessful in gathering such information. Additional consideration should be undertaken to collect information in a mandatory manner.</p> <ul style="list-style-type: none"> • The possible substitution of DTBSBP by other chemicals in the hindered phenolic family is considered not acceptable at this time since no further efforts have been undertaken to conduct an alternative assessment of these possible substitutes recognizing that some of them will be assessed at some stage of the CMP. An alternative assessment would be an evaluation of the substitute based on its hazardous properties rather than applying a risk based approach. This approach will ensure that potential alternatives or substitutions do not possess toxic properties regardless of the estimated exposure scenarios from use of the substitute. The assessment and validation of safety is an integral phase of the process to assess the safety of a chemical. This requirement should contribute to innovation by industry. • The risk management document noted that DTBSBP has been used to replace BHT, a chemical used extensively in products and industrial applications. BHT is considered an analogue to DTBSBP with some similar applications. However, BHT is a possible human carcinogen. Given the persistence and bioaccumulative nature of DTBSBP, an increase in use of BHT may be anticipated in light of the proposal to consider regulatory measures on DTBSBP for VE. • The use of BHT to replace BTBSBP may be seen as more economically beneficial to industry for some applications since it may contribute to lower overall capital cost for applying control technologies and may reduce worker exposure to the harmful chemicals. BHT is found in a solid state which can be converted easily by heat to the liquid state, which is considered a preferred state. It is quite possible that not all applications for BHT will use this method. We do not support the use of BHT, in any physical form because it is considered a possible human carcinogen. This 	<p>Rec.: A process should include an assessment of all alternatives to determine the safety of substitutes for DTBSBP. The assessment of alternatives would be based on hazards rather than the current assessment conducted under CEPA based on risk.</p> <p>Rec.: Since BHT is a possible human carcinogen, its use as an alternative to DTBSBP should not be permitted.</p>

Specific sections of risk management scope for DTBSBP (CAS RN: 17540-75-9):	Summary of proposed government measures & other measures	CELA & CSM – Comments	Recommendations
		<p>issue was not clearly elucidated in the final risk assessment document.</p> <ul style="list-style-type: none"> • We would see the use of BHT as a substitute for DTBSBP as inappropriate and unacceptable. 	
Section 7.3 Children's exposure	<ul style="list-style-type: none"> • Based on information received, it is proposed that no risk management actions to specifically protect children are required for this substance at this time. 	<ul style="list-style-type: none"> • There was uncertainty as to the presence of DTBSBP in common foam articles mouthed by toddlers and infants since there is no available empirical data. In an attempt to estimate some exposure for toddlers, a method used in the VCCEP (Voluntary Children's Chemical Evaluation Program) was adopted for the estimation of oral exposure via mouthing of foam. Another method was considered to approximate oral exposure from mouthing foam objects also yielded similar results. There was low confidence in the experimental data because of the lack of empirical data. However, there is confidence that the upper level of exposure is conservative and protective of toddlers. This was concluded because the estimations are likely overestimated and based on conservative assumptions and derived from experimental data on the structurally similar and more volatile antioxidant, BHT, which was used to screen the upper level of exposure. With the lack of empirical exposure data for DTBSBP, lower volatility of DTBSBP as compared to BHT, we have significant concerns that the lack of a risk management strategy to protect children from DTBSBP exposure is not sufficiently protective of their health. In light of these uncertainties and the lack of empirical data, and excluding the data on BHT, the government should be developing precautionary measures directed to the protection of children. • It is also troubling that the lack of information received through the industry challenge should lead the government to a conclusion that no measures are required to protect children's health or that this substance has no impact on children. • The current approach by government to collect information on exposure to children through a voluntary questionnaire is highly inadequate. The 	<p>Rec.: We do not support the government's approach as it does not take measures to protect children from exposure to DTBSBP.</p> <p>Rec.: The government should use the full scope of its authority to collect data on the impacts to children's health from this chemical. Specifically utilize CEPA Section 71(1)(c), to seek mandatory toxicological data from industry focused on exposure to children's health.</p> <p>Rec.: Additional regulatory action to protect children from exposure to DTBSBP is warranted because of the type and number of consumer products that may contain this chemical.</p> <p>Rec.: Similarly, the management proposals should also recognize and take action to protect other vulnerable sub-populations of</p>

Specific sections of risk management scope for DTBSBP (CAS RN: 17540-75-9):	Summary of proposed government measures & other measures	CELA & CSM – Comments	Recommendations
		<p>government should use its full authority under Section 71, in particular Section 71 (1) (c) to require industry to provide toxicological and other test data that will address this information gap as well as better inform the assessment report and pertinent detailed risk management strategies. The questions in these surveys should be focused and explicit to address information gaps.</p> <ul style="list-style-type: none"> • The lack of information gathered on children’s health exposures to this chemical is also applicable for other vulnerable populations (e.g., workers, people of low income, people with chemical sensitivities and aboriginal communities). 	<p>society such as people of low income, workers, people with chemical sensitivities and aboriginal communities.</p>
<p>Section 8.1 Environmental or human health objective</p>	<p>With virtual elimination proposed for DTBSBP, CEPA 1999, section 77 would also require, in addition to be added to the Virtual Elimination List, the Level of Quantification (LoQ). The concentration or release of DTBSBP into the environment as a result of human activities must be below the LoQ as specified in the Virtual Elimination List. (LoQ– this is</p>	<ul style="list-style-type: none"> • While we support the approach by government to seek the virtual elimination of DTBSBP, we have noted some concerns with the requirements to establish the Level of Quantification (LoQ) as required under CEPA. Primarily, our concerns focus on the LoQ and the barriers it creates in achieving the elimination of DTBSBP. Some concerns on the LoQ are: <ul style="list-style-type: none"> ➢ The emphasis for this chemical would be on control measures rather than the phase out of use. Furthermore, it may include exemptions being given to specific applications and sectors that would be specified by the government. In effect, it results in just managing the risks rather than focusing on the elimination of the use of this chemical. ➢ There would be little or no incentives to move towards safe substitution as attempts would be made to reduce releases to the environment below that of the LoQ. ➢ CEPA does not specify if the LoQ would be reviewed nor the frequency of the revision. It is expected that technology will improve with time but investment in control measures and detection instruments require substantial investments by companies. We question why investment should not be considered towards the phase out this chemical as opposed to 	<p>Rec.: To achieve virtual elimination of DTBSBP, we urge the government to consider the elimination of all sources of DTBSBP including its prohibition in use, manufacture, sale, disposal, import and export of DTBSBP including products containing the substance.</p> <p>Rec: The government’s approach should not include exemptions for any application of DTBSBP.</p> <p>Rec.: We do not support the establishment of a LoQ for DTBSBP as it does not effectively achieve virtual elimination.</p>

Specific sections of risk management scope for DTBSBP (CAS RN: 17540-75-9):	Summary of proposed government measures & other measures	CELA & CSM – Comments	Recommendations
	<p>the lowest concentration that can be accurately measured using sensitive but routine sampling and analytical methods).</p>	<p>relying on costly measures for control so as to avoid the impacts associated with this chemical.</p> <ul style="list-style-type: none"> ➤ There were no details to relate any proposed LoQ to any current environmental releases for DTBSBP. Also lacking are details on how protective being below the LoQ would be for the environment. It is recognized that the LoQ was not defined but the government should have an idea of an approximate value for the LoQ at this phase. The process to decide on the LoQ will be expected to become a political issue rather than ensuring the full protection of the environment and human health. <ul style="list-style-type: none"> • An approach that seeks to phase out all sources of DTBSBP is better aligned with the concept of virtual elimination. 	
<p>Section 8.2 Risk management objective</p>	<p>The risk management objective is to minimize releases of the substance to water and soil to the greatest extent practicable.</p>	<ul style="list-style-type: none"> • With a risk management stating that its objective to minimize releases of DTBSBP to water and soil to the greatest extent practicable, it is hoped that this objective can be expanded to include all environmental media including air. Focus on all environmental media will provide appropriate rationale for the virtual elimination of ALL uses of DTBSBP. • Given the properties of DTBSBP and with several possible exposure routes, some of which have not been fully assessed, a protective approach for this substance would be phasing out its usage (including the presence of residues) in consumer and industrial products. 	<p>Rec.: The risk management objective should be revised to prevent releases and use of DTBSBP not only a focus “to minimize releases...”. This would be in keeping with a virtual elimination approach.</p> <p>Rec.: We do not support the proposed risk management objective for DTBSBP as it does not fully protect human health from exposure.</p> <p>Rec.: We urge the government to develop a risk management approach that will be more preventative - a focus on the prohibition of this chemical in</p>

Specific sections of risk management scope for DTBSBP (CAS RN: 17540-75-9):	Summary of proposed government measures & other measures	CELA & CSM – Comments	Recommendations
			consumer and industrial products.
Section 9.1 Proposed risk management tool and objective.	<p>The risk management being considered for DTBSBP is the implementation of regulatory controls toward virtually eliminating releases of the substance to the environment. A regulation to prohibit and/or limit the conditions under which the substance may be imported, manufactured or used is being considered.</p> <p>Assessment of the potential for DTBSBP to meet the criteria set out in section 200 of CEPA 1999 in the event that it was to enter the environment as a result of an environmental</p>	<ul style="list-style-type: none"> • While there is agreement with the implementation of regulatory controls toward virtually eliminating releases of the substance to the environment, there is a need to at least identify some of these measures, so that stakeholders have an opportunity to make informed comments. This would also provide some context for the process of virtually eliminating releases of the substance to the environment but at the same time, recognizing that there will be formal comment periods after this current process. • There are some concerns with the proposal to prohibit and/or limit the conditions under which the substance may be imported, manufactured or used. These concerns include: <ul style="list-style-type: none"> ➢ If a substance is proposed for management measures in Canada, particularly virtual elimination, export of the substance or products containing the substance should also be prohibited. ➢ Limiting conditions under which the substance could be imported, manufactured or used is vague. Again, while extensive details are not expected at this point, the absence of any details makes it difficult to provide explicit comments. At this point in the process, NGOs would encourage the government to avoid circumstances in which on-going uses of DTBSBP are permitted without strong provisions outlining a timeframe for its phase out. The government should encourage to its full extent, the support of research and resources to find safe substitute/s to replace this chemical. ➢ Limiting conditions as mentioned above, suggest that there may be conditions under which this substances could still be imported, manufactured or used. Does this imply that there would be exemptions? This requires clarification by the government. 	<p>Rec.: Government should provide additional details as to what regulatory controls are being considered to achieve virtual elimination of the releases of DBTSBP to the environment.</p> <p>Rec.: We support a regulatory approach as noted previously that aims to prohibit the use, manufacture, sale, import, export, release and disposal of DTBSBP rather than to “limit conditions” under which DTBSBP may be imported, manufactured or used.</p> <p>Rec.: The government’s regulatory approach should also include a prohibition on export of the chemical or products that may contain this chemical-</p> <p>Rec: In the development of these regulatory measures, the government is urged not to grant exemptions to facilities or sectors.</p> <p>Rec.: The addition of DTBSBP to</p>

Specific sections of risk management scope for DTBSBP (CAS RN: 17540-75-9):	Summary of proposed government measures & other measures	CELA & CSM – Comments	Recommendations
	emergency.	<ul style="list-style-type: none"> • The proposal does not take into consideration a process for handling stockpiles of DTBSBP. This area also requires the government’s attention. The government approach, as noted previously, should address the full life cycle of the chemical. • If this substance is added to the Virtual Elimination List, addition to the Environmental Emergency Regulations is warranted. Apart from the possible presence of stockpiles of this substance, workplaces and communities should have adequate contingency plans in place should an accident occur. These plans should be transparent with workers and communities receiving the appropriate training in the event of an accident. 	<p>the Environmental Emergency Regulations is warranted. However, additional training and communication with workers and communities are required to understand contingency plans in the event of an accident.</p> <p>Rec.: Management measures should include destruction and management measures for potential stockpiles of this substance.</p>
Section 9.2 Other information gathering and research	<p>Monitoring through the Chemicals Management Plan:</p> <ul style="list-style-type: none"> • to collect and generate human health and environmental data to inform decision-making; • to identify the need for any further risk management measures; and • to measure the efficacy of preventive and mitigation actions for DTBSBP. • Further study is 	<ul style="list-style-type: none"> • There is agreement that a monitoring plan, as specified, would be beneficial in determining the effectiveness of the action plans that are prescribed for DTBSBP and thereby inform decision-makers as to the need for further risk management. This monitoring regime should include substantial focus on biomonitoring programs. • We do not see monitoring programs as a way to inform the government on what measures may be required to manage DTBSBP since we already have data to demonstrate its toxicity to the environment. Therefore, the development of the management regimes could be initiated without available monitoring data. • Given that the monitoring regimes are not yet developed or announced, there is significant concern regarding the frequency and location of monitoring. The monitoring regime should outline the timeframe and frequency of monitoring to be undertaken. Furthermore, the government should provide a roadmap on how the monitoring data will be released to the public and how the results will be used for policy development. • There is concern that the government will utilize the monitoring program 	<p>Rec.: We support a monitoring regime for DTBSBP with qualifications that monitoring should not stall the need to virtually eliminate this substance from all sectors – industrial and consumer.</p> <p>Rec.: The government should ensure that the monitoring regime is designed with explicit timeframes, locations, frequency of sampling and specify the environmental media that is under investigation.</p> <p>Recommendation: Some consideration should be given to vulnerable communities such as the Great Lakes ecosystem and</p>

Specific sections of risk management scope for DTBSBP (CAS RN: 17540-75-9):	Summary of proposed government measures & other measures	CELA & CSM – Comments	Recommendations
	<p>required regarding container handling, washing, reconditioning and recycling practices, collection rates and ultimate disposal methods of waste brake fluid, and the removal efficiency in hazardous waste facilities.</p> <ul style="list-style-type: none"> The above information will be used to inform the federal government on releases of DTBSBP to the environment, and guide further risk management if additional measures are deemed necessary. 	<p>to justify a regime that may include only control measures to reduce releases of DTBSBP and not aim for total elimination from manmade sources.</p> <ul style="list-style-type: none"> There is agreement that further study is warranted on container handling, washing, disposal of brake fluids etc. This effort should be part of a substantive approach that considers the role of Extended Producer Responsibility and consideration of a chemical throughout its life cycle. Again, without any suggestion as to the type of monitoring, frequency and location, it is not possible to provide any further comments on this proposed study. It would be appropriate if vulnerable ecosystems such as the Great Lakes Ecosystem and northern ecosystems be a focus for regular monitoring programs. Monitoring should be done in conjunction with the provincial governments as they will ultimately be responsible for monitoring the releases of DTBSBP. 	<p>arctic ecosystems for regular monitoring regimes.</p> <p>Rec.: Monitoring regimes should include biomonitoring programs as well.</p> <p>Rec.: With respect to container handling, recycling, disposal of brake fluid, the recommendation is as above but should be done in conjunction with provincial authorities.</p> <p>Rec.: Results from monitoring programs should be transparent and available to the public in a format that is easily understood.</p>

3.2 Propane, 2-nitro- (2-Nitropropane), Chemical Abstracts Service Registry Number 79-46-9

Background

The final screening assessment report for 2-nitropropane published in the *Canada Gazette*, Part I, for 2nitropropane on July 31, 2010, under subsection 77(6) of CEPA 1999, concluded that 2-nitropropane is entering or may be entering the environment in a quantity or a concentration or under conditions that constitute or may constitute a danger in Canada to human life or health. The final screening assessment report also concluded that 2-nitropropane meets the criteria for persistence but does not meet the criteria for bioaccumulation, as defined in the *Persistence and Bioaccumulation Regulations* made under CEPA 1999. Since the report concluded that 2-nitropropane does not meet the conditions set out in subsection 77(4) of CEPA 1999, the substance is not subject to the virtual elimination provisions under CEPA 1999 and therefore, will be managed using a life-cycle approach. The presence of 2-nitropropane in the environment results primarily from human activity.

Based principally on the weight-of-evidence assessments of International Agency for Research on Cancer, the European Commission and the U.S. National Toxicology Program, the critical effect for characterization of risk to human health for 2-nitropropane is carcinogenicity.

For the 2006 calendar year, no companies in Canada reported manufacturing 2-nitropropane in a quantity greater than or equal to the threshold of 100 kg, according to data submitted in response to section 71 of CEPA 1999. Information received from Canadian companies indicated that 100 -1000 kg of the substance were imported into Canada in 2006. The information also indicated that there is no domestic manufacture of 2-nitropropane and only small amounts (100–1000 kg) were imported for 2006. However, 2-nitropropane may be entering Canada in formulated products including inks, paints, adhesives, varnishes, polymers and synthetic materials which are not likely to be captured under section 71 reports.

No domestic releases were reported to the National Pollutant Release Inventory (NPRI) between 1997 and 2007. However, it is a high production volume chemical in the United States with extensive uses in the industrial/commercial sectors as well as consumer products.

With the government using a life cycle approach management for 2-nitropropane, the proposed risk management the substance is as follows:

(1) Implementation of Significant New Activity provisions under CEPA 1999

This requires that any proposed new manufacture, import or use be subject to further assessment, and would determine if the new activity requires further risk management consideration.

(2) Consideration of delisting 2-nitropropane from table XV, Division 16 (Food Additives) of the *Food and Drug Regulations*

This should result in the potential for exposure to the Canadian population not to substantially increase.

Comments on the Screening Assessment and Proposed Risk Management for 2-nitropropane

- 1) **Persistence** – There is a contradiction in the results for the persistence of 2-nitropropane presented in the screening assessment and risk management reports.⁹ The results for persistence should be presented consistently. In addition to this error, there are three issues that require clarification with respect to the approach by government to determine persistence of 2-nitropropane.

- a) The main receiving environmental compartment for the release of 2-nitropropane is air but whichever environmental media receives the release, that compartment results in the highest concentration of 2-nitropropane. Both empirical and modelled data were considered for determining the persistence of 2-nitropropane in all environmental compartments. While we acknowledge that the government applies a weight of evidence of approach to consider this data, the empirical data presented in the three studies examined for persistence presented data supporting persistence in air.

In the 1990 study, 2-nitropropane in air was determined to have a half life of 9.8 days. However, the assessors noted that the determination was likely based on the rate constants for reaction with chlorine atoms. The assessment did not present adequate justification if the rate constant to chlorine would have a significant impact on the half life. It is our view, that the photolysis data using chlorine atoms for the reaction mechanism would not likely represent the predominant reaction for the degradation of this substance in air. Furthermore, the assessment also pointed out that the substance is not likely to react with other photo-oxidative species in the atmosphere.

⁹ See: Environment Canada and Health Canada. Screening Assessment for the Challenge Propane, 2-nitro-(2-Nitropropane), Chemical Abstracts Service Registry Number 79-46-9. July 2010. pg. 11. Accessed at <http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/batch-lot-8/index-eng.php>.

Also see: Environment Canada and Health Canada. Proposed Risk Management Approach for Propane, 2-nitro-(2-Nitropropane), Chemical Abstracts Service Registry Number (CAS RN): 79-46-9. July 2010. p. 4

Photooxidation and photolysis as UV reactivity would appear to be the more realistic routes for degradation in air. Using modelled and empirical data, 2-nitropropane showed stability for photooxidation. However, the empirical data for photolysis (UV degradation) indicated a half-life just under 2 days (1.78 days) but there were no additional details to demonstrate why this 1987 study should be considered more appropriate nor why both processes – photooxidation and photolysis (UV) should not be considered together. For example, factors that may affect the half life of this chemical include seasonal changes, temperature and humidity. Also, it appears that the determination of a half life using a 24 hour degradation timeframe results in great uncertainty. The more favoured approach is to rely on data using longer timeframes that would more likely take into consideration more plausible variables when attempting to determine the half life of a chemical.

The assessment concluded that 2-nitropropane was not likely to persist in air. Taking into consideration the lack of similar empirical data or modelled data for the photolysis data (UV), the age of the data, and the lack of details of this 1987 empirical study upon which the decision for persistence for air was based, the government's decision that 2-nitropropane is not persistent in air cannot be accepted. Furthermore, with a half-life determined to be slightly less than 2 days and the above stated facts, the assessment should not have concluded with any confidence that 2-nitropropane is not persistence in air.

b) The screening assessment does not provide any conclusions on the long range transport of this chemical. However, it is noted in the Persistence and Bioaccumulation Regulations under CEPA, that a chemical is persistent in air if “it is subject to atmospheric transport from its source to a remote area.”¹⁰ While the regulation does not prescribe how atmospheric transport should be determined, the absence of this information in the screening assessment demonstrates a gap in the assessment approach. This information may have been helpful in making a more informed decision as to the persistence of 2-nitropropane in air.

c) The screening assessment and the risk management reports resulted in contradictory conclusions in the determination of persistence for 2-nitropropane.¹¹ In the risk management document, the chemical was considered persistent in the environment. If 2-nitropropane is actually persistent in the

¹⁰ See: Canada Gazette, Part II, Vol. 134, No. 7 — March 29, 2000 Registration, SOR/2000-107, 23 March, 2000, CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999. Persistence and Bioaccumulation Regulations. Accessed at <http://canadagazette.gc.ca/archives/p2/2000/2000-03-29/html/sor-dors107-eng.html>.

¹¹ See: *ibid*, pg. 11.

Also: Environment Canada and Health Canada. Proposed Risk Management Approach for Propane, 2-nitro-(2-Nitropropane), Chemical Abstracts Service Registry Number (CAS RN): 79-46-9. July 2010. pg. 4. Accessed at <http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/batch-lot-8/index-eng.php>.

environment, this conclusion is important in determining the management measures required for this chemical. With the toxicity under CEPA being based on the carcinogenicity of 2-nitropropane and the contradicting information presented on persistence, we urge the government to consider more stringent measures for 2-nitropropane.

2) Cosmetic and consumer products – The risk management document for 2-nitropropane indicated that this chemical is not currently listed under the Cosmetic Ingredient Hotlist. While no evidence has been presented to indicate that it is being used in cosmetic products in Canada, the conclusion of the assessment based on carcinogenicity should be taken into consideration with additional measures being recommended to prohibit the use of this chemical in cosmetics and personal care products. A commitment to prohibit the use of 2-nitropropane in cosmetic products would result in the prevention of future consideration of uses of this chemical. The European Commission lists 2-nitropropane under Annex II of the Cosmetic Ingredients and Substances List. This ensures that 2-nitropropane “must not form part of the composition of cosmetic products in the European Union.”¹²

Similarly, there are various information gaps on the use of 2-nitropropane in consumer products. Based on the risk management document for this chemical, it is suspected that 2-nitropropane may be entering Canada through various products such as inks, paints, adhesives, varnishes and other synthetic materials. It was noted in the risk management document that this level of detail was not available through the survey conducted during the Challenge on Batch 8 substances. The uncertainty or gaps in information on the use and presence of this chemical in products should be considered carefully. The government lacks the appropriate level of knowledge base on the uses of this chemical in consumer products. Therefore, we urge the government to improve the proposed management measures to prohibit the use of 2-nitropropane in consumer and cosmetic products.

3) Residual presence of 2-nitropropane – While the government has proposed to apply a SNAc provision to future activities for 2-nitropropane, SNAc will not restrict or manage present uses. Government has not committed to a reduction of 2-nitropropane in Canada. However, documentation of uses indicates that this chemical is used as an intermediate chemical in the synthesis of pharmaceutical ingredients. This may result in residual concentrations in pharmaceutical products. The use of 2-nitropropane as an intermediate chemical towards the production of pharmaceutical products should be avoided. Since toxicity was based on carcinogenicity, there should be a greater emphasis on measures that would prevent the use of this chemical for the pharmaceutical products, even as a residue. Government should include a substantial focus on alternatives of 2-nitropropane for use as an intermediate chemical, particularly in the pharmaceutical sector.

¹² Environment Canada and Health Canada. Screening Assessment for the Challenge Propane, 2-nitro-(2-Nitropropane), Chemical Abstracts Service Registry Number 79-46-9. July 2010. pg. 9-10. Accessed at <http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/batch-lot-8/index-eng.php>.

In general, the lack of management proposals for the present uses of 2-nitropropane is concerning regardless of the low quantity range of 2-nitropropane documented for 2006 (100-1000 kg). We urge the government to use these opportunities to reduce and phase out chemicals that have the potential for carcinogenicity and require more commitment to find and use safer alternatives.

4) Monitoring and reporting - The government's proposals did not include any improvements to monitoring programs for 2-nitropropane. Although NPRI requires reporting of releases and transfer data for 2-nitropropane, there has been no recent improvements to reporting on this chemical under the NPRI program, Canada's only mandatory program for reporting releases and transfer of specific pollutants required under CEPA 1999. Throughout the implementation of the CMP, NGOs have asked for the NPRI program to be expanded to include improved reporting mechanisms and the removal of the threshold for reporting of chemicals. It is relevant for Canadians to know the type of carcinogens that are presently in use in the country. It is also important to know their releases to the environment so as to determine whether management measures that are being taken are effectively achieving the desired objective. Therefore, it is important to require that all facilities producing, using or releasing this chemical or other CEPA toxic chemicals are tracked for releases and transfer of carcinogens. This will not occur unless significant improvements are made to the NPRI program.

Similarly, it was also noted that this chemical will be considered in the update to the Domestic Substances List. It would be essential that information on the presence and use of all chemicals in use in the Canadian market, particularly those targeted under the Chemicals Management Plan, be undertaken. Up to this point, only a selected set of chemicals, considered as medium priority chemicals have been targeted for an update under the DSL inventory update. Organizations such as ours, have urged the departments to expand this update to include all chemicals in the Canadian market. The results of this update should be made available to the public on an annual basis.

Recommendation: We support the screening assessment conclusion that 2-nitropropane is toxic under CEPA 1999.

Recommendation: We support the addition of 2-nitropropane to the Toxic Substances List (Schedule 1) of CEPA along with the other chemicals proposed for SNAc.

Recommendation: Please see Section 2 of this submission for comments and recommendations in regard to the SNAc provisions being recommended for 2-nitropropane and other substances listed in Batch 8. For 2-nitropropane, we urge the government to apply additional management measures beyond the use of SNAc.

Recommendation: Based on its carcinogenicity, we urge the government to develop management measures that result in the reduction or phase out of use, release, sale, import or export of 2-nitropropane in industrial and consumer applications.

Recommendation: We support the proposal of delisting 2-nitropropane from table XV, division 16 (food additives) of the *Food and Drug Regulations (Canada)*. It should be considered a prohibited substance for use as a food additive.

Recommendation: The government should prohibit the use of 2-nitropropane in cosmetic and consumer products.

Recommendation: The government should develop a list of safe alternatives for 2-nitropropane with specific emphasis on its use as an intermediate chemical for the production of pharmaceutical products. This should promote the prevention of residual concentration of 2-nitropropane in pharmaceuticals.

Recommendation: Additional monitoring for 2-nitropropane should be required. This would include improving reporting under NPRI such as removing reporting thresholds under NPRI for all CEPA toxic chemicals, such as 2-nitropropane. All facilities that release or transfer this chemical should report to NPRI.

Recommendation: 2-nitropropane should be included in an update of the DSL inventory update. This update should also include other chemicals in use in Canada.

4. CONCLUSION

The comments provided in this submission may have reiterated comments already provided in previous submissions. However, our organizations like other public interest organizations, seek to promote greater protection for the environment and human health. As such, we urge the government to ensure that reductions in toxic chemical usage as prescribed in the risk management documents can be tracked and measured with respect to their effectiveness.

However, through our submissions, we demonstrate the level of protection that we expect the government will strive to achieve through its management of toxic chemicals under the CMP. To date, the management measures have ranged from mandatory regulatory to non-regulatory approaches. We have provided substantial comments on these proposals throughout the CMP.

Chemicals under Batch 8 have included both regulatory and non-regulatory proposals. We expressed our support for virtual elimination of DTBSBP through a regulatory approach that aims to seek prohibition of this chemical rather than to develop "limit conditions". However, we have also expressed that the government's management

approach needs to provide increased consideration to ensure that measures deal with the life cycle, particularly the end of life issues specific to DTBSBP.

Our comments relating to the inadequacy of applying SNAc to six chemicals are on-going and consistent with the comments we have made throughout the CMP consultations. It is our view that the use of SNAc provisions does not provide the necessary protection for human health from toxic chemicals considered potential human carcinogens. If our recommendations are not taken, CEPA toxic chemicals, including 2-nitropropane, will be permitted in their current uses without any additional management measures to reduce the level of use. Based on comments to the SNAc proposals, we encourage the government to initiate a policy discussion on the use of SNAc for existing substances under the CMP and the role available to the public in the notification process prescribed under the New Substances Notification Regulation for SNAc.

We have provided several comments in response to the government's assessment approach, with particular comments on the determination of persistence to environment of 2-nitropropane and the absence of improvement to the monitoring and subsequent reporting of this chemical. These comments are intended to improve the government's efforts to protect Canadians and track the presence of these chemicals in Canada.

We hope that the comments provided in this submission are considered carefully and result in amendments to the current proposals to ensure that health and environment are protected from impacts from toxic chemicals.

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