



April 15, 2014

Office of the Auditor General of Canada  
Commissioner of the Environment and Sustainable Development  
240 Sparks Street  
Ottawa, Ontario  
K1A 0G6  
**Via email to: [petitions@oag-bvg.gc.ca](mailto:petitions@oag-bvg.gc.ca)**

Attention: Petitions

Dear Commissioner:

***Re: Petition to the Office of the Auditor General – Implementation of CEPA 1999, section 75(3) and EU REACH***

Ecojustice and the Canadian Environmental Law Association request information regarding Canada's implementation of section 75 of the *Canadian Environmental Protection Act, 1999*, SC 1999, c 33 ("CEPA 1999"). As you are aware, this provision is integral to the effective functioning of CEPA 1999 so as to realize the Act's purposes of protecting the environment and human health from the impacts of toxic substances.

Therefore, we request the response of Environment Canada, Health Canada and any other relevant departments to the questions posed below.

## Background

Under subsection 75(2) of the CEPA 1999, the Ministers of Health and the Environment (the "Ministers") are required to cooperate and develop procedures with other jurisdictions to exchange information regarding substances that are specifically prohibited or substantially restricted for environmental or health reasons.

*The Minister shall, to the extent possible, cooperate and develop procedures with jurisdictions, other than the Government of Canada, to exchange information respecting substances that are specifically prohibited or substantially restricted by or under the legislation of those jurisdictions for environmental or health reasons.*

Environment Canada, Health Canada and the European Chemicals Agency ("ECHA") have signed a Memorandum of Understanding ("MOU")<sup>1</sup> regarding scientific collaboration and information exchange

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<sup>1</sup> Memorandum of Understanding between the European Chemicals Agency and Environment Canada/Health Canada. May 21 2010. Available at <[http://echa.europa.eu/documents/10162/13558/mou\\_ca\\_echa\\_ec\\_hc\\_en.pdf](http://echa.europa.eu/documents/10162/13558/mou_ca_echa_ec_hc_en.pdf)> additional information on cooperation between the EU and Canada is found here <[http://newsletter.echa.europa.eu/home/-/newsletter/entry/2\\_13\\_cooperation\\_usa\\_canada](http://newsletter.echa.europa.eu/home/-/newsletter/entry/2_13_cooperation_usa_canada)>. Both accessed on March 28, 2014.

on the hazards and risk assessments of chemical substances, including communications on activities and emerging risks pertaining to chemicals. It is our understanding that the MOU between Environment Canada, Health Canada and ECHA sets the groundwork for cooperation with the European Union (the “EU”) as envisioned under s. 75(2) of *CEPA 1999*.

Under subsection 75(3) of *CEPA 1999* the Ministers are required to review decisions from other jurisdictions to prohibit or substantially restrict a substance to determine whether the substance is toxic or capable of becoming toxic, as defined under *CEPA 1999*, unless the only use of the substance in Canada is regulated under another Act that provides health and environmental protection:

*Where the Minister is notified in accordance with procedures developed under subsection (2) of a decision to specifically prohibit or substantially restrict any substance by or under the legislation of another jurisdiction for environmental or health reasons, the Ministers shall review the decision in order to determine whether the substance is toxic or capable of becoming toxic, unless the decision relates to a substance the only use of which in Canada is regulated under another Act of Parliament that provides for environmental and health protection.*

“Another jurisdiction” is defined in clause 75(1)(b) of *CEPA 1999* as a foreign state or subdivision of a foreign state that is a member of the Organization for Economic Cooperation and Development (“OECD”). Several member countries of the EU are members of the OECD.<sup>2</sup>

## Authorizations under REACH

The EU, under the Registration, Evaluation, Authorisation and Restriction of Chemicals (“REACH”) Regulations (EC Regulation No 1907/2006 as amended), banned 22 substances due to environmental or health concerns. The substances are banned under REACH by addition to Annex XIV, also called the Authorization List.<sup>3</sup> The sunset dates for these substances range between August 2014 and September 2017.

When a substance is assessed under *CEPA 1999* as toxic or capable of being toxic it is generally added to Schedule 1 which is the List of Toxic Substances. Of the 22 substances banned so far under REACH, six are not considered toxic under *CEPA 1999*, as summarized in the Table 1 below.

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<sup>2</sup> Although the European Union (EU) is not a member of the OECD, and could not be because it is not a country, several of its Member States are members of the OECD (ex. Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden and United Kingdom). Where the EU adopts a Regulation, the Regulation is legally binding on all of its Member States. It also takes precedence over national law where there is a conflict.

<sup>3</sup> Commission Regulation No 143/2011 amended Annex XIV adding the first six substances in February 2011. Commission Regulation No 125/2012 added an additional eight substances to Annex XIV in February 2012. Commission Regulation No. 348/2013 added an additional eight substances to Annex XIV in April 2013. EC Regulation No 1907/2006 and amendments are available here <<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02006R1907-20130701&qid=1395826642786>> Accessed on April 2, 2014. A full list of the substances on the Authorization list is available at <<http://echa.europa.eu/web/guest/addressing-chemicals-of-concern/authorisation/recommendation-for-inclusion-in-the-authorisation-list/authorisation-list>> Accessed on April 2, 2014.

Table 1

Substance on REACH Authorization list	CEPA 1999 Schedule 1
4,4'-Diaminodiphenylmethane (MDA)	No
5-tert-butyl-2,4,6- trinitro-m-xylene (Musk xylene)	No
Hexabromocyclododecane (HBCDD)	Yes
Bis(2-ethylhexyl) phthalate (DEHP)	Yes
Benzyl butyl phthalate (BBP)	No
Dibutyl phthalate (DBP)	No
Diisobutyl phthalate (DIBP)	No
Diarsenic trioxide	Yes
Diarsenic pentaoxide	Yes
Lead chromate	Yes
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	Yes
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	Yes
Tris (2-chloroethyl) phosphate (TCEP)	Yes
2,4-Dinitrotoluene (2,4-DNT)	No
Several chromium VI compounds:	Yes <sup>4</sup>
Ammonium dichromate	-
Potassium chromate	-
Acids generated from chromium trioxide and their oligomers group containing: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid	-
Chromium trioxide	-
Potassium chromate	-
Sodium dichromate	-
Sodium chromate	-
Trichlorethylene	Yes

Given the MOU with ECHA, the Ministers ought to have been informed and aware of the bans under REACH. The following provides a summary of the six substances banned under REACH that are not listed in Schedule 1, the List of Toxic Substances, including the reasons for the ban in the EU and their regulatory status in Canada.

The summary, in addition to the reason for the EU ban and the general use of the substance, examines the status of the substances with respect to the following questions:

- Is it on the Domestic Substance List (“DSL”) list?
- If on the DSL, was it found to meet DSL categorization criteria for assessment?<sup>5</sup>

<sup>4</sup> CEPA 1999, Schedule 1 includes “Hexavalent chromium compounds” which should encompass the seven chromium compound added to the REACH Authorization list

<sup>5</sup> See, CEPA 1999 section 73 (1), which states:

*The Ministers shall, within seven years from the giving of Royal Assent to this Act, categorize the substances that are on the Domestic Substances List by virtue of section 66, for the purpose of identifying the substances on the List that, in their opinion and on the basis of available information, (a) may present, to individuals in Canada, the greatest potential for exposure; or*

- Is it regulated under CEPA 1999 or any other relevant act such as the as the *Canada Consumer Product Safety Act* (“CCPSA”)?
- Have there been any previous assessments or are there any future planned assessments?
- Is it a reportable substance under the National Pollutant Release Inventory (“NPRI”), if so what are the recently reported releases, disposals and recycling?

### 1. 5-tert-butyl-2,4,6- trinitro-m-xylene (Musk xylene)

CAS No. 81-15-2

Musk xylene is used as a synthetic fragrant musk in household products such as detergents, fabric softeners, air fresheners and cosmetics and personal care products.<sup>6</sup> Musk xylene is scheduled to be totally banned in the EU under REACH as of July 21, 2014 because it was found to be very persistent and very bioaccumulative.<sup>7</sup>

Musk xylene is a domestic substance and is considered a remaining priority according to the status of prioritized substances under the Chemicals Management Plan (“CMP”), however there is no indication of when an assessment will be conducted.<sup>8</sup>

Musk xylene has been detected in sewage sludge in Canada, as well as in the surface water of the Great Lakes indicating its likely presence in consumer products in Canada.<sup>9</sup> It is not a reportable substance under the NPRI.

Table 2

Summary of actions under Canadian federal law and policy	
On Domestic Substance List	Yes
Met Categorization Criteria	No, but flagged as human health priority
CEPA toxic (CEPA 1999, Schedule 1)	No
Other Restrictions or Regulations	None that can be found
Previous Assessments	None
Future Assessments	None
NPRI Reportable Substance	No

*(b) are persistent or bioaccumulative in accordance with the regulations, and inherently toxic to human beings or to non-human organisms, as determined by laboratory or other studies.*

<sup>6</sup> ECHA. Background document for 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene). June 2009. Available at <<http://echa.europa.eu/documents/10162/f093e074-1fdc-4d00-af61-f644d2293d4f>> Accessed on April 2, 2014

<sup>7</sup> Paragraph 3 of Commission Regulation (EU) No 143/2011. Available at < <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:044:0002:0006:en:PDF>> Accessed on April 2, 2014

<sup>8</sup>Status of Prioritized Substances. Available at <<http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=7CCD1F11-1>> Accessed on April 2, 2014

<sup>9</sup> Otker M., Biswas N., and Jasin S. “Chemicals of Emerging Concern in the Great Lakes Region” (no date) pages 58 to 60. Available at <<http://www.ijc.org/php/publications/pdf/ID696.pdf>> Accessed on April 2 2014.

## 2 4,4'-Diaminodiphenylmethane (MDA)

CAS No. 101-77-9

MDA is used for making polyurethane foam and as a hardening agent in epoxy resins and adhesives. MDA is scheduled to be banned in the EU under REACH as of July 21, 2014 because it was found to be carcinogenic.<sup>10</sup> Use is unknown in Canada but, under the CMP, information on use was collected from industry by Environment Canada in late 2012 pursuant to a *CEPA 1999* section 71 order<sup>11</sup> and is being considered for inclusion in the MDI/MDA substance grouping initiative under the CMP.<sup>12</sup>

Table 3

Summary of actions under Canadian federal law and policy	
On Domestic Substance List	Yes
Met Categorization Criteria	No
<i>CEPA</i> toxic ( <i>CEPA 1999</i> , Schedule 1)	No
Other Restrictions or Regulations	None that can be found
Previous Assessments	None
Future Planned Assessments	Is being considered for inclusion in the MDI/MDA substance group assessment under CMP
NPRI Reported Substance	Yes, but no releases reported to NPRI in 2010 or 2011

## 3 Benzyl butyl phthalate (BBP)

CAS No. 85-68-7

BBP is used as a plasticizer for the manufacturing of polyvinylchloride (PVC) plastic. BBP will be banned in the EU under REACH as of January 21, 2015<sup>13</sup> due to concerns regarding reproductive toxicity.<sup>14</sup>

BBP is not considered toxic in Canada under *CEPA 1999*, although it was assessed in the year 2000 under *CEPA 1988*.<sup>15</sup> However that assessment, in addition to not being conducted under *CEPA 1999*, predates the EU REACH regulation and subsequent EU ban on BBP. BBP is listed as a remaining priority according to the status of prioritized substances under the CMP, however there is no indication of when an assessment will be conducted.

<sup>10</sup> Paragraph 4 of Commission Regulation (EU) No 143/2011, *supra note 6*

<sup>11</sup> Department of the Environment. *CEPA 1999*. Notice with respect to certain methylenediphenyl diisocyanate and diamine, and phenol, methyl- substances. Available at <<http://www.gazette.gc.ca/rp-pr/p1/2012/2012-06-16/html/notice-avis-eng.html#d101>> Accessed on April 2, 2014.

<sup>12</sup> Government of Canada. Chemical Substances. Profile for the Methylenediphenyl Diisocyanate and Diamine (MDI/MDA) Substance Grouping. Available at <http://www.chemicalsubstanceschimiques.gc.ca/group/diisocyanates/profil-eng.php> Accessed on April 2, 2014.

<sup>13</sup> With a few minor exceptions for medicinal packaging intermediates.

<sup>14</sup> Paragraph 8 of Commission Regulation (EU) No 143/2011, *supra note 6*

<sup>15</sup> For information on the past assessment refer to this web site <<http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=56FEDE7B-1>> Accessed on April 2, 2014.

BBP has been restricted in vinyl toys and childcare articles under the *Phthalates Regulations* of the *CCPSA* since June 2011,<sup>16</sup> and is regulated under *CEPA 1999* with respect to hazardous waste import and export.<sup>17</sup> Based on the NPRI data, BBP is being used in Canada by a wide range of companies including manufacturers of paints, cars, rubber and plastics demonstrating that the existing *CCPSA* regulation limiting its presence in toys and children’s articles does not cover all uses and it is likely present in other types of consumer products. BBP has not been included in the phthalates substance group initiative under the CMP.<sup>18</sup>

Table 4

Summary of actions under Canadian federal law and policy	
On Domestic Substance List	Yes
Met Categorization Criteria	Yes, for environmental criteria <sup>19</sup>
<i>CEPA</i> toxic ( <i>CEPA 1999</i> , Schedule 1)	No
Other Restrictions or Regulations	Restricted in toys and children’s articles under the <i>CCPSA</i> since 2011  Regulated under <i>CEPA 1999</i> in waste exports and imports
Previous Assessments	PSL1 assessment completed in 2000 found it to not be toxic under <i>CEPA 1988</i> s. 11
Future Planned Assessments	Not included in phthalates group assessment under CMP
NPRI Reported Substance	Yes, 12 facilities in Canada reported on the use, release and recycling of BBP in 2010. A total of 413 kilograms of BBP was released, 1.5 tonnes was disposed and 3.8 tonnes was recycled in 2010 by facilities reporting to the NPRI.  11 facilities in Canada reported on the use, release and recycling of BBP in 2011. A total of 259 kilograms of BBP was released, 3.1 tonnes was disposed and 5.6 tonnes was recycled in 2011 by facilities reporting to the NPRI.

<sup>16</sup> Section 3 of the Phthalates Regulations, SOR/2010-298. Limits BBP to 1000 mg/kg. s 3. The vinyl in a toy or child care article must contain not more than 1 000 mg/kg of di(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP) or benzyl butyl phthalate (BBP) when tested in accordance with a method that conforms to good laboratory practices. Available at <<http://laws-lois.justice.gc.ca/PDF/SOR-2010-298.pdf>> Accessed April 2, 2014.

<sup>17</sup> *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations*, SOR/2005-149, Schedule 7, Part 2, No 238 <<http://laws-lois.justice.gc.ca/eng/regulations/SOR-2005-149/>> Accessed on April 2, 2014.

<sup>18</sup> Phthalates Substance Grouping. <<http://www.chemicalsubstanceschimiques.gc.ca/group/phthalate/index-eng.php>> Accessed on April 4, 2014.

<sup>19</sup> As bioaccumulative and inherently toxic to aquatic organisms.

#### 4 Dibutyl phthalate (DBP)

CAS No. 84-74-2

DBP is scheduled to be banned (with few exceptions for packaging of medicinal products) in the EU under REACH as of January 21, 2015 because it is considered a reproductive toxicant.<sup>20</sup>

DBP has been restricted in vinyl toys and child care articles under the *CCPSA* since June 2011.<sup>21</sup> As demonstrated by the NPRI data, companies in Canada that manufacture paints and chemicals report releases of DBP indicating that the existing *CCPSA* regulation restricting its use in toys and children's articles does not cover all uses, and it is likely present in other types of consumer products.

DBP has been historically detected in the atmosphere over the Great Lakes basin.<sup>22</sup>

Table 5

Summary of actions under Canadian federal law and policy	
On Domestic Substance List	Yes
Met Categorization Criteria	No, but inherently toxic to aquatic organisms
CEPA toxic (CEPA 1999, Schedule 1)	No
Other Restrictions or Regulations	Restricted in toys and children's articles under the <i>CCPSA</i> since 2011
Previous Assessments	PSL1 assessment completed in 1994 found it to not be toxic under old <i>CEPA 1988</i> s. 11
Future Planned Assessments	Not included in phthalates group assessment under CMP
NPRI Reported Substance	Yes, 15 facilities in Canada reported on the use, release and recycling of in 2010. Total of 1.1 tonnes releases, 82 tonnes disposal and 29 tonnes recycled by facilities reporting to the NPRI.  In 2011, 13 facilities in Canada reported on the use, release and recycling of DBP in 2011 to the NPRI. A total of 910 kilograms of DBP was released, 91 tonnes was disposed and 4 kg was recycled by facilities reporting to the NPRI.

<sup>20</sup> See paragraphs 9 of Commission Regulation (EU) No 143/2011, *supra note 6*

Commission Regulation (EU) No 143/2011 <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:044:0002:0006:en:PDF>> Accessed on April 4, 2014.

<sup>21</sup> *Phthalates Regulations*, SOR/2010-298, *supra note 15*

<sup>22</sup> TOXNET. Dibutyl phthalate. Available at <<http://toxnet.nlm.nih.gov/cgi-bin/sis/search/a?dbs+hsdb:@term+@DOCNO+922>> Accessed on March 28, 2014.

## 5 Diisobutyl phthalate (DIBP)

CAS No. 84-69-5

DIBP is plasticizer used in nail polish, lacquer and other products. DIBP is scheduled to be banned in Europe under REACH as of February 21, 2015 because it is considered toxic to reproduction.<sup>23</sup> It is not considered toxic under *CEPA 1999* nor has it been assessed. It has been flagged for assessment under the phthalates grouping of the CMP. It is not a reportable substance under the NPRI so there is no public information on Canadian uses and releases.

Table 6

Summary of actions under Canadian federal law and policy	
On Domestic Substance List	Yes
Met Categorization Criteria	No, but found to be inherently toxic to fish
<i>CEPA</i> toxic ( <i>CEPA 1999</i> , Schedule 1)	No
Other Restrictions or Regulations	No
Previous Assessments	No
Future Planned Assessments	Is being included in phthalates group assessment under CMP
NPRI Reported Substance	No

## 6 2,4-Dinitrotoluene (2,4-DNT)

CAS No. 121-14-2

2,4 - DNT is used in the production of 'CEPA-toxic' toluene diisocyanate, which is used to produce flexible polyurethane foams. 2,4 - DNT is scheduled to be banned in Europe under REACH as of August 21, 2015 because it is considered carcinogenic.<sup>24</sup>

2,4 - DNT has not been assessed under *CEPA 1999*. 2,4 - DNT is listed as a remaining priority according to the status of prioritized substances under the CMP, however there is no indication of when or even if an assessment will be conducted of 2,4 - DNT. 2,4 - DNT is a reportable substance under the NPRI but there are no reported releases or uses that meet the NPRI thresholds for reporting.

Table 7

Summary of actions under Canadian federal law and policy	
On Domestic Substance List	No
Met Categorization Criteria	No, but inherently toxic to aquatic organisms
<i>CEPA</i> toxic ( <i>CEPA 1999</i> , Schedule 1)	No
Other Restrictions or Regulations	<i>Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations, SOR/2005-149, Schedule 7, Part 2, No 67</i>
Previous Assessments	No
Future Planned Assessments	No
NPRI Reported Substance	Yes, but no releases reported

<sup>23</sup>Paragraph 2 of Commission Regulation (EU) No 125/2012. Available at < <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:041:0001:0004:en:PDF>> Accessed on April 2, 2014

<sup>24</sup> Paragraph 9 of Commission Regulation (EU) No 125/2012, *ibid*



## Questions Pertaining to each of the above Six Substances Banned in the EU under the REACH Regulations but not listed in Schedule 1 of CEPA 1999

1. *Given that the EU banned the six substances above for health or environmental reasons under the REACH Regulations, and these substances are not listed on Schedule 1 of CEPA 1999, when will the Ministers fulfill their duty under section 75(3) of CEPA 1999 and review the decisions of the EU and make a determination under section 64 as to whether these substances are toxic or capable of becoming toxic?*
2. *If such reviews have been conducted, will the Ministers provide us with copies of the reviews and their determinations under CEPA 1999 section 64?*
3. *If such reviews have not yet been completed, without upholding the responses to the other questions in this petition, will the Ministers provide us with copies of the reviews and their determinations under CEPA 1999 section 64 when completed?*

## Restrictions under REACH

In addition to complete prohibitions, the REACH Regulations include 63 restrictions which restrict the manufacture, placing on the market, or use of certain substances, or substance groups, that pose an unacceptable risk to human health and the environment.

Substances or substance groups are restricted under REACH by addition to Annex XVII, which lists each substance, or substance group, and the conditions of the restriction.<sup>25</sup> Several of the restricted substances are listed on Schedule 1 of *CEPA 1999*, or are restricted under other Acts in Canada, however many are not.

Some restricted substances groups under REACH are very broad and draw from lists of substances in other EU regulations or directives such as substances classified as mutagens, carcinogens and toxic to reproduction,<sup>26</sup> or liquid substances or mixtures which are regarded as dangerous.<sup>27</sup>

Some restrictions may not be considered 'substantial' and thus may not need to be reviewed.<sup>28</sup> In addition, some of the substances that are restricted in the EU under REACH are undergoing a review in Canada through the CMP and thus will not be highlighted in this submission as we expect that those assessments under the CMP will include reviews of the EU decisions.<sup>29</sup>

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<sup>25</sup>Regulation (EC) No 1907/2006 and amendments are available here (REACH Regulation). See Restrictions in Annex XVII <[http://ec.europa.eu/enterprise/sectors/chemicals/documents/reach/index\\_en.htm#h2-1](http://ec.europa.eu/enterprise/sectors/chemicals/documents/reach/index_en.htm#h2-1)> Accessed on April 4, 2014.

<sup>26</sup> Items number 28, 29 and 30 of Annex XVII of REACH Regulation refers to classified substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008.

<sup>27</sup> Item 3 of Annex XVII of REACH Regulation refers to liquid substances or mixtures regarded as dangerous and refers to Directive 1999/45/EC and Annex I of Regulation (EC) No 1272/2008.

<sup>28</sup> Item 57 of Annex XVII OF REACH Regulation is Cyclohexane which is banned from use in contact adhesive.

<sup>29</sup> For example restricted substances are being assessed under the Azocolourants and Azodyes, the Methylenediphenyl Diisocyanate and Diamine (MDI/MDA), and the Phthalates CMP substances grouping initiatives.

Given the complexity of the restrictions under REACH it is difficult to determine the status of all of the restricted substances or substance groups in Canada, as was done above for the REACH Authorization List. However, our review did identify several substantially restricted substances in the EU under REACH that are not on the *CEPA 1999* List of Toxic Substances (Schedule 1), are not regulated under other federal legislation for all uses, have not been assessed under *CEPA 1999* nor scheduled to be assessed under the CMP, and may be present in Canada.

The following section summarizes those substances, but it must not be taken as a comprehensive list.

#### Tris(aziridinyl)phosphinoxide

CAS No. 545-55-1

Used as a flame retardant in plastics and textiles, it was banned in Europe in 1983 as a dangerous substance from use in textiles.<sup>30</sup> That ban was later incorporated into the REACH Regulation as a restriction on use in textile articles, such as garments, undergarments and linen, intended to come into contact with the skin (entry 7).<sup>31</sup> Tris(aziridinyl)phosphinoxide is not on the DSL but it may be present in consumer products imported into Canada. There are no restrictions on its use in Canada.

#### 2-Naphthylamine (CAS No. 91-59-8), 4-Nitrobiphenyl (CAS No. 92-93-3) and 4-Aminobiphenyl xenylamine (CAS No. 92-67-1)

A 1989 Council Directive determined that these three substances (2-Naphthylamine, 4-Nitrobiphenyl and 4-Aminobiphenyl xenylamine) cause cancer, and in particular cancer of the urinary system, leading to severe restrictions on their use.<sup>32</sup>

2-Naphthylamine is used to make azo dyes, it is also used in the rubber industry but is severely restricted in the EU in 2009. Under REACH, Naphthylamine shall not be placed on the market, or used, as substances or in mixtures in concentrations greater than 0.1 % by weight (item 12 of Annex XVII).<sup>33</sup> 2-Naphthylamine is on the DSL indicating that it is in the Canadian market.

4-Nitrobiphenyl was used as a chemical intermediate, but was severely restricted under REACH in 2009 such that 4-Nitrobiphenyl shall not be placed on the market, or used, as substances or in mixtures in concentrations greater than 0.1 % by weight (item 14 of Annex XVII).<sup>34</sup> 4-Nitrobiphenyl is not on the DSL so may not be present in Canada.

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<sup>30</sup> Council Directive 83/264/EEC of 16 May 1983 amending for the fourth time Directive 76/769/EEC on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations. Available at <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31983L0264:EN:HTML>> Accessed on April 2, 2014.

<sup>31</sup>Annex XVII Item 7 of the REACH Regulation (Regulation (EC) No 1907/2006).

<sup>32</sup>Council Directive 89/677/EEC of 21 December 1989 amending for the eighth time Directive 76/769/EEC on the approximation of the laws, regulations and administrative provisions of the member states relating to restrictions on the marketing and use of certain dangerous substances and preparations. <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31989L0677:EN:HTML>> Accessed on April 2, 2014.

<sup>33</sup> See Paragraph 9 of Commission Regulation No 522/2009 amending Regulation No 1907/2006. Available at <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:164:0007:0031:EN:PDF>> Accessed on April 2, 2014.

<sup>34</sup> Commission Regulation (EC) No 552/2009 of 22 June 2009 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards Annex XVI. <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:164:0007:0031:en:PDF>> Accessed on April 2, 2014.

4-Aminobiphenyl is used in the manufacturing of dyes and is severely restricted under REACH in 2009 such that in EU countries 4-Aminobiphenyl xenylamine shall not be placed on the market, or used, as substances or in mixtures in concentrations greater than 0.1 % by weight (item 15 of Annex XVII).<sup>35</sup> 4-Aminobiphenyl xenylamine is on the non-domestic substance list indicating it is believed to be in international commerce and therefore it may be present in consumer products imported into Canada.

#### Organostannic compounds and Di- $\mu$ -oxo-di-n-butylstanniohydroxyborane/Dibutyltin hydrogen borate or DBB (CAS No. 75113-37-0)

A regulation adopted in 2010 modifies REACH adding restrictions on organostannic compounds and dibutyltin hydrogen borate (Items 20 and 21 of Annex XVII, respectively) because of human health concerns including reproductive toxicity.<sup>36</sup> These substances were restricted under early legislation. Although tributyltins and tetrabutyltins substances are listed as toxic substances (Schedule 1) under *CEPA 1999*, dibutyltin compounds and dibutyltin hydrogen borate are not listed as toxic. In the EU, dibutyltin compounds and dibutyltin hydrogen borate could not be used in mixtures or articles in concentrations greater than 0.1 % by weight of tin after January 1, 2012 with a few exemptions for dibutyltin compounds being phased out later in January 2015.<sup>37</sup>

#### Cadmium

CAS No. 7440-43-9

The EU restricted the use of cadmium in synthetic materials<sup>38</sup> which was later expanded under REACH to include plastics (Item 23 of Annex XVII) because it is carcinogenic and toxic to aquatic life.<sup>39</sup> Only inorganic cadmium is listed under Schedule 1 of *CEPA 1999* as a toxic substance. Canada regulates cadmium under several acts including under the *Fisheries Act* as a component of mine effluent<sup>40</sup>, under *CEPA 1999* as a component of hazardous waste leachate<sup>41</sup> and cadmium is also restricted under the *CCPSA* in ceramics and glassware,<sup>42</sup> and as a surface coating on toys,<sup>43</sup> cribs, cradles and bassinets.<sup>44</sup> However none of these regulations appear to restrict the use of cadmium as it has been restricted under REACH. The restrictions under REACH appear in part to relate to organic cadmium substances used as stabilizers in plastics. In addition, cadmium is reportable under the NPRI but the form of cadmium is not reported, and although over 300 facilities reported cadmium releases in 2011, it is not known if these releases include organic cadmium substances.

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<sup>35</sup> *ibid*

<sup>36</sup> Paragraphs 4 and 5 of Commission Decision of 28 May 2009 amending Council Directive 76/769/EEC as regards restrictions on the marketing and use of organostannic compounds for the purpose of adapting its Annex I to technical progress. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:138:0011:0013:en:PDF> Accessed on April 2, 2014.

<sup>37</sup> Commission Regulation (EU) 276/2010 adopted on 31 March 2010 amended Annex XVII of REACH in order to include the last restrictions adopted in 2009 under Directive 76/769/EEC (entry 20). <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:086:0007:0012:EN:PDF>> Accessed on April 2, 2014.

<sup>38</sup> Commission Regulation (EU) No 494/2011 <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:134:0002:0005:EN:PDF>> Accessed on April 4, 2014.

<sup>39</sup> Paragraph 3 of Commission Regulation (EU) No 835/2012 <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:252:0001:0003:EN:PDF>> Accessed on April 4, 2014.

<sup>40</sup> Cadmium must be monitored in mine effluent under section 4 of Metal Mining Effluent Regulations (SOR/2002-222) under the *Fisheries Act* (R.S.C., 1985, c. F-14).

<sup>41</sup> Schedule 6 of the Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations, SOR/2005-149

<sup>42</sup> Section 4 of the Glazed Ceramics and Glassware Regulations SOR/98-176

<sup>43</sup> Section 23 of the Toys Regulations, SOR/2011-17

<sup>44</sup> Section 14 of the Cribs, Cradles and Bassinets Regulations SOR/2010-261

## Chloroform

CAS No. 67-66-3

Since 1996 Europe has restricted chloroform due to its toxicity such that it shall not be placed onto the market as a substance or constitutes more than 0.1% of other substances or mixtures.<sup>45</sup> This restriction was later incorporated into REACH (Item 32 in Annex XVII). Chloroform is used in the pharmaceutical industry and in the production of dyes and pesticides.<sup>46</sup> Chloroform is on the DSL and a remaining priority under the CMP. Chloroform was released by nine facilities in Canada in 2011 according to the NPRI. Chloroform is prohibited in cosmetics in Canada,<sup>47</sup> and is regulated in hazardous waste and in the context of environmental emergencies under *CEPA 1999*.<sup>48</sup> Chloroform is also a by-product of drinking water chlorination and pulp and paper bleaching. Chloroform was assessed by Health Canada and Environment Canada in 2001 and found to be non-toxic.<sup>49</sup> Chloroform is also detected in the Great Lakes.<sup>50</sup> It can also form in water as a result of the release of substances such as triclosan, widely used in personal care products and textiles due to its antimicrobial properties, to surface water and reacts with sunlight in water.<sup>51</sup>

[1,1,2-Trichloroethane](#) (CAS No. 79-00-5), [1,1,2,2-Tetrachloroethane](#) (CAS No. 79-34-5) and [1,1,1,2-Tetrachloroethane](#) (CAS No. 630-20-6)

These three substances are used as solvents but were restricted in the Europe under a 1976 Council Directive for use in substances and preparations placed on the market for sale to the general public<sup>52</sup> but that restriction was replaced by a restriction under the REACH Regulation (Items 34 to 36 in Annex XVII). All three substances are on the DSL but are not listed as toxic under Schedule 1 of *CEPA 1999*, although 1,1,2-Trichloroethane is subject to a significant new activity notice<sup>53</sup> and its isomer 1,1,1-Trichloroethane is listed as toxic under *CEPA 1999* Schedule 1. 1,1,2-Trichloroethane and 1,1,1,2-

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<sup>45</sup> Council Directive 94/60/EC of 20 December 1994. <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1994:365:0001:0009:EN:PDF>> Accessed on April 4, 2014.

<sup>46</sup> Paragraph 4 of Commission Regulation (EU) No 276/2010 of 31 March 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards Annex XVII (dichloromethane, lamp oils and grill lighter fluids and organostannic compounds). Available at <[http://echa.europa.eu/documents/10162/13630/trd\\_rar\\_env\\_france\\_chloroform\\_en.pdf](http://echa.europa.eu/documents/10162/13630/trd_rar_env_france_chloroform_en.pdf)> Accessed on April 2 2014.

<sup>47</sup> Section 15 of *Cosmetic Regulations* (CRC, c 869). "No manufacturer or importer shall sell a cosmetic that contains (a) chloroform as an ingredient".

<sup>48</sup> Schedule 6, No 19 of *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations*, SOR/2005-149; Schedule 7, Part 2, No 218 of *Hazardous Recyclables Material Regulations*, SOR/2005-149; and Schedule 1, Part 1, *Environmental Emergency Regulations*, SOR/2003-307.

<sup>49</sup> PSL2 assessment report released by the Ministers of Health and Environment in 2001. Available at <<http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=64BFC66F-1>>.

<sup>50</sup> Groundwater in the Great Lakes Basin. A Report to the International Joint Commission from the IJC Great Lakes Science Advisory Board. February 2010. P. 85. Available at <<http://www.ijc.org/files/publications/E43.pdf>> Accessed on April 4, 2014.

<sup>51</sup> *Ibid*, page 67

<sup>52</sup> See items 35 to 37. Council Directive of 27 July 1976 on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations (76/769/EEC). Available at < <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1976L0769:20081211:EN:PDF>> Accessed On April 4, 2014.

<sup>53</sup> *Canada Gazette*. Part 1. Vol. 147, No. 21. Available at < <http://gazette.gc.ca/rp-pr/p1/2013/2013-05-25/html/notice-avis-eng.html#d108>> Accessed on April 4, 2014.

Tetrachloroethane are reportable substances under the NPRI. Two facilities reported releases and disposal of 1,1,2-Trichloroethane in 2011 and one reported disposal of 1,1,1,2-Tetrachloroethane.

### 1,1 - Dichloroethane

CAS No. 75-35-4

1,1 Dichloroethane is listed on the DSL and remains a priority according to the status of prioritized substances under the CMP. Under REACH, 1,1 Dichloroethane is banned for use in substances and preparations placed on the market for sale to the general public (Item number 38 in Annex XVII).<sup>54</sup> It is listed under the NPRI but no releases that meet the NRPI thresholds were reported in 2011 or 2010 however that does not mean it is not present in consumer products in Canada. Data show that this substance is released into the atmosphere of the Great Lakes basin.<sup>55</sup>

### Trichlorobenzene

CAS No. 120-82-1

Trichlorobenzene was assessed under Priority Substance List 1 program in 1993, and assessed again for one aspect of toxicity in 2003 but was found to be non-toxic.<sup>56</sup> It is a remaining priority according to the status of prioritized substances under the CMP. Trichlorobenzene has since been restricted under REACH in Europe for health and environmental reasons for use in substances or mixtures in concentrations equal to or greater than 0.1% with a few exceptions. Initially, it was restricted in 2005<sup>57</sup> and that restriction appears to have been replaced by the REACH restriction (Item 49 under Annex XVII). Trichlorobenzene is on the DSL and according to the NPRI two facilities reported releases of trichlorobenzene in 2011. Given the concerns related to use in substances and mixtures, the NPRI data may not be reflective of all sources of trichlorobenzene in Canada.

## Questions pertaining to Substances Restricted in the EU under REACH

- 4. Given that the EU has decided to substantially restrict sixty three substances, or groups of substances, for health or environmental reasons under the REACH Regulations, and that some of these substances are not listed on Schedule 1 of CEPA 1999, when will the Ministers fulfill their duties under section 75(3) of CEPA 1999 and review the decisions of the EU and make a determination under section 64 as to whether these substances are toxic or capable of becoming toxic?*

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<sup>54</sup>Commission Regulation (EC) No 552/2009 of 22 June 2009 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards Annex XVII (substance number 38). Available at <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:164:0007:0031:EN:PDF>> Accessed on April 2, 2014.

<sup>55</sup> U.S. Department of Health and Human Services. Draft Toxicological Profile for 1,1 - Dichloroethane. April 2013. page 70. Available at <<http://www.atsdr.cdc.gov/toxprofiles/tp133-c6.pdf>> Accessed on April 4, 2014.

<sup>56</sup>Priority Substances List Assessment Report for Trichlorobenzenes. Available at <<http://www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/psl1-lsp1/trichlorobenzenes/index-eng.php#a4>> Accessed on April 4, 2014.

<sup>57</sup> Directive 2005/59/EC of the European Parliament and of the Council. Available at <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:309:0013:0014:EN:PDF>> Accessed on April 4, 2014.

5. *If such reviews have been conducted, will the Ministers provide us with copies of the reviews and their determinations under CEPA 1999 section 64?*
6. *If such reviews have not yet been completed, without upholding the responses to the other questions in this petition, will the Ministers provide us with copies of the reviews and their determinations under CEPA 1999 section 64 when completed?*

#### Questions with respect to CEPA 1999 Section 75(3) Implementation

7. *Will the Ministers explain of the procedures used to fulfill their duty under CEPA 75(3) and provide hyperlinks to, or copies of, any documents pertaining to these procedures? The response should also indicate the timing used by the Ministers, or their delegates in Environment Canada and Health Canada, in applying the procedures.*
8. *What is the role of stakeholders in these procedures?*
9. *How do the Ministers undertake reviews of substances restricted under REACH which are classified as mutagens, carcinogens and toxic to reproduction (ex. Items number 28, 29 and 30 of REACH Annex XVII)?*
10. *How do the Ministers determine if a restriction under EU REACH is 'substantial'?*
11. *How do the Ministers monitor prohibitions and substantial restrictions for environmental or health reasons by OECD countries, including by subdivisions of these countries (i.e., state level governments)?*
12. *What procedures are in place to ensure the Ministers are aware of prohibitions and substantial restrictions for environmental or health reason in OECD countries and subdivisions of those countries?*
13. *Do the Ministers apply section 75 of CEPA 1999 when assessing substances under the New Substances Notification Regulations where the notified substance is prohibited or substantially restricted in an OECD member country? If so, please describe how these decisions are considered in the assessment process of new substances. Please provide a list of new substances that were reviewed in this context.*

If you have any questions or concerns please do not hesitate to contact the undersigned. We look forward to the response to our petition.

Yours truly,



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