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**SUBMISSIONS TO THE HOUSE OF COMMONS STANDING COMMITTEE ON  
ENVIRONMENT AND SUSTAINABLE DEVELOPMENT ON BILL S-5, AN ACT  
TO AMEND THE CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999,  
etc.**

**September 2022**

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## I. OVERVIEW

1. The Canadian Environmental Law Association (“CELA”), established in 1970, is incorporated under federal law and is also a provincial legal aid clinic under Ontario law<sup>1</sup> providing legal assistance to low-income and disadvantaged individuals and groups experiencing environmental problems who are otherwise unable to afford legal representation. Potential clients come to CELA seeking legal assistance with respect to problems caused by the creation, use, or release of toxic substances in their communities. Our assistance to them may come in the form of summary advice, legal representation, law reform advocacy, or community outreach.

### A. CELA Concerns With, and Recommendations for, Bill S-5

2. Bill C-28, an Act to amend the *Canadian Environmental Protection Act, 1999* (“*CEPA, 1999*”) was tabled for First Reading in Parliament on April 13, 2021.<sup>2</sup> The Bill died on the order paper due to the intervening 2021 federal election but was re-introduced in the Senate of Canada in February 2022 as Bill S-5 in furtherance of Prime Ministerial mandate letters,<sup>3</sup> and passed by the Senate on June 22, 2022.<sup>4</sup> CELA has prepared these submissions to assist the House of Commons in considering issues related to the control of toxic substances as addressed in Bill S-5. CELA will also file specific statutory language for Bill S-5 as the bill proceeds through the House of Commons as we did for the Senate earlier this year. The following submissions address certain matters relating to Bill S-5, including: (1) the nature and extent of the toxic substance problem internationally and domestically is significant and growing but is not materially addressed by the Bill S-5 amendments; (2) proposed amendments in Bill S-5 relating to the Act’s Schedule 1 List of Toxic Substances seek to fix something that is not broken and if enacted could create, rather than resolve, problems; (3) actual problems with the existing statute are left largely unaddressed by Bill S-5, particularly, but not exclusively, Parts 4 and 5 pertaining to pollution prevention and control of toxic substances, respectively; (4) the proposed establishment in Bill S-5 of a right to a healthy environment creates a right without a remedy and, therefore, risks being ineffective; and (5) Bill S-5 proposed measures relating to endocrine disrupting substances and protection of vulnerable populations make only housekeeping changes but fail to deal with critical

<sup>1</sup> *Legal Aid Services Act, 2020*, S.O. 2020, c. 11.

<sup>2</sup> Bill C-28, *An Act to amend the Canadian Environmental Protection Act, 1999, etc.* 2d Sess., 43<sup>rd</sup> Parl., 2021, (1<sup>st</sup> reading 13 April 2021).

<sup>3</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (1<sup>st</sup> Reading, 9 February 2022). Mandate Letter from the Rt. Hon. Justin Trudeau, Prime Minister of Canada to Steven Guilbeault, Minister of Environment and Climate Change, December 16, 2021 (stating that the Prime Minister asks the Minister to deliver on the commitment to enact a strengthened [*CEPA, 1999*] to protect everyone, including people most vulnerable to harm from toxic substances and those living in communities where exposure is high); and Mandate Letter from the Rt. Hon. Justin Trudeau, Prime Minister of Canada, to Jean-Yves Duclos, Minister of Health, December 16, 2021 (stating that the Prime Minister asks the Minister to deliver on the commitment to protect Canadians from harmful chemicals by strengthening [*CEPA, 1999*]).

<sup>4</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022).

issues such as requiring testing where available information is inadequate. Arising from the foregoing CELA makes the following recommendations (which are reformulated as amendments to Bill S-5 in our companion September 2022 amendments document) in respect of the need for amendments to *CEPA, 1999* and the adequacy of Bill S-5:

### **Don't Fix What Isn't Broken**

#### **Retain Name of Schedule 1 as "List of Toxic Substances" and Do Not Divide Schedule Into Two Parts**

(a) Parliament should: (1) retain the phrase "List of Toxic Substances" to Schedule 1; and (2) not create two Parts to Schedule 1. Any substance in Schedule 1 should be eligible for the full suite of risk management measures, including complete bans, where necessary.

#### **Retain and Extend Sections 330(3) and (3.1) to Address Substances on Geographically Limited Basis to Explicitly Deal With Hot Spots**

(b) Parliament should retain sections 330(3) and (3.1) and simply extend the authority for geographically limited regulation in subsection (3.1) to other sections of the Act that enable regulatory authority, such as section 94 (which provides for interim authority to address by order substances that are not listed in Schedule 1).

### **Do Fix What is Broken**

#### **Make Pollution Prevention Planning Mandatory**

(c) Section 56(1) should at least be amended to make it mandatory, not discretionary, for the Minister to require all owners or persons responsible for substances (and products containing substances) listed in Schedule 1 to prepare and implement a pollution prevention plan by fixed dates pursuant to a timetable required to be established by the Act or regulations.

(d) The Act should authorize any person to petition the Minister (and failing that the Federal Court) to require such plans where, for whatever reasons, the Minister has not acted or there has not been compliance with the timetable.

#### **Pollution Prevention Not Pollution Abatement**

(e) The Bill S-5 amendments to section 56(1) of *CEPA, 1999* should be augmented by providing greater specificity under section 3 of the Act regarding what pollution prevention means and does not mean along the lines of the

definition of “toxics use reduction” employed in the Massachusetts *Toxics Use Reduction Act*.

### **Address Ambient Air Quality Problems from Toxic Substances**

(f) *CEPA, 1999* should be amended to require the federal government to develop legally binding and enforceable national standards for ambient air quality in consultation with the provinces, territories, Indigenous peoples, stakeholders, and the public along the lines of recommendations made by the Standing Committee in its 2017 report to Parliament on the Act, and CELA in its 2022 proposed amendments to Bill S-5.

### **Amend Not Eliminate Virtual Elimination Authority**

(g) If the federal government is concerned that the virtual elimination provision is too difficult to meet (because it requires that a level of quantification be specified before a substance can be released below that level) then it should propose amendments to that provision, rather than simply eliminating the provision altogether. CELA has previously recommended a more robust virtual elimination provision that remains appropriate for consideration in Bill S-5, which states:

(1) “virtual elimination” means the cessation of the intentional production, use, release, export, distribution or import of a substance or classes of substances.

(2) Where a substance is produced as a by-product of the production or use of another substance, virtual elimination means changes to processes or practices or substitution of material or products to avoid the creation of [the] substance in question.

(h) Parliament also should modify the current section 77(4) of *CEPA, 1999* to make it clear that naturally occurring inorganic substances (e.g., lead, mercury, arsenic) are eligible for virtual elimination.

### **Right to a Healthy Environment Requires a Remedy**

(i) Bill S-5 should be amended to ensure Canadians have a right to a healthy environment with appropriate remedies. Precedents for Parliament to consider have been provided over the years by House and Senate committee reports, CELA’s 2022 proposed amendments to the Senate of Canada on Bill S-5, and by the Global Pact for the Environment now being finalized by the United Nations.

### **Adopt Substitution Principle**

(j) Amend *CEPA, 1999* to ensure efforts to replace toxic substances with suitable alternatives or technologies are considered in pollution prevention, risk assessment and management, and virtual elimination authorities, including their risks and the technical and economic feasibility of substitution.

(k) Amend section 2(1) of *CEPA, 1999* by adding the substitution principle so that its implementation becomes a duty of the federal government.

(l) Amend the risk management provisions of the Act, under Part 5, to require alternatives assessment and place the burden on industry to show that safer alternatives are not available.

(m) Require safer substitutes for substances listed in Schedule 1 that are carcinogenic, mutagenic, toxic to reproduction, very persistent, very bioaccumulative, and endocrine disrupting.

(n) Adopt CELA's draft measures respecting alternatives in its 2022 proposed amendments to *CEPA, 1999* and Bill S-5.

### **Require Testing Where Available Information on Endocrine Disrupting Substances, Vulnerable Populations or Cumulative Effects is Insufficient**

(o) Repeal or revise section 72 and where available information on endocrine disrupting substances, vulnerable populations, or cumulative effects is insufficient, compel testing to occur when, for whatever reasons, government does not require it, with language such as the: "Minister shall require the person to conduct toxicological and other tests on a substance where information is lacking or not adequate to allow a determination of whether a substance is toxic or capable of becoming toxic, and to submit the results of the tests to the Minister."

## **B. CELA Experience With CEPA,1999**

3. CELA has had extensive experience with *CEPA, 1999*<sup>5</sup> and its predecessor legislation over the decades. CELA gave testimony in 1975 before the Standing Committee on Fisheries and Forestry during Parliament's consideration of Bill C-25, the *Environmental Contaminants Act* ("*ECA*"),<sup>6</sup> the first modern federal law designed to protect human health and the environment by addressing the manufacture, import, and use of industrial chemicals in Canadian commerce. In subsequent decades, the *ECA* became the foundation for what is now Part 5 of *CEPA, 1999* respecting the control of toxic substances. In the early 1980s, CELA published an extensive review regarding the adequacy of the *ECA* and the need for significant reform of the law's control of industrial

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<sup>5</sup> S.C. 1999, c. 33.

<sup>6</sup> R.S.C. 1985, c. E-12.

chemicals in Canada.<sup>7</sup> In the mid-1980s, CELA participated in the Parliamentary process that eventually saw the *ECA* incorporated with several other federal laws (e.g., *Clean Air Act*,<sup>8</sup> *Ocean Dumping Control Act*,<sup>9</sup> and the *Canada Water Act*<sup>10</sup>) into what became *CEPA*,<sup>11</sup> the predecessor law to the current *CEPA, 1999*. CELA also intervened before the Supreme Court of Canada in the *Hydro-Quebec* case, which saw the Court uphold in 1997 the constitutionality of *CEPA* as a valid exercise of the criminal law power<sup>12</sup> and paved the way for the Act's subsequent amendment in the late 1990s. CELA participated extensively in the Parliamentary review process that resulted in the enactment of Bill C-32 (*CEPA, 1999*, which came into force in 2000). Since then CELA: (1) has participated in the 2006-2008 House of Commons and Senate reviews of *CEPA, 1999*, which did not result in amendments to the law; (2) participated in the 2016 review by this Standing Committee, which culminated in the amendments contained in Bill S-5; (3) was a member of the Stakeholder Advisory Council with respect to Canada's Chemicals Management Plan for the period 2007 to 2020; and (4) prepared submissions for, drafted and submitted amendments to, and gave testimony before, the Standing Senate Committee on Energy, the Environment and Natural Resources in 2022 on Bill S-5. As early as 2018, CELA published its own proposed amendments to *CEPA, 1999*, which informed our submissions for your consideration respecting Bill S-5, as well as our 2022 proposed amendments to Bill S-5. CELA's 2018 proposed amendments to *CEPA, 1999* were supported by over 30 civil society organizations, including environmental, health, women's, and labour groups across Canada<sup>13</sup> and addressed such matters as the need to: (1) control endocrine disrupting substances; (2) establish enforceable national ambient air quality standards; (3) protect vulnerable populations from toxic substances; (4) require substitution of safer alternatives for toxic substances; and (5) recognize civil enforcement of the Act by the public in the courts. Our 2022 proposed amendments cover much the same areas of concern. Few of these issues have been addressed adequately, or at all, by Bill S-5.

4. The rationale for CELA's recommendations for amending Bill S-5 appears throughout our submissions and the recommendations are re-stated at the end of this document.

## II. THE NATURE AND EXTENT OF THE TOXIC SUBSTANCE PROBLEM

5. Canada has long needed a more robust federal law to address the dramatic expansion in the creation and use of toxic substances that has developed in Canadian and international commerce in recent decades. However, while the nature and extent of the

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<sup>7</sup> Joseph F. Castrilli, "Control of Toxic Chemicals in Canada: An Analysis of Law and Policy" (1982) 20 Osgoode Hall L.J. 322-401.

<sup>8</sup> R.S.C. 1985, c. C-32.

<sup>9</sup> R.S.C. 1985, c. O-2.

<sup>10</sup> R.S.C. 1985, c. C-11.

<sup>11</sup> R.S.C. 1985, c. 16 (4<sup>th</sup> Supp.).

<sup>12</sup> *R. v. Hydro-Quebec*, [1997] 3 S.C.R. 213.

<sup>13</sup> "Citizens Across Canada Urge Ministers to Adopt Federal Toxics Law Changes", *Media Release* (16 October 2018).

toxic substance problem internationally and domestically is significant and growing, it is not materially addressed by the Bill S-5 amendments, as is set out more fully below.

### A. Internationally

6. In 2019, the United Nations Environment Programme (“UNEP”) released its latest global chemicals outlook report,<sup>14</sup> which indicated that the 2002 goal of the UN World Summit on Sustainable Development, reiterated in 2006 and 2012, of achieving by 2020 the environmentally sound management of chemicals and wastes, would not be met. The UNEP report noted that trends data suggested the doubling of the global chemicals market between 2017 and 2030 will increase global chemical releases, exposures, concentrations and adverse health and environmental impacts unless the sound management of chemicals is achieved worldwide. The report added: “Business as usual is, therefore, not an option”.<sup>15</sup> The UNEP report also found that:

- Production processes continue to generate significant chemical releases to air, water and soil as well as large amounts of waste, including hazardous waste;
- Chemical pollutants are ubiquitous in the environment and humans;
- The burden of disease from chemicals is high, and vulnerable populations are particularly at risk; and
- Chemical pollution threatens biota and ecosystem functions.<sup>16</sup>

7. In 2022, a study published in the journal *Environmental Science and Technology* found that: (1) there has been a 50-fold increase in the production of chemicals since 1950, which is projected to triple again by 2050; and (2) the rapid rate of chemical production and release into the environment is happening much faster than the ability of government authorities to track or investigate the impacts. Arising from these findings the study authors concluded that chemical pollution threatens the stability of global ecosystems upon which human life depends by crossing a “planetary boundary;” that is, the point at which human-made changes to the Earth push it outside the stable environment of the last 10,000 years. The study recommended that stronger regulation was needed such as a cap on chemical production and release, in the same way carbon targets seek to cap greenhouse gas emissions.<sup>17</sup>

### B. Domestically

8. The situation in Canada is a microcosm of the global picture. The latest publicly available national pollution data the federal government has obtained from industry under

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<sup>14</sup> United Nations Environment Programme, *Global Chemicals Outlook II - From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development* (Nairobi: UNEP, 2019).

<sup>15</sup> *Ibid.* at 17.

<sup>16</sup> *Ibid.* at 92. See also United Nations Environment Programme, *Global Chemicals Outlook II: Summary for Policy Makers* (UNEP/EA.4/21) (Nairobi: UNEP, 2019) at 3, 8-9.

<sup>17</sup> Linn Persson, *et al.*, “Outside the Safe Operating Space of the Planetary Boundary for Novel Entities”, *Environmental Science and Technology* (January 18, 2022) < <https://doi.org/10.1021/acs.est.1c04158> >



*CEPA, 1999*'s National Pollutant Release Inventory (“NPRI”) on releases of 32 known or suspected cancer-causing substances<sup>18</sup> to the environment tell a consistent story for the years 2006 to 2020. During this period, on-site air releases of cancer-causing agents (identified as toxic substances under the Act) decreased almost 39 percent from over 6.1 million kilograms in 2006 to less than 3.8 million kilograms in 2020. However, for the same time-period on-site disposal and land releases of these same carcinogenic substances increased almost 41 percent from over 109 million kilograms in 2006 to over 154 million kilograms in 2020 (See Table 1, below).

**Table 1: On-site Air Releases and On-site Disposal and Land Releases in Canada of 32 Known or Suspected Carcinogens Identified in *CEPA, 1999* Schedule 1 List of Toxic Substances – 2006 to 2020**

Year	On-site Air Releases (kg)	On-site Disposal and Land Releases (kg)
2006	6,196,064.0	109,570,963.1
2007	5,036,567.8	117,797,617.9
2008	4,112,641.9	126,333,185.9
2009	3,261,617.9	105,537,653.4
2010	3,278,298.2	116,499,342.5
2011	3,428,392.6	125,583,597.7
2012	3,026,812.1	121,283,121.1
2013	3,131,467.3	127,579,887.8
2014	3,299,176.1	123,586,986.5
2015	3,325,866.4	110,774,470.1
2016	3,567,797.4	117,978,483.1
2017	3,761,386.0	128,253,399.4
2018	4,036,632.2	137,552,994.8
2019	3,902,389.7	170,746,569.8
2020	3,784,316.9	154,439,035.5
% Increase (+) or decrease (-) 2006 to 2020	<b>38.92% (-)</b>	<b>40.95% (+)</b>

**Source: Environment and Climate Change Canada, National Pollutant Release Inventory**

9. Appendix A to these submissions reproduces the NPRI definitions for on-site air releases and on-site disposal and land releases. What is clear from particularly the on-site disposal and land releases definitions is that these environmental management methods do not in any way hermetically seal off pollutants from the environment. In fact, in the case of waste rock and tailings impoundment areas (one of the management methods the NPRI program identifies as an on-site disposal measure) catastrophic releases to the

<sup>18</sup> Although there are approximately forty-three known or suspected carcinogens in Schedule 1 of *CEPA, 1999*, the following thirty-two known or suspected cancer-causing substances or categories of substances, including eleven different polycyclic aromatic hydrocarbons (“PAHs”), were selected because their NPRI reporting thresholds have not changed, and releases were reported for them, during the 15-year period 2006-2020: arsenic, hexachlorobenzene, naphthalene, benzene, dichloromethane, ethylene oxide, formaldehyde, acetaldehyde, trichloroethylene, lead (and its compounds), tetrachloroethylene, nickel, 1,2 dichloroethane, hexavalent chromium compounds, bis(2-ethylhexyl)phthalate, cadmium, carbon tetrachloride, vinyl chloride, asbestos, 1,3-Butadiene, and mercury (and its compounds), and PAHs.

environment of contaminated materials from such areas have occurred in Canada.<sup>19</sup> Accordingly, by any benchmark, reducing toxic substances in one environmental pathway (air) by millions of kilograms but allowing them to increase in another environmental pathway (land) by tens of millions of kilograms, amounts to playing chemical whack-a-mole with some of the most dangerous substances on Earth.

10. In general, the above national trend is seen at the provincial level as well. Tables 2-5, below, with some exceptions, demonstrate this for four of the largest provincial economies in Canada (Quebec, Ontario, Alberta, and British Columbia):

**Table 2: On-site Air Releases and On-site Disposal and Land Releases in Quebec of 32 Known or Suspected Carcinogens Identified in CEPA, 1999 Schedule 1 List of Toxic Substances – 2006 to 2020**

Year	On-site Air Releases (kg)	On-site Disposal and Land Releases (kg)
2006	1,172,853.6	12,291,896.8
2007	1,053,983.0	18,171,449.4
2008	745,648.0	24,827,904.7
2009	612,184.2	23,674,165.4
2010	663,833.1	23,988,641.5
2011	1,037,746.8	21,676,480.4
2012	548,770.3	22,455,100.9
2013	499,861.6	24,749,669.4
2014	539,462.6	37,617,150.2
2015	545,238.4	33,679,451.3
2016	543,797.1	32,926,692.9
2017	572,568.4	35,725,229.9
2018	502,843.5	42,785,252.2
2019	491,871.8	41,689,743.9
2020	524,078.5	41,101,121.0
% Increase (+) or decrease (-) 2006 to 2020	<b>55.32% (-)</b>	<b>234.4% (+)</b>

**Source: Environment and Climate Change Canada, National Pollutant Release Inventory**

<sup>19</sup> A 2014 tailings impoundment failure at the Mount Polley gold and copper mine in British Columbia released approximately 25 million cubic meters of contaminated water and waste containing arsenic, copper, lead, and other heavy metals into two lakes and a creek. See Patrick Byrne, et al “The long-term environmental impacts of the Mount Polley mine tailings spill, British Columbia” EGU General Assembly 2015, held 12-17 April 2015, Vienna, Austria, 2015EGUGA.17.6241B; and Winston Szeto, “Ecological impact of Mount Polley mine disaster confirmed by new study”, *CBC News* (25 May 2022) (research showing higher levels of metals in invertebrates taken from Polley and Quesnel Lakes eight years later).

**Table 3: On-site Air Releases and On-site Disposal and Land Releases in Ontario of 32 Known or Suspected Carcinogens Identified in CEPA, 1999 Schedule 1 List of Toxic Substances – 2006 to 2020**

Year	On-site Air Releases (kg)	On-site Disposal and Land Releases (kg)
2006	2,193,881.4	45,512,755.5
2007	1,453,511.9	44,853,200.8
2008	1,255,675.5	46,280,603.7
2009	917,996.1	36,060,023.3
2010	803,452.9	37,043,951.2
2011	849,577.0	43,426,886.8
2012	878,165.3	37,878,656.2
2013	898,848.2	44,879,333.6
2014	889,463.6	47,816,498.2
2015	845,306.6	40,473,635.7
2016	799,839.0	45,838,894.5
2017	761,871.0	51,035,443.7
2018	973,541.9	51,187,583.8
2019	1,172,749.4	47,245,453.6
2020	1,113,864.0	32,883,213.3
% Increase (+) or decrease (-) 2006 to 2020	<b>49.23% (-)</b>	<b>27.75% (-)</b>

**Source: Environment and Climate Change Canada, National Pollutant Release Inventory**

**Table 4: On-site Air Releases and On-site Disposal and Land Releases in Alberta of 32 Known or Suspected Carcinogens Identified in CEPA, 1999 Schedule 1 List of Toxic Substances – 2006 to 2020**

Year	On-site Air Releases (kg)	On-site Disposal and Land Releases (kg)
2006	1,852,240.3	2,132,457.8
2007	1,815,089.8	2,152,915.5
2008	1,609,074.8	2,451,300.5
2009	1,568,803.0	3,718,704.6
2010	1,634,168.1	8,611,887.8
2011	1,404,462.9	9,705,791.8
2012	1,546,697.6	9,228,114.7
2013	1,609,434.8	1,646,869.6
2014	1,545,225.9	7,505,047.8
2015	1,639,595.0	3,432,799.1
2016	1,914,566.4	2,665,689.6
2017	2,049,753.0	3,206,116.8
2018	2,397,033.6	3,554,180.3
2019	2,375,885.8	4,698,523.4
2020	993,916.7	4,037,750.5
% Increase (+) or decrease (-) 2006 to 2020	<b>46.34% (-)</b>	<b>89.35% (+)</b>

**Source: Environment and Climate Change Canada, National Pollutant Release Inventory**

**Table 5: On-site Air Releases and On-site Disposal and Land Releases in British Columbia of 32 Known or Suspected Carcinogens Identified in *CEPA, 1999* Schedule 1 List of Toxic Substances – 2006 to 2020**

Year	On-site Air Releases (kg)	On-site Disposal and Land Releases (kg)
2006	784,061.7	1,523,905.3
2007	766,777.6	1,394,984.4
2008	703,290.7	1,289,411.8
2009	472,419.8	1,373,329.5
2010	472,398.3	1,987,990.6
2011	452,515.8	1,932,563.3
2012	441,661.8	2,233,298.8
2013	471,248.3	2,864,336.1
2014	477,869.0	3,304,595.2
2015	470,815.3	2,816,261.6
2016	503,601.0	2,753,050.2
2017	579,773.3	1,869,637.5
2018	577,306.4	2,943,581.5
2019	450,831.7	4,555,158.9
2020	401,328.4	4,369,553.1
% Increase (+) or decrease (-) 2006 to 2020	<b>48.81% (-)</b>	<b>186.73% (+)</b>

**Source: Environment and Climate Change Canada, National Pollutant Release Inventory**

11. Tables 2, 4 and 5 show that in Quebec, Alberta, and British Columbia, respectively, on-site air releases of known or suspected cancer-causing agents (identified as toxic substances under *CEPA, 1999*) decreased during the 15-year period 2006 to 2020 while on-site disposal and land releases of the same substances increased significantly. Table 3, respecting Ontario, essentially shows a similar result if the 2020 pandemic year is discounted (i.e., without 2020, a 42.5 percent decrease in on-site air releases but a 3.8 percent increase in on-site disposal and land releases of these substances).

12. A similar, if not more extreme, trend is observed for certain individual carcinogenic substances considered during this 15-year period both nationally and in a selected province, such as Quebec. For example, nationally on-site air releases of arsenic, a confirmed carcinogen, decreased 67 percent from approximately 80,000 kilograms in 2006 to 26,000 kilograms in 2020. However, on-site disposal and land releases of arsenic increased **406 percent** from 13 million kilograms in 2006 to well over 66 million kilograms in 2020 (See Table 6, below). In the case of Quebec, Table 7 shows that on-site air releases of arsenic decreased 7.8 percent in the 2006-2020 period but on-site disposal and land releases of arsenic increased a startling **1967 percent** during the same period:

**Table 6: On-site Air Releases and On-site Disposal and Land Releases in Canada of Arsenic a Known Carcinogen Identified in *CEPA, 1999* Schedule 1 List of Toxic Substances – 2006 to 2020**

Year	On-site Air Releases (kg)	On-site Disposal and Land Releases (kg)
2006	79,954.7	13,120,260.9
2007	81,130.4	15,034,135.5
2008	72,883.6	16,274,913.9
2009	64,697.2	15,266,084.6
2010	48,608.7	17,041,206.8
2011	37,278.5	22,903,919.8
2012	36,919.8	19,662,488.2
2013	37,137.8	19,870,404.3
2014	48,826.4	18,817,544.3
2015	46,609.6	23,117,624.3
2016	42,997.8	21,815,514.1
2017	35,512.4	22,888,261.7
2018	38,973.3	30,765,273.7
2019	26,237.2	54,630,230.2
2020	26,152.4	66,494,619.9
% Increase (+) or decrease (-) 2006 to 2020	<b>67% (-)</b>	<b>406% (+)</b>

**Source: Environment and Climate Change Canada, National Pollutant Release Inventory**

**Table 7: On-site Air Releases and On-site Disposal and Land Releases in Quebec of Arsenic a Known Carcinogen Identified in *CEPA, 1999* Schedule 1 List of Toxic Substances – 2006 to 2020**

Year	On-site Air Releases (kg)	On-site Disposal and Land Releases (kg)
2006	15,571.9	778,411.0
2007	22,591.5	2,627,429.6
2008	23,616.7	3,262,172.2
2009	20,025.4	3,760,722.0
2010	16,865.8	4,429,188.3
2011	17,007.2	4,312,594.3
2012	13,104.2	4,030,207.9
2013	19,320.4	5,914,789.8
2014	27,007.9	7,345,790.1
2015	27,553.6	13,935,874.7
2016	22,829.2	12,393,903.1
2017	15,410.3	13,599,219.5
2018	23,285.1	14,133,069.6
2019	11,985.2	15,826,752.7
2020	14,350.0	16,086,085.5
% Increase (+) or decrease (-) 2006 to 2020	<b>7.8% (-)</b>	<b>1967% (+)</b>

**Source: Environment and Climate Change Canada, National Pollutant Release Inventory**

11. Overall, this is a disturbing trend suggesting that both Part 4 of *CEPA, 1999*, which was intended to reduce the generation of toxic substances and hazardous wastes, and Part 5 of the Act, which was intended to control the release of toxic substances, are not performing as intended by Parliament considering that these substances have been on Schedule 1 for many years, if not decades.

12. Vulnerable populations are particularly at risk from such trends. Members of Indigenous communities appearing before this Committee during its 2016 review of *CEPA, 1999* testified that monitoring data they are collecting indicates increasing levels of contaminants such as mercury, lead, cadmium, arsenic, chromium, and polycyclic aromatic hydrocarbons (“PAHs”) [all listed in Schedule 1 of *CEPA, 1999*] in their traditional foods (e.g. fish, moose).<sup>20</sup> PAHs are a class of chemicals that occur naturally in coal, crude oil, and gasoline or are produced when these substances are burned, with the PAHs generated from these substances capable of binding or forming small particles in the air.<sup>21</sup>

13. Despite reductions in on-site air releases, the Ontario data (Table 3, above) is also concerning for two reasons. First, on-site air releases of these 32 known or suspected carcinogens annually still exceed more than one million kilograms, and on-site disposal and land releases, notwithstanding the current decreases reported through 2020, may be an artifact of the pandemic and, in any event, still amount to tens of millions of kilograms per year. Second, on December 31, 2021, Ontario’s 2019 repeal of its *Toxics Reduction Act, 2009* (“*TRA, 2009*”), came into effect.<sup>22</sup> The *TRA, 2009* was intended by the Ontario Legislature, when it was enacted in the late 2000s, to reduce the use and creation of toxic substances,<sup>23</sup> and complement *CEPA, 1999* which, while it also includes such a focus,<sup>24</sup> has not been systemically implemented to achieve such a result.<sup>25</sup> The loss of the *TRA*,

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<sup>20</sup> Canada, Parliament, House of Commons Standing Committee on Environment and Sustainable Development, A Review of the Canadian Environmental Protection Act, 1999 – Evidence, No. 36, 1<sup>st</sup> Sess., 42<sup>nd</sup> Parl. (November 17, 2016) at 1-3 Melody Lepine, Director, Government and Industry Relations, and Phil Thomas, Scientist, Mikisew Cree First Nation).

<sup>21</sup> Centers for Disease Control and Prevention, National Biomonitoring Program: Polycyclic Aromatic Hydrocarbons ((PAHs) – Fact Sheet), (Washington, D.C.: CDC, April 2017).

<sup>22</sup> S.O. 2019, c. 4, Sch. 5, s.1 (s. 72.1 repealing Act on December 31, 2021).

<sup>23</sup> S.O. 2009, c. 19, s. 1(a) (purpose of Act includes preventing pollution and protecting human health and the environment by reducing the use and creation of toxic substances).

<sup>24</sup> *CEPA, 1999*, S.C. 1999, c. 33, s. 3(1) defines “pollution prevention” as meaning “the use of processes, practices, materials, products, substances, or energy that avoid or minimize the creation of pollutants and waste and reduce the overall risk to the environment or human health”; and s. 56 authorizes Minister by notice to require a person to prepare and implement a pollution prevention plan for a Schedule 1 toxic substance. See also Environmental Commissioner of Ontario, “Moving from End-of-Pipe to Front-End Toxics Reduction in Ontario”, in *Redefining Conservation: Annual Report 2009/2010* (September 2010) at 94 (while existing federal NPRI program focuses on gathering and publishing information on industrial emissions, the driving intent of the *TRA, 2009* is toxics reduction).

<sup>25</sup> Ontario, Legislative Assembly, Standing Committee on General Government, in Debates, No. G-30 (25 May 2009) at G-764 (Testimony of Dr. Miriam Diamond, Co-Chair, Ontario Toxics Reduction Scientific Expert Panel) (federal authority under s. 56 of *CEPA, 1999* to require persons on notice to prepare and implement a pollution prevention plan has been used too infrequently and in relation to far too narrow a number of industrial sectors or companies to constitute a systemic response to the problem of increasing releases and use of toxic substances into the Ontario environment).

2009 in Ontario, the province that annually releases some of the largest quantities of toxic substances in Canada, underscores the need for amendments to Parts 4 and 5 of *CEPA, 1999* and improvements in their implementation.

14. Unfortunately, Bill S-5 does not propose any amendments of material significance to *CEPA, 1999* addressing the burgeoning problems of increasing emissions of toxic substances noted above or alternatives to such substances that could reduce the need for their use or creation in the first place.

### III. BILL S-5 PROPOSES TO FIX WHAT ISN'T BROKEN

#### A. Creating Problems Where None Existed

##### 1. Bill S-5's Renaming and Bifurcating Schedule 1 Risks Constitutionality of Act

###### *a. A Short History of CEPA, 1999's Authority to Control Toxic Substances*

15. What is now Part 5 of *CEPA, 1999* entitled "Controlling Toxic Substances", was what the Supreme Court of Canada focused on in its 1997 judgment in *R. v. Hydro-Quebec* when it upheld *CEPA* (the predecessor statute to *CEPA, 1999*) as valid federal legislation for the control of toxic substances authorized under the criminal law power of the Constitution.<sup>26</sup>

16. Part of the basis for upholding *CEPA* as valid federal law was that it did not purport to control the universe of all substances that it investigated but only the few bad actors that met what is now the section 64 test under the Act for what is "toxic" (long-term harmful effect on the environment; danger to the environment on which life depends; or danger to human life or health) and that could be placed in Schedule 1 for the purpose of imposing controls. The Court's concern was that otherwise *CEPA* could end up controlling all environmental pollutants and in so doing impinge on provincial constitutional authority over property and civil rights in the provinces and have a resulting adverse impact on federalism (i.e., the balance between federal and provincial legislative powers).<sup>27</sup> As Justice La Forest explained for the majority in *Hydro-Quebec*, for a federal statute to be upheld under the criminal law power it must have a valid criminal law purpose directed at an "evil" or "injurious effect upon the public". Schedule 1 toxic substances are the "evil" which, if used in a manner contrary to the regulations, *CEPA, 1999* prohibits and penalizes.<sup>28</sup>

17. Justice La Forest noted further that *CEPA* applied to a limited number of substances; at the time of the 1997 decision just 9 (e.g., lead and mercury) out of approximately 21,000 substances in commerce in Canada.<sup>29</sup> Today that number has only risen to roughly 150 out of over 23,000. As Justice La Forest put it, the statute provides:

<sup>26</sup> *R. v. Hydro-Quebec*, [1997] 3 S.C.R. 213 at paras 127, 130, 161.

<sup>27</sup> *Ibid.* at paras 133-135, 138, 142.

<sup>28</sup> *Ibid.* at paras 146, 152.

<sup>29</sup> *Ibid.* at para 145.

“...a procedure to weed out from the vast number of substances potentially harmful to the environment or human life those only that pose significant risks of that type of harm. Specific targeting of toxic substances based on an individual assessment avoids resort to unnecessarily broad prohibitions and their impact on the exercise of provincial powers”.<sup>30</sup>

18. Subsequent decisions of the Supreme Court of Canada in considering *Hydro-Quebec* in the context of other federal legislation seeking to shelter under the authority of the criminal law power have continued to underscore the need for such legislation to have a valid criminal law purpose; i.e., address an “evil” in order to be constitutionally valid. In the 2010 decision of the Court in *Reference re Assisted Human Reproduction Act*, the majority noted that in *Hydro-Quebec* the Court held that the Parliament of Canada had the power to address “the entry into the environment of certain toxic substances”.<sup>31</sup> Similarly, in the 2020 Supreme Court of Canada judgment in *Reference re Genetic Non-Discrimination Act* both the majority and minority opinions of the Court referred approvingly to *Hydro-Quebec* as authority for the proposition that threats of harm to the environment or health, such as from toxic substances, are evils that may be properly targeted by Parliament relying on the criminal law power of the Constitution.<sup>32</sup>

19. It is thus clear that any material deviation from this focus in future amendments to *CEPA, 1999* would be highly problematic. If the federal government purports to expand control to “non-toxic” substances under the statute, then it risks the constitutional underpinning that supports Part 5 of the Act. (Part 6, dealing with “Animate Products of Biotechnology” also rests on the test under section 64). If the government removes the reference to toxic substances or tries to call them by a benign-sounding name, it may send the wrong message to the public and the courts as to whether it regards them as such.

***b. Bill S-5 Sends a Mixed Message on Control of Toxic Substances and Creates Potential for Legal Uncertainty***

20. With this as background, what does Bill S-5 do? In the view of CELA, Bill S-5 sends a mixed message to the public and the courts. It does at least three things that are highly concerning.

21. First, Bill S-5 removes the phrase “List of Toxic Substances” from Schedule 1. Henceforth, the Schedule will simply be known as “Schedule 1”.<sup>33</sup>

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<sup>30</sup> *Ibid.* at para 147.

<sup>31</sup> *Reference re Assisted Human Reproduction Act*, [2010] 3 SCR 457, paras 234, 237.

<sup>32</sup> *Reference re Genetic Non-Discrimination Act*, 2020 SCC 17, paras 95 (majority), 242, 266 (dissent).

<sup>33</sup> Government of Canada, *Bill S-5: Strengthening Environmental Protection for a Healthier Canada Act: Summary of Amendments* (Ottawa February 2022) at 7.



22. Second, clause 58 of Bill S-5 proposes to divide the existing single list of approximately 150 toxic substances in Schedule 1 of the Act into two parts. Clause 29 of Bill S-5 identifies the types of orders to which each part may be subjected. Based on section 90(1.1), the Ministers must give priority to pollution prevention actions for all substances on the list of toxic substances. Part 1 of the proposed revised schedule lists a few substances (19 – e.g., PCBs), with the accompanying amendments requiring the Ministers to “give priority to” the total, partial, or conditional prohibition of Part 1 substances or activities in relation to such substances, or the release of such substances into the environment. The Ministers also must consider “whether there are feasible alternatives to” a Part 1 substance. Part 2 of the proposed revised schedule would list approximately 132 substances (e.g., trichloroethylene), and as noted above these may be subject to pollution prevention measures.<sup>34</sup> Making pollution prevention a priority under Part 4 of the Act sounds on its face to be an encouraging reform. However, because that program has largely been implemented as if it was primarily a pollution abatement program, and not a pollution prevention program, such an approach is problematic when it is applied to toxic substances. Pollution abatement appears consistent with a long-held view of the chemical industry that many of the substances on the current Schedule 1 are not “toxic” in the traditional sense, and therefore should not be stigmatized and subjected to the most rigorous of measures available under the Act. Indeed, industry representatives praised the introduction of Bill C-28 (in 2021) in the following terms: “We are happy to see that the minister has recently proposed changes to CEPA that move away from the inappropriate toxic substances label”.<sup>35</sup> This view belies the fact that all of the substances on the existing Schedule 1 are there because they meet the very stringent test for being designated toxic established under section 64 of the Act and more than a few of them merit being virtually eliminated from commerce. Instead, the federal government in Bill S-5, as passed by the Senate, eliminates existing *CEPA, 1999* provisions defining and authorizing virtual elimination of such toxic substances.<sup>36</sup>

23. Third, Bill S-5, by removing the phrase “toxic substances” and bifurcating Schedule 1 not only gives credence to the industry view that labelling substances as toxic is inappropriate, but also creates legal uncertainty that has the potential for undermining the constitutionality of the Act. As noted above, the constitutionality of the Act is based

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<sup>34</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clauses 29 (replacing ss. 90(1)(2) of *CEPA, 1999*) with a new s. 90), 58 (replacing existing Schedule 1 – List of Toxic Substance of *CEPA, 1999* with Bill S-5 Schedule 1), and new Schedule 1 divided into Parts 1 (19 substances) and 2 (132 substances).

<sup>35</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, No. 026 (21 April 2021) at 1550 (Testimony of Michael Burt, Vice-President and Global Director, Climate and Energy Policy, Dow).

<sup>36</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 12, (repealing ss. 65 of *CEPA, 1999* (which defines, establishes a list for, and authorizes virtual elimination of, certain toxic substances), and 65.1 (defining “level of quantification”). Clause 21 of Bill S-5 also removes the existing

on the criminal law power as decided by the Supreme Court of Canada in its 1997 judgment in *Hydro-Quebec*. In that case, as noted above, the court was prepared to countenance the Act's approach to studying the universe of thousands of pollutants in the environment, so long as the Act only purported to control an "evil" few (i.e., the very worst actors, roughly 150 toxic substances currently out of over 23,000 in Canadian commerce). In this way, the Act left substantial room for provincial authority to address the thousands of other "non-toxic" substances and did not otherwise upset the balance of Canadian federalism (i.e., the division of powers between Parliament and provincial legislatures under the Constitution). While the chemical industry has applauded the decision to change the title of Schedule 1 to remove the reference to toxic substances, the federal government has provided no compelling reason for its proposed changes to Schedule 1. It is also contrary to the advice the House Standing Committee on the Environment and Sustainable Development provided Parliament and the Government of Canada in 2007. At that time the House Committee stated in part:

"The constitutional authority for CEPA was narrowly upheld by the Supreme Court in the [*Hydro-Quebec*] case as a valid exercise of the federal criminal law power. The removal of the word "toxic" would almost certainly invite litigation and, though unlikely, could tip the balance of the court on the issue of constitutionality".<sup>37</sup>

24. Thus, the Bill S-5 approach, coupled with an industry view, that maybe some (most?) of the substances in Schedule 1 really are not toxic in the traditional sense, has the potential to undermine the constitutional foundation of *CEPA, 1999*.<sup>38</sup> Indeed, industry has already felt emboldened to challenge in the federal courts on constitutional as well as other grounds recent federal government designations of substances as toxic under *CEPA, 1999*.<sup>39</sup> Even if challenges such as this case, or others like it, are eventually

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authority under s. 77(4) of *CEPA, 1999* for the Ministers of Health and Environment to propose measures for the virtual elimination of toxic substances.

<sup>37</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, "The Canadian Environmental Protection Act, 1999 – Five-Year Review: Closing the Gaps" in *Debates*, No. 5 (April 2007) at 46.

<sup>38</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, "Healthy Environment, Healthy Canadians, Healthy Economy: Strengthening the *Canadian Environmental Protection Act, 1999*" in *Debates*, No. 8 (June 2017) at 79 (one witness, Professor Mark Winfield, York University, appearing before the Standing Committee noted that splitting the list of toxic substances in two might have the potential to affect the construction of the constitutional basis for federal regulatory authority on toxic substances established in *Hydro-Quebec*), and 78 (another witness appearing before the Committee, Professor Dayna Scott, York University, also did not agree with dividing Schedule 1 into two lists because creating a "two-tiered" system of toxic substance regulation might lead to non-precautionary and ineffective regulatory actions).

<sup>39</sup> *Responsible Plastic Use Coalition et al. v. The Minister of the Environment* - T-824-21 – May 18, 2021 (F.C.) (application for judicial review brought by industry coalition challenging federal government decision to add "plastic manufactured items" to the Schedule 1 List of Toxic Substances under *CEPA, 1999* because decision viewed as colourable attempt to intrude on provincial jurisdiction and inconsistent with narrow federal constitutional authority under the criminal law power to control toxic substances approved under *Hydro-Quebec*). In July 2022, a second industry coalition filed an application for judicial review in

rejected by the courts, such litigation will: (1) divert limited government resources from needed regulation development to instead defend decisions under what up to now has been settled legal precedent, but for the Bill S-5 amendments; and (2) have a chilling effect on future regulatory initiatives. The combined sowing of seeds of constitutional confusion, diverting of resources, and chilling effect on needed regulation of toxic substances, are high prices to pay to make the chemical industry feel better about its products.

### *c. What Should Be Done?*

25. Parliament should: (1) restore the phrase “List of Toxic Substances” to Schedule 1; and (2) not create two Parts to Schedule 1. Any substance in Schedule 1 should be eligible for the full suite of risk management measures, including complete bans, where necessary.

26. If the federal government is concerned that the virtual elimination provision is too difficult to meet (because it requires that a level of quantification be specified before a substance can be released below that level) then it should propose amendments to that part of the provision, rather than simply eliminating the provision altogether. CELA has previously recommended a more robust virtual elimination provision that remains appropriate for consideration in Bill S-5 and is set out below (See Part IV.B, below).

27. Parliament also could modify the current section 77(4) of *CEPA, 1999* to make it clear that naturally occurring inorganic substances (e.g., lead, mercury, arsenic) are eligible for virtual elimination.<sup>40</sup> Historically, these substances have largely been subjected to pollution abatement not pollution prevention measures.<sup>41</sup> Under Bill S-5, all of these substances would be placed in Schedule 1, Part 2, not Part 1 (the latter being where prohibition would be possible). Moreover, Part 1 substances are the only ones where Bill S-5 would authorize the Ministers to consider feasible alternatives. In CELA’s view, alternatives analysis should apply to all toxic substances in Schedule 1.

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the Federal Court of Canada (*Petro Plastics Corporation Ltd., et al v. Attorney General of Canada*, Court File No. T-1468-22 (F.C.)) seeking to prevent the federal government from implementing the regulation (*Single-Use Plastics Prohibition Regulations*, SOR/2022-138) that would ban the manufacture and use of several types of single-use plastics. This judicial review application, building on the earlier one filed in May 2021, alleges, among other things, that: (1) the federal government has not demonstrated that single-use plastics are toxic; (2) the failure to demonstrate toxicity deprives the federal government of the authority to rely on the criminal law power as the basis for upholding the validity of the regulation under the *Constitution Act, 1867*; and (3) absent proof of toxicity there is no jurisdiction under *CEPA, 1999* to regulate single-use plastics.

<sup>40</sup> S.C. 1999, c. 33, s. 77(4) states in part that the Ministers of Health and Environment cannot recommend that a substance be added to the Schedule 1 List of Toxic Substances under *CEPA, 1999* and subjected to virtual elimination under s. 65(3) if the substance is a naturally occurring inorganic substance.

<sup>41</sup> See, e.g., *Secondary Lead Smelter Release Regulations*, SOR/91-155.

## B. Introducing Amendments That Change Nothing and Obscure Authority to Act

### 1. Repealing Geographically Focused Regulatory Authority Hides Ability to Address Hot Spots

28. The government summary of S-5 states that “amendments will facilitate the making of geographically targeted regulations that could, for example, be used to help address pollution ‘hot spots’”.<sup>42</sup>

29. However, *CEPA, 1999* already has enabling authority that makes geographically focused regulation possible in order to protect the environment, biological diversity, or human health. In particular, although section 330(3) provides that regulations made under the Act apply throughout Canada, section 330(3.1) permits exceptions to this rule to allow limited geographic application of regulations promulgated under the authority of sections 93 (toxic substances), 140 (fuel), 167 (international air pollution) or 177 (international water pollution).<sup>43</sup> Bill S-5 simply proposes to repeal both sections 330(3) and 330(3.1),<sup>44</sup> and nothing like them is proposed to be added to any other Bill S-5 amendments.<sup>45</sup>

30. In pursuing this approach, the federal government appears to be relying on the general authority under section 8 of the *Interpretation Act*, R.S.C. 1985, c. I-21 that states that every enactment applies to the whole of Canada, unless a contrary intention is expressed in the enactment. While this approach may allow the federal government to achieve the same result as sections 330(3) and (3.1) of *CEPA, 1999*, including addressing “hot spots”, reliance on the generality of section 8 obscures, rather than highlights, the authority to do so. In practice, there have never been any geographically focused regulations promulgated under *CEPA, 1999*, and removing the explicit authority to make such regulations hardly seems like a recipe for it to occur in future.

31. In the submission of CELA, it would be simpler, more straight-forward, and more transparent for Parliament to retain sections 330(3) and (3.1) and simply extend the authority for geographically limited regulation in subsection (3.1) to other sections of the Act that enable regulatory authority, such as section 94 (which provides for interim

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<sup>42</sup> Government of Canada, *Bill S-5: Strengthening Environmental Protection for a Healthier Canada Act: Summary of Amendments* (Ottawa February 2022) at 4.

<sup>43</sup> S.C. 1999, c. 33, ss. 330(3), 330(3.1).

<sup>44</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 54 (repealing ss. 330(3) and 330(3.1) of *CEPA, 1999*).

<sup>45</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 33 (no such amendments appear in proposed amendments to s. 93). No amendments at all are proposed for ss. 140, 167, or 177.

authority to address by order substances that are not listed in Schedule 1<sup>46</sup> and for which Bill S-5 has expanded such authority).<sup>47</sup>

#### IV. BILL S-5 FAILS TO FIX WHAT IS BROKEN

##### A. Problems Bill S-5 Fails to Remedy

##### 1. Part 4 of *CEPA, 1999*'s Authority to Require Pollution Prevention Planning is Discretionary, not Mandatory

32. Under section 56(1) of *CEPA, 1999*, the Minister of the Environment and Climate Change may publish a notice in the *Canada Gazette* requiring any person to prepare and implement a pollution prevention plan for a substance specified on the Schedule 1 List of Toxic Substances, or a substance that is an international air or water pollutant so designated elsewhere under the Act.<sup>48</sup>

33. Clause 10(1) of Bill S-5 as approved by the Senate would amend section 56(1) by authorizing the Minister to also publish a notice requiring a person to prepare and implement a pollution prevention plan in respect of a product that contains a substance specified in Schedule 1 or that may release such a substance into the environment.<sup>49</sup>

34. On its face, the proposed amendment is an improvement over the existing version of section 56(1). However, what clause 10(1) of Bill S-5 utterly fails to address is the fact that the authority granted the Minister under section 56(1) is discretionary, not mandatory. The Minister is not required to issue a notice requiring the preparation and implementation of a pollution prevention plan for every toxic substance (or product containing a toxic substance) listed in Schedule 1. This observation is not new. CELA first raised this concern over twenty years ago when what eventually became *CEPA, 1999* was still a newly introduced Bill in Parliament (Bill C-32). Following the enactment of Bill C-32, but just prior to its coming into force in 2000, CELA stated:

“The environmental community argued that pollution prevention planning should be required for all substances on the Toxic Substances List and those substances on the National Pollutant Release Inventory. Part 4, as it now stands, therefore, is a far cry from the provisions that were hoped for during the legislative process. In effect, the provisions are only triggered upon the exercise of discretion by the Minister and only for substances on the Toxic Substances List. At this point, it is not clear under what circumstances the Minister would intend to exercise his or her discretion (for

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<sup>46</sup> S.C. 1999, c. 33, s. 94.

<sup>47</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 34 (amending s. 94).

<sup>48</sup> S.C. 1999, c. 33, s. 56(1).

<sup>49</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 10(1) (amending s. 56(1)).

example, will the Minister routinely require pollution prevention planning for substances on the Toxic Substances List)?”<sup>50</sup>

35. Indeed, CELA’s concerns of two decades ago have, to an unfortunate degree, been borne out in that the total number of toxic substances for which pollution prevention plans have been required over the past two decades does not appear to have exceeded more than about a sixth of the total number of toxic substances currently listed in Schedule 1 (i.e., approximately 25 out of 150). At this rate (i.e., 25 substances every 20 years), it will take until approximately the year 2120 for the remaining 125 substances in Schedule 1 to all have pollution prevention plans (even assuming there are no additions of substances to Schedule 1 over the next 100 years; a level of inaction that seems highly unlikely).

36. In CELA’s submission, this is far too leisurely a pace for the implementation of pollution prevention planning to be taking place in Canada. Section 56(1) should at least be amended to make it mandatory, not discretionary, for the Minister to require all owners or persons responsible for substances (and products containing substances) listed in Schedule 1 to prepare and implement a pollution prevention plan by fixed dates pursuant to a timetable required to be established by regulation. Furthermore, the Act should authorize any person to petition the Minister (and failing that the Federal Court) to require such plans where, for whatever reasons, the Minister has not acted or there has not been compliance with the timetable.

## **2. Part 4 Has Been Used Too Frequently as a Pollution Abatement Measure Rather Than a Pollution Prevention Measure**

37. Part 4 of *CEPA, 1999* was meant to focus on pollution prevention as defined in the statute. However, in practice Part 4 frequently has been implemented as if it was a mere pollution abatement regime. This has had significant consequences for the effectiveness of *CEPA, 1999* as a tool for eliminating Schedule 1 substances from industry, commerce, and the environment. Section 3(1) of *CEPA, 1999* defines “pollution prevention” as meaning “the use of processes, practices, materials, products, substances, or energy that avoid or minimize the creation of pollutants and waste and reduce the overall risk to the environment or human health”.<sup>51</sup> At the time of the enactment of *CEPA, 1999*, CELA expected that the pollution prevention planning provisions would stimulate elimination of targeted substances because:

“...there is significant potential for pollution prevention plans to spark innovation to dramatically reduce or eventually eliminate some of the targeted substances. This potential is particularly reinforced since the definition of ‘pollution prevention’ in section 3 is defined in a positive way to

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<sup>50</sup> Paul Muldoon, CELA Executive Director, Speaking Notes: An Environmental Perspective on CEPA: Some Observations on How the Law was Developed and On-Going Issues for Implementation (23 November 1999) at 8-9.

<sup>51</sup> S.C. 1999, c. 33, s. 3(1).

ensure that the focus will be on the prevention of the creation or use of pollutants rather than on pollution control measures”.<sup>52</sup>

38. Indeed, this was not just CELA’s expectation. It was also the expectation of the House of Commons Standing Committee on Environment and Sustainable Development in its 1995 report to Parliament on reform of what was then *CEPA*:

“... the Committee believes that pollution prevention should be the priority approach to environmental protection. In addition, the Committee firmly believes that CEPA should provide a key legislative base for promoting pollution prevention in Canada. ...a major shift in emphasis is required in the legislation, from managing pollution after it has been created to preventing pollution in the first place. We believe that pollution prevention will avoid, eliminate and reduce more pollution than “react and cure” strategies and that it will do so more cost-effectively. To this end, we contend that emphasis should be placed on a variety of pollution prevention strategies and tools that encourage more decisions to be made at the point of manufacture or use. Such strategies and tools contribute to the efficient use and conservation of natural resources, material and feedstock substitution, product reformulation, and the adoption of clean production methods and practices.

The Committee also acknowledges that the transition to clean production and practices will inevitably be an ongoing process. There will be situations where control and remediation will remain the base available options. Nonetheless, we reiterate the need to emphasize preventive measures and to phase out pollution control methods. Pollution-control strategies should be considered only as interim measures until pollution-prevention strategies are put in place.”<sup>53</sup>

...

“The environmental objective for requiring pollution prevention planning is to overcome the inertia of decades of performance-based pollution control standards and to realign management practices to conform with a pollution prevention perspective.”<sup>54</sup>

39. In practice, it has not exactly worked out that way in Canada. In the intervening two decades since *CEPA, 1999* has come into force, more often than not “pollution prevention” plans approved by the Minister under Part 4 have instead been about pollution abatement. There is a significant difference between the two types of measures that make abatement infinitely less effective than prevention.

40. As CELA noted in its 1999 review of the results of Parliament’s consideration of Bill C-32, pollution prevention planning requirements derive from the relatively successful efforts in the United States with respect to toxics use reduction laws. Perhaps the most successful of these has been the Massachusetts *Toxics Use Reduction Act* (on which Ontario’s recently repealed statute was also based). The Massachusetts law, which resulted in a 50 percent reduction in the generation by industry of toxic or hazardous by-products in the state within ten years of the law’s coming into force, defined “toxics use reduction” as:

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<sup>52</sup> Paul Muldoon, CELA Executive Director, Speaking Notes: An Environmental Perspective on CEPA: Some Observations on How the Law was Developed and On-Going Issues for Implementation (23 November 1999) at 9.

<sup>53</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, “It’s About Our Health! Towards Pollution Prevention – CEPA Revisited” in *Debates*, No. 81 (13 June 1995) at 83.

<sup>54</sup> *Ibid.* at 85-86.

“in-plant changes in production processes or raw materials that reduce, avoid, eliminate the use of toxic or hazardous substances or generation of hazardous byproducts per unit of product, so as to reduce risks to the health of workers, consumers, or the environment, without shifting risks between workers, consumers, or parts of the environment”. Toxics use reduction shall be achieved through any of the following techniques:

1. Input substitution, which refers to replacing a toxic or hazardous substance or raw material used in a production unit with a non-toxic or less toxic substance;
2. Product reformulation, which refers to substituting for an existing end-product an end-product which is non-toxic or less toxic upon use, release or disposal;
3. Production unit redesign or modification, which refers to developing and using production units of a different design than those currently used;
4. Production unit modernization, which refers to upgrading or replacing existing unit equipment and methods with other equipment and methods based on the same production unit;
5. Improved operation and maintenance of production unit equipment and methods which refers to modifying or adding to existing equipment or methods including, but not limited to, such techniques as improved housekeeping practices, system adjustments, product and process inspections, or production unit control equipment or methods; or
6. Recycling, reuse, or extended use of toxics by using equipment or methods which become an integral part of the production unit of concern, including but not limited to filtration and other closed loop methods.<sup>55</sup>

41. The Massachusetts law also defined what was not included in the definition of toxics use reduction and therein underscored the difference between it and pollution abatement or control:

“...toxics use reduction shall not include or in any way be inferred to promote or require incineration, transfer from one medium of release or discharge to other media, off-site or out-of-production unit waste recycling, or methods of end-of-pipe treatment of toxics as waste”.<sup>56</sup>

42. Unfortunately, pollution abatement measures (i.e., methods the definition in the Massachusetts law underscore as not toxics use reduction methods), have been the predominant methods of implementing pollution prevention plans under Part 4 of *CEPA, 1999* as set out in Table 8, below:

**Table 8: Pollution Prevention Plans Approved Under *CEPA, 1999* – 2002-2023**

Substance <sup>57</sup>	Time Period Specified	Risk management objective	Implementation
<b>NOTICES NO LONGER IN EFFECT:</b>			
Acrylonitrile (used in the manufacture of synthetic rubber)	Notice published 25/05/2002. Plan prepared by 25/05/2003. Implemented by 31/05/2007.	“Reduce the release of acrylonitrile from synthetic rubber manufacturing sources to the lowest achievable level by the application of best available techniques economically achievable.”	Total releases of acrylonitrile by the single facility subject to the notice—which, alone, accounted for 82% of all releases—was reduced by 85%. (This translates to an overall reduction of 69.7%.)
Dichloromethane*	Notice published 29/11/2003.*	“Reduce aggregate dichloromethane releases by 85% from the 1995 base year levels by January 1, 2007. Note	Aggregate releases were reduced by 93% overall relative to 1995 levels. However, 3 of the 5 sectors did not achieve

<sup>55</sup> *Toxics Use Reduction Act*, Mass. Gen. L. ch. 21I, s. 2.

<sup>56</sup> *Ibid.*

<sup>57</sup> Environment and Climate Change Canada, CEPA Registry, [List of pollution prevention plan notices.](#)



		that 5 sectors had different targets specific to each sector.”	their individual objectives.*
<b>Inorganic chloramines and chlorinated wastewater effluents*</b> (and ammonia?)	Notice published 7/06/2003. Plan prepared by 7/06/2005. Implemented by 7/06/2008.	“Achieve and maintain a concentration of total residual chlorine that is less than or equal to 0.02 mg/L in effluent released to surface water by December 15, 2009.”	80% of facilities subject to the notice met the objective: as a result, residual chlorine concentration was reduced by 85% overall (the reference point for this is unclear*). Note that facilities that were subject to this notice are now subject to the Wastewater Systems Effluent Regulations under the <i>Fisheries Act</i> .
<b>Nonylphenol and its ethoxylates (NP/NPEs) contained in products*</b>	Notice published 4/12/2004.*	“Phase 2: 95% from base year levels of the total mass used or imported annually.” (base year not specified*)	NP/NPEs used in manufacturing was reduced by 96%; importation was also reduced by 96%.
<b>Nonylphenol and its ethoxylates used in textile mill wet processing*</b>	Notice published 4/12/2004.*	“For NP/NPEs used in textile wet processing, reduce the annual use by at least 97% on a mass basis relative to annual use for the base year. For textile mill effluents, achieve and maintain through means other than dilution, a maximum acute toxicity of 13% IC50 (50 percent inhibiting concentration) for effluents discharged to an off-site wastewater treatment facility no later than 2009.”	Use of NP/NPEs in these contexts was reduced by 99.99%. The effluent toxicity target was “met or partially met” by 92% of active textile mills.
<b>Specified toxic substances used in wood preservation*</b>	Notice published 22/10/2005.*	“Reduce the release of targeted toxic substances during wood preservation processes to the lowest achievable levels by the application of or by achieving equivalence with best management practices.”*	There were no reduction targets for this notice, but “3 of 4 targeted facilities eventually met their objectives” and the fourth facility closed.
<b>Toluene diisocyanates (TDIs) used in the polyurethane and other foam sector (except polystyrene)</b>	Notice published on 26/11/2011. Plan prepared by 26/11/2012. Implement by 26/11/2015.	“Reduce human exposure to TDIs through the reduction of industrial TDI emissions to the environment to the greatest extent practicable, using best available techniques economically achievable.”	“All 14 facilities achieved the risk management objectives of the notice”. Specifically: <ul style="list-style-type: none"> <li>• The overall reduction of TDI releases for the 8 facilities that actually measured or estimated on-site releases to air was 55%.</li> <li>• The reduction of TDIs for the 6 facilities that used modelling to predict TDI concentration in ambient air was 94%.</li> </ul>
<b>Specified toxic substances (inorganic arsenic compounds, inorganic cadmium compounds, lead, inorganic nickel compounds, mercury, particulate matter, polychlorinated</b>	Notice published 29/04/2006. Plan prepared by 29/10/2006. Implement by 31/12/2015 (two facilities were granted extensions until 16/11/2018).	“The application of best available techniques for pollution prevention and control to avoid or minimize the creation and release of pollutants and waste and to reduce the overall risk to the environment or human health from 11 toxic substances.”	Relative to the base year (2005), facilities reported overall reductions of: <ul style="list-style-type: none"> <li>• 48% for sulphur dioxide</li> <li>• 52% for particulate matter</li> <li>• 90% for mercury</li> </ul>

<p><b>dibenzo-para-dioxins, polychlorinated dibenzofurans, sulphur dioxide</b>) produced by base metals smelters and refineries and zinc plants</p>		<p>The progress report outlines specific targets, some of which are specific to particular facilities.</p>	<ul style="list-style-type: none"> <li>• 65% for dioxins and furans</li> <li>• Arsenic, cadmium, lead, and nickel were not subject to targets, but decreased by 33%, 86%, 46% and 63% respectively</li> </ul>
<b>NOTICES STILL IN EFFECT:</b>			
<p><b>Mercury</b> from mercury switches in end-of-life vehicles</p>	<p>Notice published 29/12/2007. Plan must be prepared within 6 months and implemented within 48 months of becoming subject to the notice. Notice is still in effect to allow other facilities to become subject to the notice.</p>	<p>“Reduce releases of mercury to the environment through participation by vehicle manufacturers and steel mills in a mercury switch management program. Ultimate objective: achieve an annual mercury switch capture rate of 90% within the first 4 years of participation in program.”</p>	<p>All facilities subject to the notice now participate in the Switch Out program and 413,328 switches have been collected.* The ultimate objective, however, was not achieved.</p>
<p><b>Mercury</b> from dental amalgam waste</p>	<p>Notice published 08/05/2010. Plan must be prepared within 3 months and implemented within 6 months of becoming subject to the notice. Notice is still in effect to allow other facilities to become subject to the notice.</p>	<p>“95% national reduction in mercury releases into the environment from dental amalgam waste, from a base year of 2000.”</p>	<p>The goal was achieved, but not because of the plan. The vast majority of dental facilities didn’t implement the plan right away. However, a 2012 survey indicated “an increase in the number of dental facilities that had adopted best management practices (BMPs) and that had installed dental amalgam separators. Several factors outside of the scope of the notice, including an increased environmental awareness of mercury waste management among dental facilities, marketing efforts from dental amalgam separators suppliers, and provincial and municipal initiatives, may have played an important role in the implementation of BMPs, including the use of dental amalgam separators.”</p>
<p><b>Bisphenol A (BPA)</b> in industrial effluents</p>	<p>Notice published 14/04/2012. Plan must be prepared within 6 months and implemented within 24 months of becoming subject to the notice. Notice is still in effect, either to allow other facilities to become subject to the notice or because 2 facilities still have not met the objective.</p>	<p>“Achieve and maintain the lowest total BPA concentration that is economically and technically feasible and is less than 1.75 µg/L in effluent released.”</p>	<p>The substance remains present in concentrations above the target for 2 of the 4 facilities subject to the notice. These facilities have agreed to pursue sampling until the achievement of the risk management objective. It is unclear if these facilities are still considered to have “implemented” the plan as suggested by the government website.</p> <p>“There has been an overall 99% reduction in the amount of BPA used. An overall reduction of 94% of BPA sent</p>

			to off-site wastewater systems was achieved. An overall reduction of 83% has been achieved to date for the average concentration of BPA in effluents.”
<b>Siloxane D4</b> in industrial effluents	Notice published on 2/06/2012. Plan must be prepared within 12 months and implemented within 60 months of becoming subject to the notice. Notice is still in effect to allow other facilities to become subject to the notice. Notice is still in effect to allow other facilities to become subject to the notice.	“To reduce total siloxane D4 releases to the aquatic environment from the sum of all facilities subject to the notice by 80%, from the preparation year levels, by the end of the implementation period.”	The objective was not met. The total D4 releases by the 6 facilities were reduced by 56%. While 5 of the 6 facilities met the target and reduced the D4 concentration in their effluents to a level that is less than or equal to 17.3 µg/L or released a total quantity of D4 in their effluents that is less than or equal to 3 kg per year, one facility did not meet the risk management objective. Because that facility is the biggest D4 user, the overall risk management objective of the notice was not met.
<b>Isoprene</b> in synthetic rubber manufacturing	Notice published 09/06/2012. Plan must be prepared within 12 months and implemented within 48 months. Notice remains in effect because one facility has yet to implement the plan: the deadline was extended to December 31, 2018.	“To reduce human exposure to isoprene through the reduction of industrial emissions of isoprene to the environment by 80% relative to the base year (2009), using best available techniques that are economically achievable.”	The only facility subject to the notice has not yet met the objective. Emissions have been reduced by 78%.
<b>Halocarbons</b> in refrigerants or air conditioners	Notice published on 21/05/2016. Plan must be prepared within 6 months and implemented within 30 months. Notice remains in effect because a tenth facility was added after the notice was published and is still implementing the plan.	“Manage halocarbon refrigerants in an environmentally-sound manner in order to minimize the release of halocarbons into the environment.”	There is no detailed progress report as there is for the other substances, only the following statement: “As of May 1, 2019, 9 companies had implemented their pollution prevention plan and therefore the companies had met the risk management objective. A 10th company is currently implementing their P2 plan and their results will be included in the next performance report. Since 2016, this P2 notice has prevented the release of more than 585 tonnes of halocarbons into the environment.”
<b>Nitrogen oxides, sulphur dioxide, and fugitive volatile organic compound (VOC) emissions</b> in the iron, steel, and ilmenite sector	Notice published on 06/05/2017. A detailed schedule of planning, reporting and implementing has been <a href="#">established</a> .	“Achieve and maintain the base level industrial emissions requirements (BLIERS) air emission targets for oxides of nitrogen (NOX) and sulphur dioxide (SO2). Implement best practices to reduce fugitive volatile organic compound (VOC) emissions, where	The ilmenite smelting facility has met its SO2 target. All other targets are to be met in 2020 or beyond (reporting postponed to September 2021 due to COVID).

		appropriate and practicable.”	
<b>Hydrazine</b> in the electricity sector	Notice published on 10/11/2018. Plan prepared by 10/11/2019 and implemented by 10/11/2021.	“Achieve and maintain a total hydrazine concentration in effluent at each final discharge point of the facility that is less than or equal to the following target levels: 26 ug/L, if discharged to a Great Lake; 26 ug/L, if discharged to a large freshwater body; 2.6 ug/L, if discharged to freshwater body that is not a large freshwater body or a Great lake; or 2.0 ug/L, if discharged to sea water.”	Deadline for plan implementation has not yet passed.
<b>Toluene diisocyanates (TDIs)</b>	Notice published on 16/02/2019. Plan prepared by 30/03/2020 and implemented by 30/03/2022.	“Reduce human exposure to TDIs through the reduction of industrial TDI emissions to ambient air to the greatest extent practicable, using best available techniques economically achievable.”	Deadline for plan implementation has not yet passed.
<b>Reaction products of 2-propanone with diphenylamine (PREPOD)</b> in chemical or rubber manufacturing	Notice published on 01/01/2020. Plan prepared by 01/06/2021 and implemented by 01/06/2023.	“Reduce the presence of PREPOD in industrial effluents by reducing the concentration of the component diisopropyldimethylacridan (DIPDMA) below its level of quantification of 0.12 ng/L.”	Deadline for plan implementation has not yet passed.
<b>Triclosan</b> in cosmetics, health products or drugs	Notice published on 10/10/2020. Plan prepared by 10/10/2021 and implemented by 10/10/2023.	“Reduce the quantity of triclosan released to the aquatic environment as a result of the use of triclosan-containing products that are imported into or manufactured in Canada.”	Deadline for plan implementation has not yet passed.

Source: Environment and Climate Change Canada, 2021<sup>58</sup>

\* Indicates link to pollution prevention plan page broken on government website, resulting in gaps in information.

43. As is apparent from a review of Table 8, with some exceptions, the predominant approach to Ministerial approval of pollution prevention plans under *CEPA, 1999*, whether for notices no longer in effect (e.g., acrylonitrile, dichloromethane, inorganic chloramines and chlorinated wastewater effluents, specified toxic substances used in wood preservation, toluene diisocyanates) or notices still in effect (e.g., siloxane D4 in industrial effluents, isoprene industrial emissions, nitrogen oxides, sulphur dioxide, fugitive volatile organic emissions, hydrazine effluent discharges), has been some type of pollution abatement or control of releases, emissions, or discharges to the environment.

44. As is also apparent from Table 8, above: (1) reduction “targets” are often vaguely defined or non-existent; (2) targets are often not met; (3) oversight appears limited in some cases; and (4) there is little information about how emission reductions are actually achieved (a point that is particularly concerning if, in reality, they simply constitute the transfer of contaminants from one environmental pathway to another or, as the

<sup>58</sup> Table 8 and the accompanying analysis were prepared by Matthew Green, an Osgoode Hall law student working with CELA, during the Fall 2021-Spring 2022 period.

Massachusetts law describes it, the “transfer from one medium of release or discharge to other media”, and also end up undermining the substitution principle in the process).

45. Furthermore, even where pollution prevention plans have attempted to address the issue of the use or creation of toxic substances, such as mercury from vehicle switches or dental amalgams, and on-site air releases of mercury during the 2006-2020 period decreased nationally, on-site disposal and land releases of mercury increased dramatically. This again simply suggests a transfer from one medium of release to another (see Table 9, below).

**Table 9: On-site Air Releases and On-site Disposal and Land Releases in Canada of Mercury (and its Compounds) a Known or Suspected Carcinogen Identified in CEPA, 1999 Schedule 1 List of Toxic Substances – 2006 to 2020**

Year	On-site Air Releases (kg)	On-site Disposal and Land Releases (kg)
2006	4,490.9	48,992.5
2007	5,168.4	33,567.1
2008	4,483.0	29,290.5
2009	3,653.8	27,599.9
2010	3,288.4	161,709.2
2011	2,464.4	49,822.8
2012	2,382.5	37,485.8
2013	2,529.3	295,400.6
2014	2,299.8	70,690.7
2015	2,234.3	55,672.2
2016	2,238.0	110,126.6
2017	2,000.3	91,266.5
2018	2,090.2	73,609.7
2019	1,911.0	93,401.9
2020	1,743.2	121,038.5
% Increase (+) or decrease (-) 2006 to 2020	<b>61.18% (-)</b>	<b>147.06% (+)</b>

**Source: Environment and Climate Change Canada, National Pollutant Release Inventory**

46. In CELA’s submission, the expected direction of the pollution prevention planning provisions of *CEPA, 1999*, based on the definition of “pollution prevention” in section 3 of the Act, and the expectation and clear preference of the House of Commons Standing Committee in its 1995 report for pollution prevention, has not been met by the manner in which the program has been implemented over the past two decades.

47. Accordingly, CELA recommends that the Bill S-5 amendments to section 56(1) of *CEPA, 1999* be augmented by providing greater specificity under section 3 of the Act regarding what pollution prevention means and does not mean along the lines of the definition of “toxics use reduction” employed in the Massachusetts *Toxics Use Reduction Act*, set out above.

### 3. Neither Part 5 nor Part 7 Address Increasing Ambient Air Quality Problems Posed by Schedule 1 Toxic Substances

48. Certain substances pose ambient (outdoor) air quality problems for human health that are not being addressed adequately, or at all, by *CEPA, 1999* and for which Bill S-5 proposes no reforms. These include six Schedule 1 toxic substances under *CEPA, 1999*: fine particulate matter (PM<sub>2.5</sub>), ground-level ozone, nitrogen dioxide, sulphur dioxide, lead, and carbon monoxide (the last listed only as part of petroleum and refinery releases).<sup>59</sup>

49. The 2017 House Standing Environment Committee report noted a 2013 World Health Organization finding that approximately 9,000 people die prematurely each year in Canada as a result of exposure to fine particulate matter alone.<sup>60</sup> Indeed, in 2021 Health Canada reported that air pollution is one of the largest risk factors for premature death and disability and estimated that above-background air pollution, including air pollution from human sources in North America, contributes to 15,300 premature deaths per year in Canada. This includes an estimated 6,600 premature deaths in Ontario, 4,000 in Quebec, 1,900 in British Columbia and 1,400 in Alberta. National morbidity or nonfatal health outcomes included 2.7 million asthma symptom days and 35 million acute respiratory days per year, with the total economic cost of all health impacts attributable to air pollution for the year being \$120 billion (2016 CAD), the equivalent of approximately 6 percent of Canada's 2016 real gross domestic product. The air pollutants focused on in the 2021 report were PM<sub>2.5</sub>, ground-level ozone, and nitrogen dioxide, but the report noted that other air contaminants contribute to air pollution health impacts, such as sulphur dioxide, and carbon monoxide.<sup>61</sup> In another recent study, the federal government reported that while between 1990 and 2017, emissions to air of lead decreased by 86 percent, since 2013, lead air emissions have been increasing, primarily due to the non-ferrous smelting and refining industry.<sup>62</sup> The potential health impacts of lead, as reported in a 2021 Health Canada study, include:

“Chronic low-level exposure to lead has been associated with nervous system effects, cardiovascular disease, decreased kidney function and reproductive problems. Lead exposure in infants and children is associated with lowered intelligence quotient (IQ) and a greater risk of attention-related behaviours. No safe level of exposure is known to exist for these neurodevelopmental outcomes. The International Agency for Research on Cancer has classified inorganic lead compounds as probably carcinogenic to humans”.<sup>63</sup>

<sup>59</sup> S.C. 1999, c. 33, Schedule 1 (List of Toxic Substances), PM<sub>2.5</sub> (item 51 on Sch. 1), ground level ozone (item 61), nitrogen dioxide (item 63), sulphur dioxide (item 64), lead (item 7), carbon monoxide (item 134(m) – (q), (z.8) – as part of petroleum and refinery releases).

<sup>60</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, “Healthy Environment, Healthy Canadians, Healthy Economy: Strengthening the *Canadian Environmental Protection Act, 1999*” in *Debates*, No. 8 (June 2017) at 40.

<sup>61</sup> Health Canada, *Health Impacts of Air Pollution in Canada: Estimates of Morbidity and Premature Mortality Outcomes – 2021 Report* (Ottawa: Government of Canada, 2021) at 6.

<sup>62</sup> Environment and Climate Change Canada, *Canadian Environmental Sustainability Indicators: Emission of Harmful Substances to Air* (Ottawa: Government of Canada, 2019) at 11.

<sup>63</sup> Health Canada, *Lead in Canadians* (Ottawa: Government of Canada, 2021).

50. While Bill S-5 contained no proposed reforms for addressing ambient air quality, evidence before the 2016 House Standing Environment Committee reviewing *CEPA, 1999* did identify certain problems and potential solutions, including: (1) Canada’s ambient air quality standards (produced pursuant to section 55 of *CEPA, 1999*) are not legally enforceable, being more in the nature of objectives or guidelines and, even if they were enforceable, some are as much as four times weaker than the corresponding American standards (which have been enforceable for almost three decades); and (2) if Canada had legally enforceable ambient air quality standards they could go a long way toward addressing environmental inequality across the country, with designation of areas failing to meet such standards being deemed to be in “non-attainment”, as is done under the United States *Clean Air Act*, and made subject to enforcement action, loss of federal funding, or other measures.<sup>64</sup>

51. The weight of evidence before the House Standing Committee caused it to recommend that *CEPA, 1999* “be amended to require the federal government to develop legally binding and enforceable national standards for air quality in consultation with the provinces, territories, Indigenous peoples, stakeholders and the public”.<sup>65</sup> In 2022, CELA drafted proposed amendments to Bill S-5 for *CEPA, 1999* that would create such a regime and will provide them under separate cover to the Standing Committee.<sup>66</sup>

## **B. Problems Bill S-5 Makes Worse**

### **1. Instead of Improving Virtual Elimination Authority Under Part 5, Bill S-5 Eliminates Virtual Elimination as a Requirement of Federal Law**

52. As noted above, Bill S-5 eliminates existing *CEPA, 1999* provisions defining and authorizing virtual elimination of certain toxic substances.<sup>67</sup> In its February 2022 summary of amendments to *CEPA, 1999* arising from Bill S-5, the federal government states that:

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<sup>64</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, “Healthy Environment, Healthy Canadians, Healthy Economy: Strengthening the *Canadian Environmental Protection Act, 1999*” in *Debates*, No. 8 (June 2017) at 40-41.

<sup>65</sup> *Ibid.* at 42.

<sup>66</sup> CELA first provided these amendments to the Senate Standing Committee on Energy, Environment and Natural Resources in March 2022. CELA has updated these amendments in light of Senate amendments to Bill S-5 for presentation to the House of Commons Standing Committee on Environment and Sustainable Development. See Canadian Environmental Law Association, *Proposed Amendments to the House of Commons Standing Committee on Environment and Sustainable Development on Bill S-5, An Act to Amend the Canadian Environmental Protection Act, 1999, etc.* (September 2022), Tab 7 (Establishing Authority for Ambient Air Quality Standards).

<sup>67</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 12, repealing ss. 65 of *CEPA, 1999* (which defines, establishes a list for, and authorizes virtual elimination of, certain toxic substances), and 65.1 (defining “level of quantification”). Clause 21 of Bill S-5 also removes the existing authority under s. 77(4) of *CEPA, 1999* for the Ministers of Health and Environment to propose measures for the virtual elimination of toxic substances.

“The unworkable provisions for virtual elimination...of toxic substances that are persistent and bioaccumulative...will be repealed and replaced with a new regime that remains risk-based but provides that toxic substances of highest risk should be managed by giving priority to prohibition.”<sup>68</sup>

53. However, the materials released by the federal government at the time of the tabling of Bill S-5 before Parliament do not explain what made the virtual elimination provisions “unworkable”. In CELA’s submission, a proper understanding of the history regarding the development of this authority and the impediments to its use should: (1) lead to amending, not removing, the virtual elimination authority; and (2) not lead to reliance on the “prohibition” approach that already exists in the statute and which, with some amendments under Bill S-5, the federal government proposes to rely on going forward.

#### *a. The Long History Surrounding Virtual Elimination*

54. It is instructive to begin a review of the history surrounding this issue starting with what the 1995 House Standing Environment Committee report envisaged for the virtual elimination provisions. What the Standing Committee wanted was: (1) to define those substances which should be tracked for virtual elimination through a sunset provision; and (2) the “elimination of the *generation, use and release* of such substances”[emphasis in original].<sup>69</sup> The Standing Committee was of the view that what the federal government wanted, however, was to ensure that proponents demonstrate that such substances will not be released.<sup>70</sup>

55. CELA took a view similar to that of the Standing Committee. In its submissions to the Senate Standing Committee on Environment and Energy during the course of the Committee’s consideration of Bill C-32, CELA noted that:

“One of the recurring themes in the CEPA review has been the goal of addressing the environmental and human health problems arising from the most dangerous substances...

There are a number of substances that are persistent, bioaccumulative and toxic. A significant amount of scientific work has been undertaken with respect to the environmental effects of toxic substances, particularly in the Great Lakes region. Throughout the CEPA review, public interest groups and the Standing Committee on Environment and Sustainable Development agreed that there is no safe level for these types of substances. It is for this reason that one of the most controversial issues in CEPA has been to determine what should be the ultimate goal with respect to these most dangerous substances.

...

Public interest groups have consistently taken the position that the only legitimate goal for the most dangerous substances is “elimination”. In this context, CELA proposed a definition that sought to eliminate the use, generation and release of substances that meet certain criteria.

<sup>68</sup> Government of Canada, *Bill S-5: Strengthening Environmental Protection for a Healthier Canada Act: Summary of Amendments* (Ottawa February 2022) at 5.

<sup>69</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, “It’s About Our Health! Towards Pollution Prevention – CEPA Revisited” in *Debates*, No. 81 (13 June 1995) at 73.

<sup>70</sup> *Ibid.*



...  
 ...s. 65(1) In this Part, “virtual elimination” means the cessation of the intentional production, use, release, export, distribution or import of a substance or classes of substances.

(2) Where a substance is produced as a by-product of the production or use of another substance, virtual elimination means changes to processes or practices or substitution of material or products to avoid the creation of [the] substance in question.”<sup>71</sup>

...

56. CELA renewed this concern when it commented on the final version of the virtual elimination provisions after Bill C-32 was enacted (the provisions currently in force in *CEPA, 1999*):

“The issue concerning virtual elimination has been debated for many years and can be stated as such: are there certain pollutants that are so dangerous owing to certain characteristics that there is no safe threshold? If there is no safe threshold, should not these substances be subject to a phase-out (that is, ensuring that there is no use or generation of the substance in question) rather than some emission limit, no matter how small?

...

Unfortunately, the virtual elimination goal still fails to meet the expectations of the environmental community. One could argue that the definition is still inconsistent with ... the pollution prevention declaration of the act (because the definition is oriented to emission reductions like a pollution control regime rather than use and generation issues as required by a pollution prevention approach) and with the *Great Lakes Water Quality Agreement* [which as interpreted by the International Joint Commission views virtual elimination as meaning the complete elimination of persistent toxic substances].<sup>72</sup>

57. The 2007 House of Commons Standing Committee review of *CEPA, 1999*, (the first to review the current version of the Act) sounded some of the same themes of concern as had been raised a decade earlier. The 2007 Standing Committee report noted that the virtual elimination provisions of *CEPA, 1999* had yet to be used and were “an abject failure”. Part of the problem in the 2007 Standing Committee’s view was the requirement that before the Minister could place a substance on the virtual elimination list established under section 65(2) of the Act the Minister first had to specify a level of quantification for the substance and only allow releases of the substance below that level of quantification. Because establishing a level of quantification was often extremely difficult to do, few substances ever made it on to the list. As a result, the 2007 Standing Committee recommended that the requirement be eliminated.<sup>73</sup> In CELA’s view, the problem with the level of quantification requirement stemmed from only trying to control releases of a substance rather than eliminate the substance from commerce altogether.

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<sup>71</sup> Paul Muldoon, CELA Executive Director, Presentation to the Senate Standing Committee on Environment and Energy on Bill C-32: The *Canadian Environmental Protection Act* (26 August 1999) at 3, 5.

<sup>72</sup> Paul Muldoon, CELA Executive Director, Speaking Notes: An Environmental Perspective on CEPA: Some Observations on How the Law was Developed and On-Going Issues for Implementation (23 November 1999) at 5, 7.

<sup>73</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, “The Canadian Environmental Protection Act, 1999 – Five-Year Review: Closing the Gaps” in *Debates*, No. 5 (April 2007) at 33-34.

58. The 2007 Standing Committee report also noted that because of the difficulty in establishing a level of quantification, the federal government resorted to using prohibition regulations under the Act as a means of managing substances of greatest concern. However, the committee was clear that prohibition regulations were a means to achieving, not a substitute for, the objective of virtual elimination.<sup>74</sup>

59. The 2017 Standing Committee review of *CEPA, 1999* described the virtual elimination provisions of *CEPA, 1999* as “dysfunctional” noting that the federal government was proposing a prohibition approach as a basis for repealing the virtual elimination provisions because: (1) implementing virtual elimination duplicates the risk management requirements that already exist by virtue of adding a substance to Schedule 1 and prohibiting by regulation use of the substance; and (2) virtual elimination only works in relation to point source releases of a substance, not diffuse releases of a substance.<sup>75</sup>

60. However, the report of the 2017 Standing Committee also noted the testimony of those witnesses who pointed out that historically the federal government’s use of the *Prohibition of Certain Toxic Substances Regulations* (SOR/2021-285, as amended) to achieve virtual elimination did not always result in prohibiting toxic substances and the products that contain them.<sup>76</sup> This is borne out by reviewing these regulations and their schedules which, while they sometimes prohibit certain substances, also authorize permitted uses and concentration limits for many other toxic substances, thus allowing them to remain in commerce and, potentially, the environment.<sup>77</sup>

### ***b. What Should be Done?***

61. In the respectful submission of CELA, if the federal government is concerned that the virtual elimination provision is too difficult to meet (because it requires that a level of quantification be specified before a substance can be released below that level) then it should propose amendments to that provision, rather than simply eliminating the provision altogether. In this regard, CELA does agree with the Bill S-5 proposal to eliminate the definition for virtual elimination contained in section 65.1 of *CEPA, 1999*. However, CELA has previously recommended a more robust virtual elimination provision that remains appropriate for consideration in Bill S-5: “virtual elimination” means (a) the cessation of the intentional production, use, release, export, distribution, or import of a substance or classes of substances; and (b) where a substance is produced as a by-product of the production or use of another substance, virtual elimination means changes to processes, practices, substitution of materials or products to avoid creation of substances in question.<sup>78</sup>

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<sup>74</sup> *Ibid.* at 34-35.

<sup>75</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, “Healthy Environment, Healthy Canadians, Healthy Economy: Strengthening the *Canadian Environmental Protection Act, 1999*” in *Debates*, No. 8 (June 2017) at 77-78.

<sup>76</sup> *Ibid.* at 79.

<sup>77</sup> *Prohibition of Certain Toxic Substances Regulations*, SOR/2021-285, as amended, Schedules 1 and 2.

<sup>78</sup> Paul Muldoon, CELA Executive Director, Presentation to the Senate Standing Committee on Environment and Energy on Bill C-32: The *Canadian Environmental Protection Act* (26 August 1999) at 5.

62. In short, the regulatory focus for such substances should be on eliminating them from the environment altogether. CELA's proposed approach is consistent with that of the 2012 Great Lake Water Quality Agreement wherein the focus is on the need to achieve virtual elimination and zero discharge of chemicals of mutual concern that could otherwise find their way into the air, water, land, sediment, and biota.<sup>79</sup> Adopting CELA's proposed approach also would be more consistent with pollution prevention and Part 4 of *CEPA, 1999* by focusing on the need to get away from the management and abatement of such substances and instead focusing on alternatives to them.

63. Parliament also should modify the current section 77(4) of *CEPA, 1999* to make it clear that naturally occurring inorganic substances (e.g., lead, mercury, arsenic) are eligible for virtual elimination.<sup>80</sup> CELA's 2022 proposed amendments to *CEPA, 1999* provide suggested language for such a reform.<sup>81</sup>

### C. Problems Bill S-5 Only Partially Addresses

#### 1. Bill S-5 Proposed Right to a Healthy Environment Lacks a Remedy

##### *a. How Bill S-5 Addresses the Right to a Healthy Environment*

64. Several provisions in Bill S-5 address a right to a healthy environment. First, the preamble to *CEPA, 1999* would be amended to state that every individual in Canada has a right to a healthy environment (as provided under the Act).<sup>82</sup> Second, Bill S-5 (creating a new subsection (a.2) for existing section 2(1) of the Act) also would require the Government of Canada to protect the right of every individual in Canada to a healthy environment as provided under the Act, subject to any reasonable limits.<sup>83</sup> In conjunction with this amendment, Bill S-5 would amend existing section 44 of *CEPA, 1999* to require the Ministers of Health and Environment to conduct research, studies or monitoring activities to support the federal government in protecting the right to a healthy environment referred to in section 2(1)(a.2).<sup>84</sup> Third, clause 5 of Bill S-5 would add a

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<sup>79</sup> Canada – United States Great Water Quality Agreement 2012 (art. 4(0) – virtual elimination for releases of chemicals of mutual concern); art. 4(p) – zero discharge for control of releases of chemicals of mutual concern; Annex 3 – need to manage chemicals of mutual concern by implementing measures to achieve virtual elimination and zero discharge).

<sup>80</sup> As noted above, S.C. 1999, c. 33, s. 77(4) states in part that the Ministers of Health and Environment cannot recommend that a substance be added to the Schedule 1 List of Toxic Substances under *CEPA, 1999* and subjected to virtual elimination under s. 65(3) if the substance is a naturally occurring inorganic substance.

<sup>81</sup> Canadian Environmental Law Association, *Proposed Amendments to the House of Commons Standing Committee on Environment and Sustainable Development on Bill S-5, An Act to Amend the Canadian Environmental Protection Act, 1999, etc.* (September 2022), Tab 4 (Retaining and Revising Virtual Elimination Authority).

<sup>82</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 2(1) would amend the preamble to *CEPA, 1999* by adding such a requirement following the first preamble paragraph.

<sup>83</sup> *Ibid.*, clause 3(2).

<sup>84</sup> *Ibid.*, clause 7 (adding a new subsection (3.1) to s. 44).

new section 5.1(1)(2) to *CEPA, 1999* which states that the Ministers (of Environment and Health) must, within two years after the coming into force of the section, develop an implementation framework for how the right to a healthy environment will be “considered in the administration of this Act”. The implementation framework must elaborate on: (1) the principles to be considered in administration of the Act, including environmental justice, avoidance of adverse effects that disproportionately affect vulnerable populations, non-regression, and intergenerational equity; and (2) the “reasonable limits” to which the right is subject resulting from consideration of social, health, scientific, and economic factors.<sup>85</sup>

***b. Analysis of the Bill S-5 Provisions on a Right to a Healthy Environment***

65. Read separately or together the provisions in Bill S-5 do not establish a right to a healthy environment. First, as a matter of law, preambles are not enforceable in and of themselves. They are merely interpretative aids.<sup>86</sup>

66. Second, the proposed Bill S-5 amendments to sections 2 and 5.1 are so circumscribed with caveats about “reasonable limits” and consideration of, for example, economic factors, that they hardly constitute recognition of environmental rights, let alone an environmental magna carta. In contrast, there are no caveats, for example, in the environmental right recognized in the Yukon *Environment Act*, which states that the “people of the Yukon have the right to a healthful natural environment”.<sup>87</sup> There is no qualifying language to make less certain the human right to housing recognized in the *National Housing Strategy Act*, when it says that: “It is declared to be the housing policy of the Government of Canada to (a) recognize that the right to adequate housing is a fundamental human right affirmed in international law”.<sup>88</sup> However, the language used in Bill S-5 clearly is intended to limit the potential impact of recognizing a right to a healthy environment.

67. Third, the commitment to develop an “implementation framework” several years down the road is pretty vague and certainly does not on its face create a stand-alone “right” of individuals to a healthy environment. It is a regime entirely dependent on the will of government; i.e., the opposite of a rights-based approach to the law. A right requires a remedy for individuals to invoke in an independent forum (i.e., a court) when, for whatever reasons, government will not act. Such a remedy-based right is precisely what is lacking in Bill S-5. Contrast the Bill S-5 approach with Yukon’s *Environment Act* which, having recognized an environmental right, then declares: “that it is in the public interest to provide every person resident in the Yukon with a remedy adequate to protect

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<sup>85</sup> *Ibid.*, clause 5.

<sup>86</sup> Kent Roach, “The Uses and Audiences of Preambles in Legislation” (2001) 47 McGill L.J. 129 at 153 (though preambles may be used to provide courts with guidance about how they should interpret statutes, there is no guarantee that courts will follow this guidance).

<sup>87</sup> RSY 2002, c. 76, s. 6.

<sup>88</sup> SC 2019, c. 29, s. 4. See also Canada, Senate Standing Committee on Energy, Environment and Natural Resources, *Bill S-5, Strengthening Environmental Protection for a Healthier Canada Act*, Evidence, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl. (17 May 2022) (David Boyd, Associate Professor, Institute for Resources, Environment and Sustainability, University of British Columbia) at 9.

the natural environment and the public trust”.<sup>89</sup> The Yukon law then does exactly that by granting to every Yukon resident the right to commence an action in court against persons who have impaired the natural environment or the government for failing to act to prevent such harm.<sup>90</sup> Section 5.1 of Bill S-5 does not on its face contemplate further amendments to *CEPA, 1999* arising from development of the “implementation framework” that could result in a true “right and remedy” being established. A technical briefing by federal officials held on the day Bill C-28 was tabled in the House of Commons did not leave such an impression either.<sup>91</sup>

***c. What Previous Parliamentary Committees Have Recommended***

68. The 1995, 2007, and 2017 reports of the House of Commons Standing Committee on the Environment and Sustainable Development, and the 2008 report of the Senate Standing Committee on Energy, Environment and Natural Resources, when read together, provide a better foundation for developing amendments to *CEPA, 1999* that would enhance both procedural and substantive rights to a healthy environment.

69. The 1995 House committee report found that: “Exposure to toxic substances has the potential to cause a broad range of physical harm, including cancer, genetic mutations, central nervous system disorders, fetal and birth injuries, lung disease and sterility”.<sup>92</sup> As a result, the 1995 report recommended that: (1) the “remedies available to Canadians for violations under the Act be broadened [because] the existing remedies are too few and too restrictive. They must be strengthened if Canadians are to be encouraged to take active part in protecting their environment”;<sup>93</sup> and (2) “the federal government [should] be encouraged to provide in *CEPA* a civil remedy for the creation of environmental risk...and once a plaintiff had presented a *prima facie* case demonstrating that the defendant had caused the environmental risk complained of, the onus would be placed on the defendant to disprove causation of injury to the plaintiff”.<sup>94</sup>

70. The 2007 House committee report found that: “One of the expected outcomes of *CEPA 1999*, according to the Formative Evaluation of the Act, was ‘the opportunity to initiate investigations of alleged offences, recover personal damage and economic loss, make personal claims and file citizens’ suits.’ The environmental protection action

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<sup>89</sup> RSY 2002, c. 76, s. 7.

<sup>90</sup> RSY 2002, c. 76, s. 8.

<sup>91</sup> CELA attended a federal government technical briefing by conference call held on Bill C-28 on April 13, 2021, and was advised by government officials in attendance that no further amendments to *CEPA, 1999* were expected arising from development of the implementation framework. Bill C-28 proceeded no further due to the intervening Fall 2021 federal election, but was re-introduced as Bill S-5, this time in the Senate of Canada, in February 2022.

<sup>92</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, “It’s About Our Health! Towards Pollution Prevention – *CEPA* Revisited” in *Debates*, No. 81 (13 June 1995) at 229.

<sup>93</sup> *Ibid.* at 225.

<sup>94</sup> *Ibid.* at 230-231.

(section 22), however, has yet to be used”.<sup>95</sup> Section 22 was the provision that had been added to the Act in 1999 to meet some of the concerns identified by the 1995 report. The consensus on the 2007 committee was that there appeared to be too many barriers to invoking section 22 to make it an effective provision for citizens to use in the courts (e.g., the need for an individual to first request the Minister to conduct an investigation, the need for an offence to have been committed, and the need for the offence to have caused significant harm to the environment). As a result, the 2007 report recommended that section 22(2) of the Act should be amended to allow an environmental protection action to be brought in the courts “if the offence may result in harm or serious risk of harm to the environment or human, animal or plant life or health”.<sup>96</sup> A similar recommendation was made in 2008 by the Senate committee when it recommended that *CEPA, 1999* be amended by removing the need for citizens to show that an action has caused significant environmental harm before being able to proceed with an environmental protection action.<sup>97</sup> The 2007 and 2008 reports did not result in any amendments to *CEPA, 1999*.

71. The 2017 House committee report found that section 22 of the Act continued to be unused by members of the public. The 2017 report suggested that one reason that may account for why section 22 had not been used is the “strict test” for bringing an environmental protection action, which requires that the alleged offence “caused significant harm to the environment” as opposed to any harm. The 2017 report noted that the federal government’s 2016 discussion paper raised the possibility of amending *CEPA, 1999* “to lower the threshold for bringing an environmental protection action from an allegation that the offence caused “significant harm” to simply that it caused “harm” to the environment. Such a change would have been consistent with the recommendation made in the 2008 Senate committee report, noted above, and is, in fact, one of the recommendations the 2017 report made for amending section 22 along with removing as a prerequisite to an individual bringing an environmental protection action, the requirement that the individual first request that the Minister conduct an investigation.”<sup>98</sup>

#### ***d. What Bill S-5 Failed to Do***

72. Bill S-5 deviates significantly from these Standing Committee recommendations. For example, the government could have amended existing section 22 of the Act, as recommended by the 2017 Standing Committee. However, the government made no changes to section 22 in Bill S-5. As noted above, section 22 authorizes any person, after requesting an investigation by the Minister where the Minister fails to conduct an investigation or responds unreasonably, to bring an environmental protection action in a

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<sup>95</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, “The Canadian Environmental Protection Act, 1999 – Five-Year Review: Closing the Gaps” in *Debates*, No. 5 (April 2007) at 40.

<sup>96</sup> *Ibid.* at 40-41.

<sup>97</sup> Canada, Senate Standing Committee on Energy, Environment and Natural Resources, “Sixth Report: The Canadian Environmental Protection Act (1999, c. 33) – Rx: Strengthen and Apply Diligently” in *Debates*, (March 2008) at recommendation 14.

<sup>98</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, “Healthy Environment, Healthy Canadians, Healthy Economy: Strengthening the *Canadian Environmental Protection Act, 1999*” in *Debates*, No. 8 (June 2017) at 37-39.

court of competent jurisdiction where there has been an offence committed under the Act that has caused significant environmental harm. Unfortunately, section 22 is circumscribed by many caveats, procedural obstacles, and conflicting legal principles, as noted above. As a result, it has not been invoked by any member of the public since *CEPA, 1999* came into force in 2000.

73. It bears noting that in testimony before the House Standing Committee in October 2016, federal government officials also confirmed that with respect to section 22: (1) this citizen suit provision has not been used since its passage; (2) the existing provision constitutes a high threshold for individuals seeking to bring such an action; and (3) the Environment Minister wanted this brought to the Standing Committee's attention for consideration.<sup>99</sup> However, there is more than just one aspect to section 22 that is problematic. As CELA noted in testimony before the Standing Committee in May 2016:

“Currently, under section 22, an action cannot be commenced by an individual unless:

- (1) the individual has first applied to the Minister for an investigation of an alleged offence committed under the Act (section 17);
- (2) the Minister failed to conduct an investigation and report within a reasonable time (section 22(1)(a));
- (3) the Minister's response to the investigation was unreasonable (section 22)(1)(b));
- (4) the alleged offence “caused significant harm to the environment” (section 22(2)(b)).

Furthermore, under section 24(a) of the Act, an environmental protection action may not be brought if the alleged conduct was taken “to correct or mitigate harm or the risk of harm to the environment or to human, animal or plant life or health”.

The cumulative impact of these various barriers is that there are no reported cases of an environmental protection action having been invoked by a member of the public since *CEPA, 1999* came into force in 2000. In its March 2008 report on *CEPA, 1999*, the Senate Standing Committee on Energy, Environment and Natural Resources recommended removing the need for citizens to show that an action caused significant environmental harm before being able to proceed with an environmental protection action.

CELA submits that all of the above barriers to the bringing of a section 22 environmental protection action be examined by the Standing Committee with a view to their removal.<sup>100</sup>

74. CELA continues to be of the view that all the above provisions of the Act need to be reconsidered if section 22 is to become an effective enforcement tool. At a minimum, it should not be necessary to demonstrate both a violation of the Act and significant harm to succeed. It also should not be necessary in emergency situations to first request that the

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<sup>99</sup> House of Commons, Standing Committee on Environment and Sustainable Development, *A Review of the Canadian Environmental Protection Act, 1999*, Evidence, No. 28, 1<sup>st</sup> Sess., 42<sup>nd</sup> Parl. (6 October 2016) (John Moffet, Director General, Legislative and Regulatory Affairs Directorate, Environment and Climate Change Canada – “ECCC”) at 2, 6-7.

<sup>100</sup> CELA Letter to Cynara Corbin, Clerk of the Standing Committee on Environment and Sustainable Development, June 16, 2016 (Response to Questions Posed by Standing Committee Members at May 19, 2016 Hearing) at page 18.

Minister conduct and report upon the results of an investigation and then determine if the Minister's response was unreasonable. The merits of an environmental protection action should stand or fall on their own weight.

75. The 2017 Standing Committee and persons appearing before the Committee believed section 22 could be re-fashioned into a workable remedy for members of the public to use in the courts in vindicating a right to a healthy environment. In 2022, CELA drafted such amendments to section 22 and presented them to the Standing Senate Standing Committee on Energy, Environment and Natural Resources on Bill S-5 and will be re-filing them with this House Standing Environment Committee as part of a larger set of proposed changes to *CEPA, 1999*.<sup>101</sup> While neither the full Senate, nor the Standing Senate Committee, adopted the CELA amendments on section 22, in June 2022, the Committee made the following observations in its report to the Senate of Canada on Bill S-5 arising from the Committee's hearings:

“4. This committee would like to state their concern that the right to a healthy environment cannot be protected unless it is made truly enforceable. This enforceability would come by removing the barriers that exist to the current remedy authority within Section 22 of CEPA, entitled “Environmental Protection Action.” There is concern that Section 22 of CEPA contains too many procedural barriers and technical requirements that must be met to be of practical use. As Bill S-5 does not propose the removal or re-evaluation of these barriers, this Committee is concerned that the right to a healthy environment may remain unenforceable.”<sup>102</sup>

76. Finally, the proposed Global Pact for the Environment, currently under discussion at the United Nations, also provides guidance on what a true right to, and remedy to ensure, a healthy environment would look like.<sup>103</sup> Article 1 of the Pact (Right to an ecologically sound environment) states: “Every person has the right to live in an ecologically sound environment adequate for their health, well-being, dignity, culture and fulfilment”. Moreover, Article 11 of the Pact (Access to environmental justice) states: “Parties shall ensure the right of effective and affordable access to administrative and judicial procedures, including redress and remedies, to challenge acts or omissions of public authorities or private persons which contravene environmental law, taking into consideration the provisions of the present Pact”.<sup>104</sup> Taken together, these articles provide the foundation for establishing a true right and remedy with respect to a right to a healthy environment in Canada.

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<sup>101</sup> Canadian Environmental Law Association, *Proposed Amendments to the House of Commons Standing Committee on Environment and Sustainable Development on Bill S-5, An Act to Amend the Canadian Environmental Protection Act, 1999, etc.* (September 2022), Tab 2 (Right to a Healthy Environment and Remedy).

<sup>102</sup> The observations report does not explain why these matters were not the subject of amendments despite the nature of the observations in the report about the noted deficiencies in Bill S-5. See *Journals of the Senate* (20 June 2022) at 761.

<sup>103</sup> United Nations General Assembly, Report of the Secretary General on Gaps in International Environmental Law and Environment-Related Instruments: Towards a Global Pact for the Environment, UNGAOR, UN Doc. A/73/419 (30 November 2018) at paras 18-19, 75-76, 102.

<sup>104</sup> Le Club des Juristes, *Draft Project: Global Pact for the Environment* (Preliminary Draft) (Paris: 24 June 2017), arts. 1, 11.



### *e. What Should Be Done?*

77. Canada can do much better than what is currently in Bill S-5 on the issue of a right to a healthy environment. Canadians should not have to wait another 15 to 20 years to learn that the “right” recognized in Bill S-5 turned out to be unused because of obstacles to its use and necessitated resolution in the next review of *CEPA, 1999* (or its successor). Bill S-5 should be amended now to ensure Canadians have a true right to a healthy environment with appropriate remedies.

## **2. Substituting Safer Alternatives for Toxic Substances is Not, But Should Be, a Central Focus of Bill S-5 Amendments**

78. Previous Parliamentary committees have supported the substitution principle; namely that as part of a risk management strategy, replacing problematic substances with safer alternatives should be a primary goal of, and highlighted more in, *CEPA, 1999*.<sup>105</sup> Indeed, evidence heard by the Parliamentary committees emphasized that the substitution principle has become a bedrock foundation of the European Union’s REACH chemicals legislation.<sup>106</sup>

79. However, that has not been the case under *CEPA, 1999* and amendments contained in Bill S-5 fall well short of that goal. There are at least five main concerns with Bill S-5’s approach to the issue of alternatives. First, unlike the REACH regime in Europe,<sup>107</sup> Bill S-5 does not establish a systemic, comprehensive approach to enshrining substitution as a central component to, and ultimate goal of, the governmental decision-making process on toxic substances. Instead, by comparison, Bill S-5 is grudging, ad hoc, minimalist, and indirect in reforming *CEPA, 1999* on the issue of alternatives. There are only three explicit references to alternatives (or substitution) in the entirety of Bill S-5, and a fourth provision that, while it is silent on the issue of alternatives, the federal government suggests will support the shift to safer chemicals:

- The preamble;<sup>108</sup>

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<sup>105</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, “The Canadian Environmental Protection Act, 1999 – Five-Year Review: Closing the Gaps” in *Debates*, No. 5 (April 2007) at 38-39. See also Canada, House of Commons Standing Committee on Environment and Sustainable Development, “Healthy Environment, Healthy Canadians, Healthy Economy: Strengthening the *Canadian Environmental Protection Act, 1999*” in *Debates*, No. 8 (June 2017) at 72-76.

<sup>106</sup> *Ibid.*

<sup>107</sup> European Commission Regulation (EC) 1907/2006 of December 2006 Concerning the Registration, Evaluation, Authorization and Restriction of Chemicals [“REACH”], [2006] OJL396/1, Title VII, Authorization, arts. 55-66. Art. 55 sets out the aim of Title VII as ensuring the “good functioning of the European market while assuring that the risks from substances of very high concern are properly controlled and that these substances are progressively replaced by suitable alternative substances or technologies where these are economically and technically feasible. To this end all manufacturers, importers and downstream users applying for authorizations shall conduct an analysis of the availability of alternatives and consider their risks, and the technical and economic feasibility of substitution.” Thereafter, Title VII consists of over ten pages of detailed directives on substitution.

<sup>108</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 2(6), replacing the

- Amended section 68 (about collecting data regarding the existence of alternatives,<sup>109</sup> a provision which, in slightly modified form, has been in *CEPA, 1999* for over twenty years and has had no discernible effect on accelerating substitution of less toxic, or non-toxic, substances over this period in Canada);
- Amended section 90(1.2) (respecting feasible alternatives to a toxic substance being a factor to consider in developing a proposed regulation for Schedule 1, Part 1 substances);<sup>110</sup> and
- Amended sections 75.1 (defining the “watch list”)<sup>111</sup> and 77(2)(b) (adding substances to the watch list).<sup>112</sup>

80. Second, Bill S-5 only has a very short list of substances in proposed Part 1 of Schedule 1 that are eligible for substitution (i.e., containing less than 13 percent of all toxic substances in Schedule 1).<sup>113</sup>

81. Third, the Bill S-5 Part 1 list is only 35 percent as long (19 substances, or only 30 percent as long if substances listed in Part 1 but long banned from Canadian commerce,

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13<sup>th</sup> paragraph of the preamble to state: “Whereas the Government of Canada recognizes the importance of encouraging the progressive substitution of substances, processes and technologies with alternatives that are safer for the environment and human health, when they are economically and technically viable”. See also Government of Canada, Backgrounder, “Government of Canada Delivers on Commitment to Strengthen the Canadian Environmental Protection Act, 1999 and Recognizes a Right to a Healthy Environment” (13 April 2021) (noting that to support the shift to safer chemicals, the government will recognize, in the preamble, the importance of encouraging the progressive substitution of substances with alternatives that are safer for the environment or human health).

<sup>109</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 16(4) (replacing s. 68(a)(xii) with new subparagraph (xii) respecting collecting/generating data or conducting investigations on existence, development, and use of safer or more sustainable alternatives to substance or product).

<sup>110</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 29.

<sup>111</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 20 replacing ss. 76 and 76.1 with s. 75.1 (requiring Minister to compile/amend list from time to time that specifies substances Ministers have reason to suspect are capable of becoming toxic or been determined capable of becoming toxic).

<sup>112</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 21(1) repealing and replacing s. 77(1)-(4) with ss. 77(1)-(3) (including s. 77(2)(b) authorizing Ministers to recommend adding substances to list created by s. 75.1)). See also Government of Canada, Backgrounder, “Government of Canada Delivers on Commitment to Strengthen the Canadian Environmental Protection Act, 1999 and Recognizes a Right to a Healthy Environment” (13 April 2021) at 3 (noting proposed amendments will require the Minister to publish and maintain a “watch list” of substances determined to be capable of becoming toxic under the Act if, for example, exposure increased and noting further that the list will help importers, manufacturers and Canadian consumers to select safer alternatives and avoid regrettable substitutions by avoiding replacing one problem chemical with another that in turn becomes a problem).

<sup>113</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 58 and Schedule 1, Part 1 (19 substances) (19 / 151 [total number of substances in Schedule 1] equals 12.6 percent).

like PCBs, are not counted), compared to REACH's Annex XIV (54 substances).<sup>114</sup> As a result, Bill S-5 fails to include known or suspected carcinogens in Part 1 that REACH includes in its Annex XIV (e.g., trichloroethylene).<sup>115</sup>

82. Fourth, under Bill S-5 alternatives analysis has no role to play in considering toxic substances listed in proposed Part 2 of Schedule 1 – containing 87 percent of all toxic substances in Schedule 1<sup>116</sup> – due to the effect of proposed section 90(1.2), noted above.

83. Fifth, the government suggestion that the watch list will help importers and manufacturers to select safer alternatives seems far-fetched, if not wishful thinking. The only two provisions in Bill S-5 that mention the watch list are section 75.1, which defines the list, and section 77(2)(b), which allows the Ministers to propose adding a substance to the watch list. The federal government suggests that adding a substance to the watch list could occur “if the substance is of potential concern and requires monitoring”.<sup>117</sup> However, there is nothing in the amendments that would obligate the government to monitor, or require monitoring, let alone to review, modify, or act on the substances on the watch list in any way. In fact, the watch list is reminiscent in many ways of section 76 of *CEPA, 1999*, a far more sophisticated requirement than the watch list provisions, respecting establishment of a priority substances list (“PSL”), a provision that Bill S-5 would repeal.<sup>118</sup> The PSL requirement, under section 76 of the Act, obligates the Ministers to establish, and add to, a list, substances the Ministers are satisfied priority should be given in assessing whether they are toxic or capable of becoming toxic.<sup>119</sup> Unfortunately, in 1999, 2002, and 2008 the federal environment commissioner issued three stinging audits of the federal government's approach to the PSL provisions. The 1999 federal environment commissioner's audit, for example, found that the federal government: (1) did not track the releases of 40 percent of the substances on one of the PSLs; (2) proposed using voluntary measures to manage substances on the list; (3) was unable to reliably measure whether reduction targets for priority substances were achieved; and (4) took too long in its risk assessments of substances and, where assessments were completed, failed to characterize risks and sources of exposure. The 2002 audit found that the federal government: (1) still had not published final decisions on some substances after 13 years of the substances being on the list; and (2) lacked sufficient information on toxicity. The 2008 audit found that the federal government still

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<sup>114</sup> REACH, Annex XIV consists of 54 substances (19 / 54 equals 35 percent). Substances in Annex 14 being substances of very high concern are subject to authorization, which entails undertaking of an alternatives analysis, before continued use is permitted, if at all.

<sup>115</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), Schedule 1, Part 2 (trichloroethylene is listed as item 40 in Part 2); REACH, Annex XIV (trichloroethylene is listed in Annex XIV).

<sup>116</sup> One hundred thirty-two (132) [substances in Part 2] / 151 [substances in Schedule 1] equals 87.4 percent.

<sup>117</sup> Government of Canada, *Bill S-5: Strengthening Environmental Protection for a Healthier Canada Act: Summary of Amendments* (Ottawa February 2022) at 4.

<sup>118</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 20 (replacing ss. 76 and 76.1 with s. 75.1).

<sup>119</sup> S.C. 1999, c. 33, s. 76(1).

had incomplete assessments on several substances and until the government could conclude whether the substances were toxic, no risk management measures could be imposed to control the risks the substances might present.<sup>120</sup> These problems eventually caused section 76 to fall out of use in favour of the Chemicals Management Plan, which ran from 2006 to 2020. But given the sketchy nature of the watch list provisions in Bill S-5, it is hard to imagine the proposed amendments being useful for anything, let alone encouraging the use of alternatives, in light of the PSL experience.

84. Previous Parliamentary committees heard and/or recommended many proposals for improving the role of alternatives analysis with respect to toxic substances, including:

- Amending *CEPA, 1999* to ensure efforts to replace toxic substances with suitable alternatives or technologies are considered in pollution prevention, risk assessment and management, and virtual elimination authorities, including their risks and the technical and economic feasibility of substitution;<sup>121</sup>
- Amending section 2(1) of *CEPA, 1999* by adding the substitution principle so that its implementation becomes a duty of the federal government;
- Amending the risk management provisions of the Act, under Part 5, to require alternatives assessment and place the burden on industry to show that safer alternatives are not available;
- Requiring safer substitutes for substances listed in Schedule 1 that are carcinogenic, mutagenic, toxic to reproduction, very persistent and very bioaccumulative, and endocrine disrupting.<sup>122</sup>

85. CELA also drafted measures for the consideration of the Ministers respecting alternatives in its 2022 proposed amendments of Bill S-5 respecting *CEPA, 1999*.<sup>123</sup> With some exceptions, Bill S-5 neither adopts proposals reviewed by the 2007 and 2017 Parliamentary committees', nor CELA's proposals, but should be amended to do so.

### **3. Where Available Information on Endocrine Disrupting Substances and Vulnerable Populations is Insufficient, Bill S-5 Reforms Fail to Require Testing**

86. For the purpose of assessing whether a substance is toxic or capable of becoming toxic under section 68 of the Act, amendments in Bill S-5 would authorize the Minister of Environment to collect data and conduct investigations in relation to whether a substance

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<sup>120</sup> Joseph F. Castrilli, *Annotated Guide to the Canadian Environmental Protection Act: Volume 1*, looseleaf (Toronto: Thomson Reuters, 2022) at § CEPA:15.

<sup>121</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, "The Canadian Environmental Protection Act, 1999 – Five-Year Review: Closing the Gaps" in *Debates*, No. 5 (April 2007) at 39.

<sup>122</sup> Canada, House of Commons Standing Committee on Environment and Sustainable Development, "Healthy Environment, Healthy Canadians, Healthy Economy: Strengthening the *Canadian Environmental Protection Act, 1999*" in *Debates*, No. 8 (June 2017) at 74.

<sup>123</sup> Canadian Environmental Law Association, *Proposed Amendments to the House of Commons Standing Committee on Environment and Sustainable Development on Bill S-5, An Act to Amend the Canadian Environmental Protection Act, 1999, etc.* (September 2022), Tab 3 (Mandatory Pollution Prevention Planning).

has the ability to disrupt the endocrine system of an organism.<sup>124</sup> This amendment will improve existing law in relation to endocrine disrupting substances. The failure to explicitly mention disruption of the endocrine system in the existing law up to now allowed many substances to escape scientific review at the categorization and chemicals management stages under *CEPA, 1999* if they did not exhibit any other type of toxicity.<sup>125</sup>

87. Bill S-5 amendments would also replace the existing categorization authority of *CEPA, 1999*<sup>126</sup> with a requirement that the Ministers must develop and publish a plan within two years after the coming into force of the requirement, that specifies which substances should be given priority for: (1) assessment to determine if they are toxic or capable of becoming toxic; and (2) management of the risk posed by the substances. Substances that could disrupt the endocrine system of an organism are specifically identified as substances that must be taken into account in developing the proposed plan.<sup>127</sup>

88. However, even with the proposed Bill S-5 amendments, the Minister is not authorized under section 68 to require testing by industry with respect to endocrine disruption or, for that matter, whether a substance causes “carcinogenic, mutagenic or neurotoxic effects”. Collecting data but not requiring testing can be the Achilles heel of a statute’s approach to assessing the toxicity of substances. Indeed, under the existing Act even where authority to require testing does exist (such as in section 71(1)(c)) actual instances of requiring industry to test have been rare due, in part, to other *CEPA, 1999* provisions, such as section 72, that CELA submits requires amendment or repeal, discussed below.

89. Similarly, Bill S-5 amendments also will allow the Ministers of Environment and Health to consider available information on vulnerable populations and cumulative effects in relation to a substance when engaging in a weight of evidence evaluation for a screening assessment or other risk analysis under proposed section 76.1(2). This too would improve existing law by explicitly acknowledging for the first time in the Act the need to consider available information relating to vulnerable populations and cumulative effects. However, there often is not any (or not adequate) information available and the

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<sup>124</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 16(3) (adding new subsection 68(a)(vi.1)).

<sup>125</sup> Joseph F. Castrilli, “Canadian Regulation of Toxic Substances: Model or Muddle?” (2013), 15 ABA Int. Env. & Resources L. Committee Newsletter 31-35.

<sup>126</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 19 (repealing s. 73 of *CEPA, 1999*).

<sup>127</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 19 (adding s. 73(3)(c), which refers to amended s. 68(a)(vi.1)).

amendments do not require that the Ministers direct that testing be undertaken by industry where there is an information gap.<sup>128</sup>

90. Testing has been a central requirement under the laws of other countries. It has not been under *CEPA, 1999*. Although section 71(1)(c) has not been the subject of judicial interpretation, a similar requirement under the federal law of the United States has been. In this regard, section 71(1)(c) of *CEPA, 1999* may be compared with section 2603 of the *Toxic Substances Control Act* (“*TOSCA*”), which directs the Environmental Protection Agency of the United States (“*USEPA*”) to require chemical manufacturers, distributors, processors and others to conduct tests for existing chemicals if: (1) the manufacture, distribution, processing, use, or disposal of the chemical “may present an unreasonable risk” of injury to health or the environment; or (2) the chemical is produced in very large volume and there is a potential for a substantial quantity to be released into the environment or substantial or significant human exposure. Under either condition, *USEPA* must issue a rule requiring tests (known as a test rule) if: (a) existing data are insufficient, and (b) testing is necessary to develop the data.<sup>129</sup> The courts of the United States have upheld *USEPA* test rules where, in light of the evidence before them, the existence of an “unreasonable risk of injury to health” is a substantial (i.e., more than theoretical) probability. Since “unreasonable risk of injury to health” is a function of toxicity and exposure, this standard has been restated as follows: A test rule is warranted when there is a more-than-theoretical basis for suspecting that some amount of exposure occurs and that the substance is sufficiently toxic at that exposure level to present an “unreasonable risk of injury to health”.<sup>130</sup>

91. Bill S-5 does propose amendments to existing section 71(1)(c) to specify in more detail the types of information that a ministerial notice may require be provided, including with respect to testing procedures, laboratory practices and conditions.<sup>131</sup> The amendments appear to be based on suggestions provided by the federal government in a 2016 discussion paper<sup>132</sup> that preceded the review of *CEPA, 1999* conducted by the House Standing Environment Committee.

92. The problem with the Bill S-5 amendments and the earlier federal government proposal is that they fail to deal with the obstacles posed by section 72 of the Act; in

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<sup>128</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 20 (amending s. 76.1 by adding a subparagraph (2) respecting consideration of available information on vulnerable populations and cumulative effects).

<sup>129</sup> U.S.C.A. § 2603(a)(b) (West 2022).

<sup>130</sup> See *Chemical Manufacturers Association v. U.S. Environmental Protection Agency*, 859 F.2d 977 (D.C. Cir. 1988).

<sup>131</sup> Bill S-5, *An Act to amend the Canadian Environmental Protection Act, 1999 etc.*, 1<sup>st</sup> Sess., 44<sup>th</sup> Parl., 70-71 Eliz. II, Senate of Canada (as passed following 3<sup>rd</sup> Reading, 22 June 2022), clause 18(6) (adding subsections 71(2.2)(2.3)).

<sup>132</sup> Environment and Climate Change Canada, Discussion Paper: Canadian Environmental Protection Act, 1999 – Issues and Possible Approaches (Ottawa: ECCC, May 2016) at 33 (suggesting amending the Act to provide the Minister with express authority under s. 71 to request information on methodology, data, models used, toxicological or other tests performed, in furtherance of the purpose of assessing whether a substance is toxic or capable of becoming toxic).

particular that the Minister may not exercise the powers under section 71(1)(c) [i.e., require persons to conduct toxicological or other testing] unless the Ministers already have reason to suspect that the substance is toxic or capable of becoming toxic. As CELA indicated in our June 16, 2016 submission to the Standing Committee:

“The primary problem with certain key sections of *CEPA, 1999* relating to existing substances is that they place the burden of proof on the Minister not industry for anything that is already on the market. Thus, the issue is not what should trigger an assessment of a substance so much as who has the burden of demonstrating safety. For example, the Minister of Environment does not have the authority to request that industry conduct toxicological and other tests under section 71(1)(c) if, under section 72, the Ministers of Health and Environment do not have reason to suspect that the substance is toxic or capable of becoming toxic. This is a distinct contrast to the situation under REACH in Europe where the onus with respect to the generation of data is squarely on industry for anything that is on the market”.<sup>133</sup>

93. In the absence of amendment or repeal of section 72 the proposed Bill S-5 reform may not be effective in achieving the goal of greater information acquisition. What is fundamentally lacking is a mechanism compelling testing to occur when, for whatever reasons, government does not require it. In June 2022, the Standing Senate Committee on Energy, the Environment and Natural Resources presented its report to the full Senate of Canada on amendments to Bill S-5 arising from the committee’s hearings. The Standing Committee’s report also included certain observations, including the following:

“5. This committee wishes to convey their concern surrounding industry data collection where information gaps exist on the toxicity of substances they use or emit. Bill S-5 authorizes collection of data on whether a substance is an endocrine disruptor. Bill S-5 also authorizes the Minister to consider available information on vulnerable populations and the cumulative effects of a potential toxic substance. However, in none of these cases does Bill S-5 direct the Minister to require testing by industry when data gaps exist on whether a substance is toxic or is capable of becoming toxic. In such instances, this committee believes that testing should be done by industry where and when available information on substance toxicity is unavailable or inconclusive.”<sup>134</sup>

94. CELA’s 2022 proposed amendments state that the Minister shall require the person to conduct toxicological and other tests on a substance where information is lacking or not adequate to allow a determination of whether a substance is toxic or capable of becoming toxic, and to submit the results of the tests to the Minister.<sup>135</sup> Language of this type in the law would permit third party enforcement, for example, by persons with a right to a healthy environment.

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<sup>133</sup> CELA Letter to Cynara Corbin, Clerk of the Standing Committee on Environment and Sustainable Development, June 16, 2016 (Response to Questions Posed by Standing Committee Members at May 19, 2016 Hearing) at pages 5-6.

<sup>134</sup> *Journals of the Senate* (20 June 2022) at 752-762.

<sup>135</sup> Canadian Environmental Law Association, *Proposed Amendments to the House of Commons Standing Committee on Environment and Sustainable Development on Bill S-5, An Act to Amend the Canadian Environmental Protection Act, 1999, etc.* (September 2022), Tab 5 (Mandatory Testing).

## V. CONCLUSIONS

95. *CEPA, 1999* has not been amended significantly for two decades. During this period, the nature and extent of human health and environmental challenges associated with the manufacture, import, distribution, processing, use, and disposal of chemicals have proliferated in industry and commerce. The Act has not kept pace with the increased challenges, yet Bill S-5, with some exceptions, proposes to fix what is not broken, while failing to fix what is not working. If we do not see the next series of amendments to the law after Bill S-5 for another twenty years, Canada by that time will be ill-served by an out-of-date statute for which so much more was expected. The House of Commons should strongly consider improvements to *CEPA, 1999* that go beyond what is contained in Bill S-5. CELA, in its submissions, has pointed the way to some amendments that might be of assistance in this regard.

## VI. RECOMMENDATIONS

96. Considering the foregoing, CELA makes the following recommendations in respect of the Bill S-5 proposed amendments to *CEPA, 1999*:

### **Don't Fix What Isn't Broken**

#### **Retain Name of Schedule 1 as "List of Toxic Substances" and Do Not Divide Schedule Into Two Parts**

(a) Parliament should: (1) retain the phrase "List of Toxic Substances" to Schedule 1; and (2) not create two Parts to Schedule 1. Any substance in Schedule 1 should be eligible for the full suite of risk management measures, including complete bans, where necessary.

#### **Retain and Extend Sections 330(3) and (3.1) to Address Substances on Geographically Limited Basis to Explicitly Deal With Hot Spots**

(b) Parliament should retain sections 330(3) and (3.1) and simply extend the authority for geographically limited regulation in subsection (3.1) to other sections of the Act that enable regulatory authority, such as section 94 (which provides for interim authority to address by order substances that are not listed in Schedule 1).



## **Do Fix What is Broken**

### **Make Pollution Prevention Planning Mandatory**

(c) Section 56(1) should at least be amended to make it mandatory, not discretionary, for the Minister to require all owners or persons responsible for substances (and products containing substances) listed in Schedule 1 to prepare and implement a pollution prevention plan by fixed dates pursuant to a timetable required to be established by regulation.

(d) The Act should authorize any person to petition the Minister (and failing that the Federal Court) to require such plans where, for whatever reasons, the Minister has not acted or there has not been compliance with the timetable.

### **Pollution Prevention Not Pollution Abatement**

(e) The Bill S-5 amendments to section 56(1) of *CEPA, 1999* should be augmented by providing greater specificity under section 3 of the Act regarding what pollution prevention means and does not mean along the lines of the definition of “toxics use reduction” employed in the Massachusetts *Toxics Use Reduction Act*.

### **Address Ambient Air Quality Problems from Toxic Substances**

(f) *CEPA, 1999* should be amended to require the federal government to develop legally binding and enforceable national standards for ambient air quality in consultation with the provinces, territories, Indigenous peoples, stakeholders, and the public along the lines of amendments proposed by CELA in its 2022 proposed amendments to the Act.

### **Amend Not Eliminate Virtual Elimination Authority**

(g) If the federal government is concerned that the virtual elimination provision is too difficult to meet (because it requires that a level of quantification be specified before a substance can be released below that level) then it should propose amendments to that provision, rather than simply eliminating the provision altogether. CELA has previously recommended a more robust virtual elimination provision that remains appropriate for consideration in Bill S-5, which states:

(1) “virtual elimination” means the cessation of the intentional production, use, release, export, distribution or import of a substance or classes of substances.

(2) Where a substance is produced as a by-product of the production or use of another substance, virtual elimination means changes to processes

or practices or substitution of material or products to avoid the creation of [the] substance in question.

(h) Parliament also should modify the current section 77(4) of *CEPA, 1999* to make it clear that naturally occurring inorganic substances (e.g., lead, mercury, arsenic) are eligible for virtual elimination. CELA's 2022 proposed amendments to *CEPA, 1999* provide suggested language for such a reform.<sup>136</sup>

### **Right to a Healthy Environment Requires a Remedy**

(i) Bill S-5 should be amended to ensure Canadians have a right to a healthy environment with appropriate remedies. Precedents for Parliament to consider have been provided over the years by House and Senate committee reports, CELA's 2022 proposed amendments to the Senate of Canada on Bill S-5,<sup>137</sup> and by the Global Pact for the Environment now being finalized by the United Nations.

### **Adopt Substitution Principle**

(j) Amend *CEPA, 1999* to ensure efforts to replace toxic substances with suitable alternatives or technologies are considered in pollution prevention, risk assessment and management, and virtual elimination authorities, including their risks and the technical and economic feasibility of substitution.

(k) Amend section 2(1) of *CEPA, 1999* by adding the substitution principle so that its implementation becomes a duty of the federal government.

(l) Amend the risk management provisions of the Act, under Part 5, to require alternatives assessment and place the burden on industry to show that safer alternatives are not available.

(m) Require safer substitutes for substances listed in Schedule 1 that are carcinogenic, mutagenic, toxic to reproduction, very persistent and very bioaccumulative, and endocrine disrupting.

(n) Adopt CELA's draft measures respecting alternatives in its 2022 proposed amendments to *CEPA, 1999* and Bill S-5.<sup>138</sup>

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<sup>136</sup> Canadian Environmental Law Association, *Proposed Amendments to the House of Commons Standing Committee on Environment and Sustainable Development on Bill S-5, An Act to Amend the Canadian Environmental Protection Act, 1999, etc.* (September 2022), Tab 4 (Retaining and Revising Virtual Elimination Authority).

<sup>137</sup> *Ibid.* Tab 2 (Right to a Healthy Environment and Remedy).

<sup>138</sup> *Ibid.* Tab 3 (Mandatory Pollution Prevention Planning).

**Require Testing Where Available Information on Endocrine Disrupting Substances, Vulnerable Populations or Cumulative Effects is Insufficient**

(o) Repeal or revise section 72 and where available information on endocrine disrupting substances, vulnerable populations or cumulative effects is insufficient, compel testing to occur when, for whatever reasons, government does not require it, with language such as the: “Minister shall require the person to conduct toxicological and other tests on a substance where information is lacking or not adequate to allow a determination of whether a substance is toxic or capable of becoming toxic, and to submit the results of the tests to the Minister.”<sup>139</sup>

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<sup>139</sup> *Ibid.* Tab 5 (Mandatory Testing).

## VII. APPENDIX A: DEFINITIONS FOR ON-SITE RELEASES TO AIR, ON-SITE DISPOSAL, AND LAND RELEASES

### 10. Glossary

#### 10.1 Release, disposal, and recycling categories

**On-site releases:** a discharge of a substance to the environment within the physical boundaries of the facility. This includes releases to air, surface waters and land. Routine releases (e.g., fugitive releases) and accidental or non-routine releases (e.g., spills) are included. Releases do not include on-site or off-site disposals or off-site transfers for recycling.

##### Releases to air

- **Stack or point releases:** releases from stack or point sources including stacks, flares, vents, ducts, pipes, or other confined process streams. Releases to air from pollution control equipment generally fall into this category.
- **Storage or handling releases:** releases to air from storage or handling of materials.
- **Fugitive releases:** releases that cannot be captured and releases that are unintentional, including
  - fugitive equipment leaks from valves, pump seals, flanges, compressors, sampling connections, open-ended lines, etc.
  - evaporative losses from surface impoundments and spills
  - releases from building ventilation systems
  - any other fugitive or non-point air emissions from land treatment, tailings, waste rock, storage piles, etc.
- **Spills:** accidental releases to air.
- **Road dust:** total particulate matter, PM10 and PM2.5 releases from road dust must be reported if vehicles travelled more than 10 000 kilometres on unpaved roads at the facility.
- **Other non-point releases:** any other non-point releases to air that are not captured in the categories above.

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##### Releases to land

Releases to land include surface and underground releases which occur at a facility.

- **Spills:** spills include any accidental releases to land, normally occurring over a short period of time (hours or days).
- **Leaks:** leaks differ from spills in that they are chronic events, occurring over a comparatively long time (days, months, etc.).

- **Other releases to land that are not disposals:** net quantities of other releases to land that are not spills or leaks and are not for the purposes of disposal. This category includes NPRI substances that are injected underground for purposes other than disposal (for example, solvents used to enhance in situ bitumen extraction). NPRI substances sent to landfill, used for land application, disposed of by underground injection, or transferred for treatment or storage are categorized as disposals (see the following sections for more information on disposals). Disposal quantities should be reported under the disposal category only, and not under releases to land, to avoid double-reporting.

**Disposals:** The final disposal to landfill, land application or underground injection, either on the facility site or at a location off the facility site; transfer to a location off the facility site for storage or treatment prior to final disposal; or movement into an area where tailings or waste rock are discarded or stored, and further managed to reduce or prevent releases to air, water or land, either on the facility site or at a location off the facility site. The disposal of a substance is different from a direct release to air, water or land.

#### **On-site Disposals**

- **Landfill:** total quantities of substances sent for final disposal to a designated landfill area located within the site boundaries.
- **Land application:** total quantities of substances sent for final disposal by application or incorporation into soil within the site boundaries.
- **Underground injection:** total quantities of substances disposed of by injection underground from within the site boundaries.
- **Tailings and waste rock:** net quantities of substances that are moved into an on-site area where tailings or waste rock are discarded or stored and further managed to reduce or prevent releases.

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**Source:** Environment and Climate Change Canada, *Guide for Reporting to the National Pollutant Release Inventory: 2020 and 2021*, at pages 65-67.