SUBMISSIONS TO THE MINISTERS OF ENVIRONMENT AND CLIMATE CHANGE AND HEALTH ON BILL C-28, AN ACT TO AMEND THE CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999, etc.

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TABLE OF CONTENTS

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[1] providing legal assistance to low-income and disadvantaged individuals and groups experiencing environmental problems who are otherwise unable to afford legal representation. In particular, many 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 C-28

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.[2] The Bill died on the order paper due to the intervening 2021 federal election but is expected to be re-introduced in the current session of Parliament.[3] It is not clear whether Bill C-28 will be re-introduced as is or will be further amended. CELA has prepared these submissions on Bill C-28 because they may be of assistance to the Government of Canada as background even if a substantially different Bill is introduced. CELA may also file supplementary submissions, and/or further specific statutory language for Bill C-28, or its successor, as the bill proceeds through Parliament. The following submissions address certain matters relating to Bill C-28, 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 C-28 amendments; (2) proposed amendments in Bill C-28 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 C-28, particularly, but not exclusively, Parts 4 and 5 pertaining to pollution prevention and control of toxic substances, respectively; (4) the proposed establishment in Bill C-28 of a right to a healthy environment creates a right without a remedy and, therefore, risks being ineffective; and (5) Bill C-28 proposed measures relating to endocrine disrupting substances and protection of vulnerable populations make only housekeeping changes but fail to deal with critical issues such as requiring testing where available information is inadequate. Arising from the foregoing CELA makes the following recommendations in respect of the Bill C-28 proposed amendments to *CEPA, 1999*:

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[1] Legal Aid Services Act, 2020, S.O. 2020, c. 11.

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

[3] 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*]).

Fixing 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 so as 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).

Failing to 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 C-28 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 2018 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 C-28, 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 2018 proposed amendments to *CEPA, 1999* provide suggested language for such a reform.[4]

Right to a Healthy Environment Requires a Remedy

(i) Bill C-28 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 2018 proposed amendments, and by the Global Pact for the Environment now being finalized by the United Nations.

[4] See Appendix A to these Submissions. Canadian Environmental Law Association, *An Act to amend CEPA, 1999,* s. 23 (repealing and replacing s. 77(4)) (October 2018).

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) Where appropriate, adopt CELA's draft measures respecting alternatives in its 2018 proposed amendments to *CEPA, 1999*.

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

(o) Repeal 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*[5] 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-3, the *Environmental Contaminants Act* ("*ECA*"),[6] 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

[5] S.C. 1999, c. 33.
[6] R.S.C. 1985, c. E-12.

adequacy of the *ECA* and the need for significant reform of the law's control of industrial chemicals in Canada.[7] 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*,[8] *Ocean Dumping Control Act*,[9] and the *Canada Water Act*[10]) into what became *CEPA*,[11] 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[12] 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) 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 the House of Commons Standing Committee on Environment and Sustainable Development, which culminated in the amendments contained in Bill C-28; and (3) was a member of the Stakeholder Advisory Council with respect to Canada's Chemicals Management Plan for the period 2007 to 2020. In 2018, CELA also published its own proposed amendments to *CEPA, 1999*, which we have included with our submissions for your consideration respecting Bill C-28. 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[13] 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. Few of these issues were addressed adequately, or at all, by Bill C-28.

4. The rationale for CELA's recommendations for amending Bill C-28 appear 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 toxic substance problem internationally and domestically is significant and growing, it is not materially addressed by the Bill C-28 amendments, as is set out more fully below.

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[7] Joseph F. Castrilli, "Control of Toxic Chemicals in Canada: An Analysis of Law and Policy" (1982) 20 Osgoode Hall L.J. 322-401.
[8] R.S.C. 1985, c. C-32.
[9] R.S.C. 1985, c. O-2.
[10] R.S.C. 1985, c. C-11.
[11] R.S.C. 1985, c. 16 (4th Supp.).
[12] *R. v. Hydro-Quebec*, [1997] 3 S.C.R. 213.
[13] "Citizens Across Canada Urge Ministers to Adopt Federal Toxics Law Changes", *Media Release* (16 October 2018).

A. Internationally

6. In 2019, the United Nations Environment Programme ("UNEP") released its latest global chemicals outlook report,[14] 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".[15] 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.[16]

7. In 2022, a publication of the American Chemical Society 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.[17]

B. Domestically

8. The situation in Canada is a microcosm of the global picture. The latest publicly available national data compiled pursuant to the National Pollutant Release Inventory ("NPRI"), generated pursuant to section 46 of *CEPA, 1999*, and reported upon by the

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[14] United Nations Environment Programme, Global Chemicals Outlook II - From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development (Nairobi: UNEP, 2019).
[15] *Ibid.*at 17.
[16] *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.
[17] 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 >

Commission for Environmental Cooperation ("CEC")[18] show, for example, that on-site industrial emissions to air of substances that are known or suspected carcinogens and listed in Schedule 1 of the Act as toxic substances, increased during the period 2013-2019 by 679,410.80 kilograms (kg) or almost 21 percent (3,249,567.72 kg in 2013 to 3,928,978.53 kg in 2019). Individual Schedule 1 chemical carcinogens whose on-site air emissions increased during this period (and thereby contributed to the overall increase of such emissions in Canada) are shown in Table 1, below:

Table 1: Known or Suspected Carcinogens in *CEPA, 1999* Schedule 1 List of Toxic Substance Showing On-site Air Emission Increases in Canada – 2013-2019

Pollutant	On-site Air Emissions 2019 (kg)	On-site Air Emissions 2013 (kg)	Difference (kg)	Percentage Increase
1,3-Butadiene	22,651	19,541.1	3,109.9	15.91
Acetaldehyde	780,294	729,166.4	51,127.6	7.01
Acrylonitrile	5,554.32	3,487.2	2,067.12	59.28
Benzene	587,794.9	495,294.9	92,500	18.68
Chromium (and its compounds)	29,701.27	18,982.5078	10,718.7622	56.47
Dioxins and Furans	0.01265	0.0098	0.00285	29.08
Formaldehyde	1,918,339	1,287,151.4	631,187.6	49.04
Hexachlorobenzene	5.335786	3.5963	1.7394	48.37
Hydrazine (and its salts)	77.84	55.0	22.84	41.52
Lead (and its compounds)	107,264.7	93,424.1046	13,840.5954	14.81
Napthalene	219,245.68	97,069.7	122,175.98	55.7
Quinoline (and its salts)	282.8245	200.0	82.8245	41.41
Toluenediisocyanate (mixed isomers)	106.4873	11.5	94.98	825.98
Trichloroethylene	34,168.75	16,324.0	17,844.75	109.31
Vinyl chloride	429.627	402.0	27.627	6.87

Sources: Commission for Environmental Cooperation, 2021; Environment and Climate Change Canada (NPRI program), 2022

9. 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. Vulnerable populations are particularly at risk from such trends. Members of Indigenous communities appearing before the House Standing Committee during its 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

[18] The CEC was created in 1994 as part of a side agreement on cooperation on environmental matters entered into by Canada, Mexico, and the United States under the *North American Free Trade Agreement* and is continued under a 2020 renewal, amendment, and expansion of trade arrangements between the three countries.

Schedule 1 of *CEPA, 1999*] in their traditional foods (e.g. fish, moose).[19] While all of the increases reported by Indigenous communities may not be due exclusively to air emissions, some undoubtedly are, such as PAHs, 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.[20]

10. A similar trend in on-site air emissions of toxic substances that are also known or suspected carcinogens is seen in the NPRI/CEC data when just Ontario data is used. On-site industrial emissions to air in Ontario of all substances that are also known or suspected carcinogens and listed in Schedule 1 of *CEPA, 1999* as toxic substances, increased during the period 2013-2019 by 264,185.7 kg or 28.8 percent (917,273.8 kg in 2013 to 1,181,459.6 kg in 2019). Individual Schedule 1 chemical carcinogens whose on-site air emissions increased in Ontario during this period (and thereby contributed to the overall increase of such emissions in Ontario) are shown in Table 2, below:

Table 2: Known or Suspected Carcinogens in *CEPA, 1999* Schedule 1 List of Toxic Substance Showing On-site Air Emission Increases in Ontario – 2013-2019

Pollutant	On-site Air Emissions 2019 (kg)	On-site Air Emissions 2013 (kg)	Difference (kg)	Percentage Increase
1,3-Butadiene	18,527	11,944.8	6,582.2	55.1
Acetaldehyde	115,194.50	103,410.8	11,783.7	11.3
Acrylonitrile	1,331.20	430.0	901.2	209.58
Dioxins and Furans	0.005897587	0.0021	0.003798	180.8
Formaldehyde	655,983.24	259,838.4	396,144.8	152.45
Hexachlorobenzene	2.7808	1.0318	1.749	169.5
Hydrazine (and its salts)	76.24	55.0	21.24	38.62
Mercury (and its compounds)	618.87	596.2561	20.61	3.46
Naphthalene	38,064.05	34,211.4	3,852.65	11.26
Quinoline (and its salts)	206.83	200.0	6.83	3.42
Toluenediisocyanate (mixed isomers)	90.93	11.0	79.93	726.66
Trichloroethylene	23,740.75	3,414.0	20,326.75	595.39
Vinyl chloride	429.63	402.0	27.63	6.87

Source: Commission for Environmental Cooperation, 2021; Environment and Climate Change Canada (NPRI program), 2022

11. It is also worthy of note that even where on-site air emissions in Ontario of *CEPA, 1999* Schedule 1 known or suspected carcinogens were lower in 2019 than in 2013, the

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

[20] Centers for Disease Control and Prevention, *National Biomonitoring Program: Polycyclic Aromatic Hydrocarbons ((PAHs) – Fact Sheet)*, (Washington, D.C.: CDC, April 2017).

overall data in this period were highly erratic and hardly suggestive of a downward trend in such emissions, as set out in Table 3, below:

Table 3: Selected Known or Suspected Carcinogens in *CEPA, 1999* Schedule 1 List of Toxic Substance Showing On-site Air Emissions in Ontario – 2013-2019

Pollutant	On-site Air Emissions 2019 (kg)	On-site Air Emissions 2018 (kg)	On-site Air Emissions 2017 (kg)	On-site Air Emissions 2016 (kg)	On-site Air Emissions 2015 (kg)	On-site Air Emissions 2014 (kg)	On-site Air Emissions 2013 (kg)
Arsenic (and its compounds)	2,295.59	3,414.55	7,743.23	10,053.52	5,877.95	13,514.49	7,264.10
Lead (and its compounds)	10,636.42	13,930.54	31,598.25	45,434.06	27,596.76	35,389.12	21,621.66

Source: Commission for Environmental Cooperation, 2021; Environment and Climate Change Canada (NPRI program), 2022

12. Table 3 shows that on-site air emissions of arsenic in Ontario were higher than in 2013 and 2019 in three of the five intervening years. Similarly, Table 3 shows that on-site air emissions of lead in Ontario were much higher than in 2013 and 2019 in four of the five intervening years. The data for these two toxic and carcinogenic substances do not necessarily suggest a trend toward reduction of such on-site air emissions in Ontario.

13. The Ontario data is especially concerning because on December 31, 2021, Ontario's 2019 repeal of its *Toxics Reduction Act, 2009* ("*TRA, 2009*"), came into effect.[21] 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,[22] and complement *CEPA, 1999* which, while it also includes such a focus,[23] has not been systemically implemented to achieve such a result.[24] The loss of the *TRA, 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.

[21] S.O. 2019, c. 4, Sch. 5, s.1 (s. 72.1 repealing Act on December 31, 2021).

[22] 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).

[23] *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).

[24] 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).

14. Unfortunately, Bill C-28 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 C-28 PROPOSES TO FIX WHAT ISN'T BROKEN

A. Creating Problems Where None Existed

1. Bill C-28'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.[25]

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).[26] 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.[27]

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.[28] Today that number has only risen to roughly 150 out of over 23,000. As Justice La Forest put it, the statute provides:

> "…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

[25] *R. v. Hydro-Quebec*, [1997] 3 S.C.R. 213 at paras 127, 130, 161.
[26] *Ibid*. at paras 133-135, 138, 142.
[27] *Ibid*. at paras 146, 152.
[28] *Ibid*. at para 145.

> 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".[29]

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".[30] 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.[31]

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 C-28 Sends a Mixed Message on Control of Toxic Substances and Creates Potential for Legal Uncertainty

20. With this as background, what does Bill C-28 do? In the view of CELA, Bill C-28 sends a mixed message to the public and the courts. It does at least three things that are highly concerning.

21. First, Bill C-28 removes the phrase "List of Toxic Substances" from Schedule 1. Henceforth, the Schedule will simply be known as "Schedule 1".[32]

22. Second, section 58 of Bill C-28 proposes to divide the existing single list of approximately 150 toxic substances in Schedule 1 of the Act into two parts. Section 29 of Bill C-28 identifies the types of orders to which each part may be subjected. Part 1 of the proposed revised schedule would list a few substances (19 at this time – 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

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[29] *Ibid*. at para 147.
[30] *Reference re Assisted Human Reproduction Act*, [2010] 3 SCR 457, paras 234, 237.
[31] *Reference re Genetic Non-Discrimination Act*, 2020 SCC 17, paras 95 (majority), 242, 266 (dissent).
[32] Government of Canada, *Bill C-28: Strengthening Environmental Protection for a Healthier Canada Act: Summary of Amendments* (Ottawa April 2021) at 7.

substances. Part 2 of the proposed revised schedule would list approximately 130 substances (e.g., trichloroethylene), with the accompanying amendments requiring the Ministers to "give priority to" pollution prevention actions with respect to these substances.[33] Limiting a toxic substance to only being subject to pollution prevention measures under Part 4 of the Act is not a bad thing on its face. However, in light of the fact that that program has largely been implemented as if it was primarily a pollution abatement program, and not a pollution prevention program, is problematic when it is applied to toxic substances. The approach 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 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".[34] 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 C-28 proposes to eliminate existing *CEPA, 1999* provisions defining and authorizing virtual elimination of such toxic substances.[35]

23. Third, Bill C-28, 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 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). The Bill C-28 approach, coupled with an industry view, that maybe some (most?) of the substances in Schedule 1 really are not toxic in the

[33] Bill C-28, ss. 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 C-28 Schedule 1), and new Schedule 1 divided into Parts 1 (19 substances) and 2 (130 substances).

[34] 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).

[35] Bill C-28, s. 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"). Section 21 of Bill C-28 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.

traditional sense, has the potential to undermine the constitutional foundation of *CEPA, 1999*.[36]

24. 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*.[37] Even if challenges such as this case, or others like it, are eventually 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 C-28 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 C-28 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

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[36] 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).

[37] *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*).

eligible for virtual elimination.[38] Historically, these substances have largely been subjected to pollution abatement not pollution prevention measures.[39] CELA's 2018 proposed amendments to *CEPA, 1999* provide suggested language that would make such substances eligible for virtual elimination (See Part IV.B, below). Under Bill C-28, all of these substances would be placed in Part 2 (pollution prevention), not Part 1 (prohibition) of the proposed revised Schedule 1. Unfortunately, under *CEPA, 1999* to date pollution prevention has been treated by the federal government largely as an exercise in pollution abatement. The difference between the two types of measures is crucial to the success of *CEPA, 1999* and reviewed below.

B. Introducing Amendments That Change Nothing But Obscure Purpose of Reform

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

28. The government summary of C-28 states that "amendments will facilitate the making of geographically targeted regulations that could, for example, be used to help address pollution 'hot spots'".[40]

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).[41] Bill C-28 simply proposes to repeal both sections 330(3) and 330(3.1),[42] and nothing like them is proposed to be added to any other Bill C-28 amendments.[43]

30. Accordingly, it would be unusual for the federal government to argue that having proposed to repeal section 330(3) (which declares that a regulation applies throughout Canada subject to section 330(3.1)), and (3.1) (which declares that a regulation may be applied on a geographically limited basis), and not having proposed to add anything in the place of section 330(3.1) in Bill C-28, that the courts should presume that geographically limited application of regulations is still permissible under the Act. However, that would appear to be the federal government's position, as reflected in the government summary of the Bill C-28 amendments regarding hot spots, noted above.

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[38] 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.

[39] See, e.g. *Secondary Lead Smelter Release Regulations*, SOR/91-155.

[40] Government of Canada, *Bill C-28: Strengthening Environmental Protection for a Healthier Canada Act: Summary of Amendments* (Ottawa April 2021) at 4.

[41] S.C. 1999, c. 33, ss. 330(3), 330(3.1).

[42] Bill C-28, s. 55 (repealing ss. 330(3) and 330(3.1) of *CEPA, 1999*).

[43] Bill C-28, ss. 33 (no such amendments appear in proposed amendments to s. 93). No amendments at all are proposed for ss. 140, 167, or 177.

31. In the submission of CELA, it would be simpler, more straight-forward, and less likely to attract litigation, 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 authority to address by order substances that are not listed in Schedule 1[44] and for which Bill C-28 has expanded such authority).[45]

IV. BILL C-28 FAILS TO FIX WHAT IS BROKEN

A. Problems Bill C-28 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.[46]

33. Section 10(1) of Bill C-28 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.[47]

34. On its face, the proposed amendment is an improvement over the existing version of section 56(1). However, what section 10(1) of Bill C-28 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

[44] S.C. 1999, c. 33, s. 94.
[45] Bill C-28, s. 34 (amending s. 94).
[46] S.C. 1999, c. 33, s. 56(1).
[47] Bill C-28, s. 10(1).

> example, will the Minister routinely require pollution prevention planning for substances on the Toxic Substances List)?"[48]

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 2100 for just the existing list of 130 substances in the proposed Part 2 of Schedule 1 to all have pollution prevention plans (even assuming there are no additions of substances to Schedule 1 over the next 80 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".[49] 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

[48] 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.
[49] 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".[50]

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."[51]
> …
>
> "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."[52]

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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[50] 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.

[51] 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.

[52] *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.[53]

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".[54]

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 4, below:

Table 4: Pollution Prevention Plans Approved Under *CEPA, 1999* – 2002-2023

Substance[55]	Time Period Specified	Risk management objective	Implementation
NOTICES NO LONGER IN EFFECT:			
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

[53] *Toxics Use Reduction Act*, Mass. Gen. L. ch. 21I, s. 2.
[54] *Ibid.*
[55] 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.*
Inorganic chloramines and chlorinated wastewater effluents* (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 *Fisheries Act*.
Nonylphenol and its ethoxylates (NP/NPEs) contained in products*	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%.
Nonylphenol and its ethoxylates used in textile mill wet processing*	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.
Specified toxic substances used in wood preservation*	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.
Toluene diisocyanates (TDIs) used in the polyurethane and other foam sector (except polystyrene)	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: • The overall reduction of TDI releases for the 8 facilities that actually measured or estimated on-site releases to air was 55%. • The reduction of TDIs for the 6 facilities that used modelling to predict TDI concentration in ambient air was 94%.
Specified toxic substances (inorganic arsenic compounds, inorganic cadmium compounds, lead, inorganic nickel compounds, mercury, particulate matter, polychlorinated	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: • 48% for sulphur dioxide • 52% for particulate matter • 90% for mercury

dibenzo-para-dioxins, polychlorinated dibenzofurans, sulphur dioxide) produced by base metals smelters and refineries and zinc plants		The progress report outlines specific targets, some of which are specific to particular facilities.	• 65% for dioxins and furans • Arsenic, cadmium, lead, and nickel were not subject to targets, but decreased by 33%, 86%, 46% and 63% respectively
NOTICES STILL IN EFFECT:			
Mercury from mercury switches in end-of-life vehicles	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.	"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."	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.
Mercury from dental amalgam waste	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.	"95% national reduction in mercury releases into the environment from dental amalgam waste, from a base year of 2000."	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."
Bisphenol A (BPA) in industrial effluents	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.	"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."	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. "There has been an overall 99% reduction in the amount of BPA *used*. An overall reduction of 94% of BPA sent

			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."
Siloxane D4 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.
Isoprene 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%.
Halocarbons 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."
Nitrogen oxides, sulphur dioxide, and fugitive volatile organic compound (VOC) emissions in the iron, steel, and ilmenite sector	Notice published on 06/05/2017. A detailed schedule of planning, reporting and implementing has been established.	"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."	
Hydrazine 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.
Toluene diisocyanates (TDIs)	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.
Reaction products of 2-propanone with diphenylamine (PREPOD) 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.
Triclosan 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
*** 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 4, 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. It is also noteworthy that there have been increases in on-site air emissions of some of these substances as reported in the most recent data available from the NPRI/CEC (e.g., see Table 1, above for hydrazine and its salts, and toluene diisocyanates), suggesting that the "pollution prevention" plans (which really were only pollution abatement plans) weren't even effective in reducing emissions to the environment. As is also apparent from Table 4, 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 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 (e.g., mercury from vehicle switches or dental amalgams), on-site air emissions of mercury continue to increase in certain parts of the country (e.g., Ontario) based on the latest data available from NPRI/CEC (see Table 2, above), suggesting that other industrial sectors that are sources of mercury should be, but have not been, targeted for the development of pollution prevention planning.

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 C-28 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 C-28 proposes no reforms. These include six Schedule 1 toxic substances under *CEPA, 1999*: fine particulate matter ($PM_{2.5}$), ground-level ozone, nitrogen dioxide, sulphur dioxide, lead, and carbon monoxide (the last listed only as part of petroleum and refinery releases).[56]

49. The 2017 House Standing 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.[57] 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

[56] S.C. 1999, c. 33, Schedule 1 (List of Toxic Substances), $PM_{2.5}$ (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).

[57] 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.

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 $PM_{2.5}$, 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.[58] 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.[59] This latter finding corresponds with increases seen in on-site air emissions of lead since 2013 reported to NPRI set out in Table 1, above. 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".[60]

50. While Bill C-28 contained no proposed reforms for addressing ambient air quality, evidence before the House Standing 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.[61]

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

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[58] 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.
[59] Environment and Climate Change Canada, *Canadian Environmental Sustainability Indicators: Emission of Harmful Substances to Air* (Ottawa: Government of Canada, 2019) at 11.
[60] Health Canada, *Lead in Canadians* (Ottawa: Government of Canada, 2021).
[61] 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.

provinces, territories, Indigenous peoples, stakeholders and the public".[62] In 2018, CELA drafted proposed amendments to *CEPA, 1999* that would create such a regime and have attached them to these submissions.[63]

B. Problems Bill C-28 Makes Worse

1. Instead of Improving Virtual Elimination Authority Under Part 5, Bill C-28 Eliminates Virtual Elimination as a Requirement of Federal Law

52. As noted above, Bill C-28 proposes to eliminate existing *CEPA, 1999* provisions defining and authorizing virtual elimination of certain toxic substances.[64] In its April 2021 summary of amendments to Bill C-28, the federal government states that:

> "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."[65]

53. However, the materials released by the federal government at the time of the tabling of Bill C-28 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 C-28, 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 Standing 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 sunsetting provision; and (2) the "elimination of the *generation, use and release* of such substances"[emphasis in

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[62] *Ibid*. at 42.

[63] See Appendix A to these Submissions. Canadian Environmental Law Association, *An Act to amend CEPA, 1999,* Part 7, Division 6.1 – Air Pollution in Canada, s. 33 (addition of ss. 174.1 – 174.3) (October 2018).

[64] Bill C-28, s. 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"). Section 21 of Bill C-28 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.

[65] Government of Canada, *Bill C-28: Strengthening Environmental Protection for a Healthier Canada Act: Summary of Amendments* (Ottawa April 2021) at 5.

original].[66] 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.[67]

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.
> …
> ….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."[68]
> …

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

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[66] 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.

[67] *Ibid*.

[68] 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.

> 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].[69]

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.[70] 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.

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.[71]

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.[72]

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

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[69] 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.

[70] 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.

[71] *Ibid.* at 34-35.

[72] 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.

products that contain them.[73] 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.[74]

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 C-28 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 C-28: "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.[75]

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.[76] 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.[77] Given the latest data on increases of on-site air emissions of such substances as lead, mercury, and arsenic nationally, or in particular

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[73] *Ibid*. at 79.

[74] *Prohibition of Certain Toxic Substances Regulations*, SOR/2021-285, as amended, Schedules 1 and 2.

[75] 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.

[76] 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).

[77] 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.

provinces, such an amendment appears past due. CELA's 2018 proposed amendments to *CEPA, 1999* provide suggested language for such a reform.[78]

C. Problems Bill C-28 Only Partially Addresses

1. Bill C-28 Proposed Right to a Healthy Environment Lacks a Remedy

a. How Bill C-28 Addresses the Right to a Healthy Environment

64. Several provisions in Bill C-28 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).[79] Second, Bill C-28 (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, which right may be balanced with relevant factors, including social, economic, health and scientific factors.[80] In conjunction with this amendment, Bill C-28 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).[81] Third, section 5 of Bill C-28 would add a new section 5.1(1) 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", including principles of environmental justice, avoidance of adverse effects that disproportionately affect vulnerable populations, and the principle of non-regression, balanced with the above-noted social, economic, health and scientific factors.[82]

b. Analysis of the Bill C-28 Provisions on a Right to a Healthy Environment

65. Read separately or together the provisions in Bill C-28 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.[83]

66. Second, the proposed amendments to sections 2 and 5.1 are so circumscribed with caveats about balancing, for example, economic factors, that they hardly constitute recognition of environmental rights, let alone an environmental magna carta.

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[78] See Appendix A to these Submissions. Canadian Environmental Law Association, *An Act to amend CEPA, 1999*, s. 23 (repealing and replacing s. 77(4)) (October 2018).
[79] Bill C-28, s. 2(1) would amend the preamble to *CEPA, 1999* by adding such a requirement following the first preamble paragraph.
[80] *Ibid*., s. 3(2).
[81] *Ibid*., s. 7 (adding a new subsection (3.1) to s. 44).
[82] *Ibid*., s. 5.
[83] 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).

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 C-28. Moreover, section 5.1 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 Parliament did not leave such an impression either.[84]

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".[85] 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";[86] 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".[87]

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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[84] CELA attended a federal government technical briefing by conference call held on the new Bill on April 13, 2021 and was advised by government officials in attendance that no further amendments to *CEPA, 1999* were expected as a result of the development of the implementation framework.

[85] 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.

[86] *Ibid*. at 225.

[87] *Ibid*. at 230-231.

(section 22), however, has yet to be used".[88] 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".[89] 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.[90] 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.[91]

d. What Bill C-28 Failed to Do

72. Bill C-28 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 C-28. 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

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[88] 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.
[89] *Ibid*. at 40-41.
[90] 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.
[91] 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.

action in a 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.[92] 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".[93]

74. CELA continues to be of the view that all of 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 in order to succeed. It also should not be necessary in emergency

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

[93] 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.

situations to first request that the 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 2018, CELA drafted such amendments to section 22 that were supported by over 30 organizations across the country as part of a larger set of proposed changes to *CEPA, 1999*.[94] Bill C-28 failed to adopt any of the CELA amendments. For the assistance of the Standing Committee, the 2018 CELA proposed amendments are attached to these submissions.

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.[95] 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".[96] 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.

e. What Should Be Done?

77. Canada can do much better than what is currently in Bill C-28 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 C-28 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 C-28 should be amended now to ensure Canadians have a true 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 2018 proposed amendments, and by the Global Pact for the Environment now being finalized by the United Nations.

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[94] See Appendix A to these Submissions. Canadian Environmental Law Association, *An Act to amend CEPA, 1999*, Part 2 – Public Participation, s. 4 (repeal and replacement of s. 22 with new ss. 22, 22.1, and 22.2 on a right to a healthy environment) (October 2018).

[95] 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.

[96] Le Club des Juristes, *Draft Project: Global Pact for the Environment* (Preliminary Draft) (Paris: 24 June 2017), arts. 1, 11.

2. Substituting Safer Alternatives for Toxic Substances is Not, But Should Be, a Central Focus of Bill C-28 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*.[97] 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.[98]

79. However, that has not been the case under *CEPA, 1999* and amendments contained in Bill C-28 fall well short of that goal. There are at least five main concerns with Bill C-28's approach to the issue of alternatives. First, unlike the REACH regime in Europe,[99] Bill C-28 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 C-28 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 C-28, 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;[100]
- Amended section 68 (about collecting data regarding the existence of alternatives,[101] a provision which, in slightly modified form, has been in *CEPA,*

[97] 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.
[98] *Ibid*.
[99] 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.
[100] Bill C-28, s. 2(6), replacing the 13th 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 in order 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).

1999 for over twenty years and has had no discernible effect on accelerating substitution of less toxic, or non-toxic, substances over the last two decades 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);[102] and

- Amended sections 75.1 (defining the "watch list")[103] and 77(2)(b) (adding substances to the watch list).[104]

80. Second, Bill C-28 only has a very short list of substances in proposed Part 1 of Schedule 1 that are eligible for substitution (i.e., containing only 13 percent of all toxic substances in Schedule1).[105]

81. Third, the Bill C-28 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, like PCBs, are not counted), compared to REACH's Annex XIV (54 substances).[106] As a result, Bill C-28 fails to include substances in Part 1 that REACH includes in its Annex XIV (e.g., trichloroethylene).[107]

82. Fourth, under Bill C-28 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[108] – due to the effect of proposed section 90(1.2), noted above. According to Bill C-28, Part 2 substances are only subject to pollution prevention,

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[101] Bill C-28, s. 16(4) (replacing s. 68(a)(xii) with a new subparagraph (xii) respecting collecting or generating data or conducting investigations regarding the existence, development, and use of safer or more sustainable alternatives to a substance or product).
[102] Bill C-28, s. 29.
[103] Bill C-28, s. 20 replacing ss. 76 and 76.1 with s. 75.1 (requiring the Minister to compile and amend a list from time to time that specifies substances that the Ministers have reason to suspect are capable of becoming toxic or have been determined to be capable of becoming toxic).
[104] Bill C-28, s. 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) (noting that proposed amendments will require the Minister to publish and maintain a "watch list" of substances that have been 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).
[105] Bill C-28, s. 58 and Schedule 1, Part 1 (19 substances) (19 / 149 [total number of substances in Schedule 1] equals 12.7 percent).
[106] 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.
[107] Bill C-28, Schedule 1, Part 2 (trichloroethylene is listed as item 40 in Part 2); REACH, Annex XIV (trichloroethylene is listed in Annex XIV).
[108] One hundred thirty (130) [substances in Part 2] / 149 equals 87 percent.

pursuant to section 90(1.1)(b).[109] With some exceptions, because the federal government has overseen over the last twenty years pollution prevention plans develop that are little more than pollution abatement measures, opportunities for applying the substitution principle to such substances would appear limited due to the Bill C-28 amendments.

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 C-28 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".[110] 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 C-28 would repeal.[111] 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.[112] 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 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.[113] 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 C-28, 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.

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[109] Bill C-28, s. 29 (replacing s. 90(1) with new requirements including s. 90(1.1)(b) which indicates that in developing a regulation in relation to a Schedule 1 substance, the Minister shall give priority to, in the case of a substance listed in Part 2, pollution prevention actions).

[110] Government of Canada, *Bill C-28: Strengthening Environmental Protection for a Healthier Canada Act: Summary of Amendments* (Ottawa April 2021) at 4.

[111] Bill C-28, s. 20 replacing ss. 76 and 76.1 with s. 75.1.

[112] S.C. 1999, c. 33, s. 76(1).

[113] Joseph F. Castrilli, *Annotated Guide to the Canadian Environmental Protection Act: Volume 1*, looseleaf (Toronto: Thomson Reuters, 2021) at CEPA-39 to CEPA-41.

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;[114]
- 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.[115]

85. CELA also drafted measures respecting alternatives in its 2018 proposed amendments to *CEPA, 1999*.[116] With some exceptions, Bill C-28 neither adopts proposals reviewed by the 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 C-28 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 C-28 would authorize the Minister of Environment to collect data and conduct investigations in relation to whether a substance has the ability to disrupt the endocrine system of an organism.[117] 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.[118]

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[114] 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.

[115] 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.

[116] See Appendix A to these Submissions. Canadian Environmental Law Association, *An Act to amend CEPA, 1999*, Part 5.1 – Safer Alternatives to Priority Toxic Substances, s. 32 (addition of ss. 103.1 – 103.10) (October 2018).

[117] Bill C-28, s. 16(3) (adding new subsection 68(a)(vi.1)).

[118] Joseph F. Castrilli, "Canadian Regulation of Toxic Substances: Model or Muddle?" (2013), 15 ABA Int. Env. & Resources L. Committee Newsletter 31-35.

87. Bill C-28 amendments would also replace the existing categorization authority of *CEPA, 1999*[119] 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 have the ability to disrupt the endocrine system of an organism are specifically identified as substances that must be taken into account in developing the proposed plan.[120]

88. However, even with the proposed Bill C-28 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, and is discussed below.

89. Similarly, Bill C-28 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 amendments do not require that the Ministers direct that testing be undertaken by industry where there is an information gap.[121]

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,

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[119] Bill C-28, s. 19 (repealing s. 73 of *CEPA, 1999*).
[120] Bill C-28, s. 19 (adding s. 73(3)(c), which refers to amended s. 68(a)(vi.1)).
[121] Bill C-28, s. 20 (amending s. 76.1 by adding a subparagraph (2) respecting consideration of available information on vulnerable populations and cumulative effects).

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.[122] 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".[123]

91. Bill C-28 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.[124] The amendments appear to be based on suggestions provided by the federal government in a 2016 discussion paper[125] that preceded the review of *CEPA, 1999* conducted by the House Standing Committee.

92. The problem with the Bill C-28 amendments and the earlier federal government proposal is that they fail to deal with the obstacles posed by section 72 of the Act; in 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".[126]

93. In the absence of repeal of s. 72 the proposed Bill C-28 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,

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[122] U.S.C.A. § 2603(a)(b) (West 2021).

[123] See *Chemical Manufacturers Association v. U.S. Environmental Protection Agency*, 859 F.2d 977 (D.C. Cir. 1988).

[124] Bill C-28, s. 18(6) (adding subsections 71(2.2)(2.3)).

[125] 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).

[126] 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.

government does not require it. CELA's 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.[127] Language of this type in the law would permit third party enforcement, for example, by persons with a right to a healthy environment.

V. CONCLUSIONS

94. *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 C-28, 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 C-28 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. Parliament should strongly consider improvements to *CEPA, 1999* that go beyond what is contained in Bill C-28. CELA, in its submissions, has pointed the way to some amendments that should be considered.

VI. RECOMMENDATIONS

95. In light of the foregoing, CELA makes the following recommendations in respect of the Bill C-28 proposed amendments to *CEPA, 1999*:

Fixing 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.

[127] See Appendix A to these Submissions. Canadian Environmental Law Association, *An Act to amend CEPA, 1999*, Part 5 – Controlling Toxic Substances, s. 16 (repeal and replacement of s. 72 respecting information gathering) (October 2018).

Retain and Extend Sections 330(3) and (3.1) to Address Substances on Geographically Limited Basis so as 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).

Failing to 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 C-28 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 2018 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 C-28, 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 2018 proposed amendments to *CEPA, 1999* provide suggested language for such a reform.[128]

Right to a Healthy Environment Requires a Remedy

(i) Bill C-28 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 2018 proposed amendments, 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.

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[128] See Appendix A to these Submissions. Canadian Environmental Law Association, *An Act to amend CEPA, 1999,* s. 23 (repealing and replacing s. 77(4)) (October 2018).

(n) Where appropriate, adopt CELA's draft measures respecting alternatives in its 2018 proposed amendments to *CEPA, 1999*.

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

(o) Repeal 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."

VII. APPENDIX A: 2018 CELA PROPOSED AMENDMENTS TO CEPA, 1999

BILL C –

C –

First Session, Forty-second Parliament,
67 Elizabeth II, 2018

HOUSE OF COMMONS OF CANADA

BILL C-

An Act to amend the Canadian Environmental Protection Act, 1999

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FIRST READING, _____2018

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Table of Contents

SUMMARY

This enactment amends certain provisions of the *Canadian Environmental Protection Act, 1999*.

The preamble is amended to recognize the right of every Canadian to a healthy environment; commit the Government of Canada to applying environmental justice principles in decisions regarding exposure of vulnerable populations to toxic substances; and recognize and commit the Government of Canada to implementing the principles enshrined in the United Nations Declaration on the Rights of Indigenous Peoples.

Administrative duties of the Government of Canada are expanded to include application of the polluter pays, substitution, and environmental justice principles and protection of the right of every resident of Canada to a healthy environment.

New interpretive provisions are added defining such terms as acceptable risk, aggregate exposures, cumulative effects, economically feasible, environmental justice, hot spots, public trust, resident of Canada, safer alternative, significant environmental harm, substances of very high concern, substitution principle, technically feasible, vulnerable population, and weight of evidence approach.

Part 2 of the Act is amended by repealing and replacing the current provision on environmental protection actions with a new right of every resident of Canada to a healthy environment, imposing duties on the Government to protect that right, and expanding the procedures that will allow any person to vindicate that right in Federal Court. Part 2 is also amended to authorize any person, whether or not directly affected, to bring an application for judicial review of any government decision made under the Act that would otherwise be subject to judicial review under section 18.1 of the *Federal Courts Act*.

Part 3 is amended to grant any person the right to petition the Minister to add substances to the National Pollutant Release Inventory where the substances, if released to the environment, may harm a vulnerable population, or are substances of very high concern, and require the Minister to respond within a specified time.

Part 4 is amended to require a person preparing a pollution prevention plan to specify how the precautionary, substitution, polluter pays, and environmental justice principles have been incorporated into the plan, and imposes obligations on the Minister to issue a notice to a person who has prepared a plan to submit it to the Minister for review where more than five years have elapsed since the preparation of the plan.

Part 5 is amended by repealing and replacing the definitions for: (1) toxic substance, to make it more hazard-based as opposed to risk-based; and (2) virtual elimination, to make it accord with the concept of zero discharge. Part 5 is also amended to expand the information gathering authority of the Minister with respect to substances, to apply the categorization and screening level assessment regimes to endocrine disrupting substances in their own right, to clarify that where a substance is found to be toxic or capable of becoming toxic the option of taking no further action is not available to the Minister, and to expand the considerations that must be addressed in respect of preventive or control actions for substances determined to be toxic, including effects on vulnerable populations, aggregate exposures and cumulative effects, and substitution of safer alternatives. Part 5 is further amended to add re-evaluation and special review measures for substances that have been previously subjected to categorization and screening, to clarify that the burden of persuading the Ministers that health and environmental risks of a substance are acceptable rests with the manufacturer, importer, or user, as the case may be, during categorization, screening level assessment, re-evaluation, special review, or assessment of substances or activities new to Canada, and to expand public consultation opportunities with respect thereto. Part 5 is also amended to specify that where a finding that a substance is toxic or capable of becoming toxic is made following a screening assessment, re-evaluation, or special review and the substance is not added to the List of Toxic Substances, after two years any person may apply to the Federal Court to require that this be done. A proposed regulation or instrument respecting preventive or control actions in relation to the substance must be placed in the

Canada Gazette by the Minister within two years following the order of the court, and the regulation or instrument in relation to that substance must be promulgated within 18 months thereafter.

Schedule 1 toxic substances are identified as priority toxic substances for the purposes of a new Part 5.1 to the Act. The Minister, following the production of assessment reports on safer alternatives for these substances produced over a period of several years, will prepare national safer alternatives action plans for these substances. These plans will act as a model for individual substitution implementation plans and reporting prepared by industrial facilities (defined as manufacturers, importers, processers, or users of priority toxic substances). Opportunities for industrial facilities to apply for a variance from having to prepare a plan by the deadline set out in Part 5.1 also are authorized, subject to compliance with certain criteria and an opportunity for public comment on the variance request. To assist firms in meeting the requirements of the Act, the law would authorize: (1) certification of safer alternatives planners; (2) imposition of fees; (3) establishment of technical assistance programs for small businesses and employees; and (4) establishment of an Institute on Pollution Prevention and Safer Alternatives.

Part 7 is amended by adding a new Division 6.1 regarding air pollution in Canada. Division 6.1 provides authority for promulgating regulations regarding national primary and secondary ambient air quality standards for lead, sulphur dioxide, fine particulate matter, carbon monoxide, ozone, and nitrogen dioxide, and imposes obligations on the Minister to develop, adopt, and implement a national plan for ensuring that the standards for these substances are attained to protect public health and welfare. In undertaking both development of regulations and the implementation plan, the Minister is required to offer to consult provinces and members of the National Advisory Committee who are representatives of aboriginal governments, and may consult others, before proceeding. Division 6.1 also authorizes the Minister to use existing provisions of the Act to enter into administrative or equivalency agreements with provinces or with an aboriginal people, as the case may be, to achieve Division 6.1 objectives.

Part 11 is amended by adding a requirement for the Minister to table a state of the environment report every five years in each House of Parliament that also examines exposure levels to toxic substances and substances of very high concern in hot spots and assesses the health of vulnerable populations at these locations in light of environmental justice principles, with such report to be subject to review by a Parliamentary committee.

TABLE OF PROVISIONS

11. Toxic substances

12. Definition of “virtual elimination”

13. Repeal of definition of “level of quantification”

General

14. Domestic Substances List

15. Research, investigation and evaluation

Information Gathering

16. When information on a substance required to be submitted

Priority Substances and Other Substances

17. Categorization of endocrine disrupting substances on Domestic Substances List

18. Screening level assessment

19. Weight of evidence and the precautionary, substitution, and environmental justice principles

20. When substance is not toxic or capable of becoming toxic

21. When substance is toxic or capable of becoming toxic

22. Same

23. Proposal for virtual elimination

24. Publication of final decision

25. Considerations in respect of preventive or control actions where substance is toxic or capable of becoming toxic

Re-evaluation

26. Ministers’ discretion/requirement to initiate re-evaluation

Special Review

Burden of Persuasion and Consideration of Information

Public Consultation

Substances and Activities New to Canada

27. Weight of evidence and precautionary, substitution, and environmental justice principles

Regulation of Toxic Substances

28. Where application to court to add to List of Toxic Substances

Preamble

The preamble is amended by adding the following after the fourteenth whereas:

Whereas the Government of Canada recognizes the right of every Canadian to a healthy environment;

Whereas the Government of Canada recognizes that exposure to toxic substances can adversely affect the environment and health of people, including that of vulnerable populations and, therefore, is committed to applying environmental justice principles in its decision-making;

Whereas the Government of Canada recognizes and is committed to implementing the principles enshrined in the United Nations Declaration on the Rights of Indigenous Peoples;

Short Title

1. This Act may be cited as the *Canadian Environmental Protection Act, 2018*.

Administrative Duties

2. Section 2(1) is amended by repealing and replacing subparagraph (a) with the following

> (a) exercise its powers in a manner that protects the environment and human health, applies the precautionary principle, and promotes and reinforces enforceable pollution prevention approaches;

and by adding the following:

> (a.2) apply the polluter pays principle;
>
> (a.3) apply the substitution principle;
>
> (a.4) apply the environmental justice principle;
>
> (p) protect the right of every resident of Canada to a healthy environment;

Interpretation

3. Section 3(1) is amended by adding the following:

“acceptable risk” means that there is reasonable certainty that no harm to human health, future generations, vulnerable populations, or the environment will result from exposure to or the manufacture, processing, import, use, or release of a substance;

“aggregate exposures” means the sum total of all exposures by a receptor to a single substance from all exposure routes, pathways, sources, or settings;

“consumer product” has the same meaning as in the *Canada Consumer Product Safety Act*, S.C. 2010, c. 21;

“cumulative effects” means the sum total of biological effects arising from the aggregate exposures to all substances that have a common mechanism or mode of action, target tissue, or effect, to which a human or environmental receptor is exposed;

“economically feasible” means that a safer alternative does not significantly reduce the operating margin of the industrial facility, or the person who imports, manufactures, transports, processes, or distributes a substance for commercial purposes, or uses a substance in a commercial manufacturing or processing activity, as the case may be;

“endocrine disrupting substance” means a substance having the ability to disrupt the synthesis, secretion, transport, binding, action or elimination of natural hormones or their receptors in an organism, or its progeny, that affects cellular signaling, and gene expression responsible for the maintenance of homeostasis, reproduction, development, immune function, tissue health, or behaviour of the organism and, for the purposes of this Act, such a substance is deemed to be inherently toxic;

“environmental justice principle” means fair treatment and meaningful involvement of all people, including a vulnerable population, in respect of environmental and human health hazards associated with toxic substances, or substances of very high concern, in Canada;

“exposure pathways” means air, soil, water, or food;

“exposure routes” means dermal, oral, by inhalation, transplacental, or ocular;

“exposure settings” means home, community, school, childcare, workplace, or place of commerce;

“exposure sources” means industrial emissions, or consumer products;

“fair treatment” means no group of people, including a vulnerable population, shall bear a disproportionate risk of experiencing adverse environmental or human health effects from exposure to a toxic substance manufactured, processed, imported, or used in Canada;

“hot spots” means geographic locations where emissions of substances to air, discharges to water, or deposits to land, from specific sources, may expose local populations to elevated health risks, when considered individually or cumulatively from other nearby sources;

“meaningful involvement” means:

(a) people, including a vulnerable population, shall have a full opportunity to participate in the decision-making process of the Government of Canada under this Act regarding a substance that may adversely affect human health or the environment;

(b) people, including a vulnerable population, shall be entitled to an opportunity to influence a decision of the Government of Canada on a substance and whether it is determined to be toxic and how it will be managed under this Act;

(c) the concerns of people, including a vulnerable population, shall be considered by the Government of Canada in the decision-making process regarding whether a substance is determined to be toxic and how it will be managed under this Act;

(d) the Government of Canada shall seek out and facilitate the involvement of people, including a vulnerable population, who may be potentially affected by a substance regarding whether it is determined to be toxic and how it will be managed under this Act;

"person" means a resident of Canada, any other individual, or a corporation;

"polluter pays principle" means users and producers of pollutants and wastes should bear the responsibility for remedying their actions that cause or contribute to pollution of the environment, and pay the direct and indirect costs they impose on society and reduce pollution based on either the extent of the damage done to society, or the extent to which an acceptable level or standard of pollution is exceeded;

"precautionary principle" means the principle that where there are threats of serious or irreversible damage to the environment or human health, lack of full scientific certainty shall not be used as a reason for postponing measures to protect the environment or human health;

"public trust" means the responsibility of the Government of Canada to preserve and protect the collective interest of residents of Canada in the quality of the environment for the benefit of present and future generations;

"resident of Canada" means a Canadian citizen or a permanent resident within the meaning of section 2(1) of the *Immigration and Refugee Protection Act*;

"safer alternative" means an option that includes input substitution as well as including a change in chemical, material, product, process, function, system or other action, whose adoption to replace a toxic substance, a priority toxic substance, or substance of very high concern currently in use, or proposed for use, as the case may be, would be the most effective in comparison with another chemical, material, product, process, function, system, or other action, in reducing overall potential harm to public and workplace health, safety, or the environment;

"significant environmental harm" includes, but is not limited to, harm where the effects on the environment are long lasting, difficult to reverse or irreversible, widespread, cumulative, or serious;

"substance" means….

(h) environmental or metabolic breakdown products;

"substances of very high concern" means, in addition to those substances listed as toxic substances in Schedule 1, substances not listed in Schedule 1 having any of the following characteristics:

(a) substances known to cause or reasonably anticipated to cause significant adverse human health or environmental effects at concentration levels that are reasonably likely to exist beyond facility site boundaries as a result of continuous, or frequently occurring, releases;

(b) substances known to cause or reasonably anticipated to cause in humans or wildlife:

(i) carcinogenic, mutagenic, or teratogenic effects;

(ii) reproductive dysfunctions;

(iii) neurological or developmental disorders;

(iv) heritable genetic alterations;

(v) endocrine disrupting effects; or

(vi) other chronic health effects;

(c) substances known to cause or reasonably anticipated to cause a potentially significant adverse effect on human health or the environment because of:

(i) their toxicity;

(ii) their persistence in the environment; or

(iii) their tendency to bioaccumulate in the environment;

"substitution principle" means toxic substances listed in Schedule 1, or other substances of very high concern, are progressively replaced by non-hazardous or less hazardous, including non-chemical, alternatives or technologies where these are technically and economically feasible;

"technically feasible" means that the technical knowledge, equipment, materials, and other resources available in the marketplace are expected to be sufficient to develop and implement a safer alternative;

"vulnerable population" means people who are:

(a) infants, children, or adolescents;

(b) women, including pregnant women;

(c) seniors;

(d) Indigenous peoples;

(e) individuals with a pre-existing medical condition;

(f) workers that work with a toxic substance; or

(g) by reason of their;

i. income;

ii. race;

iii. colour;

iv. gender;

v. national origin; or

vi. geographic location,

are subject to a disproportionate potential for exposure to, or potential for disproportionate adverse effects from exposure to, a substance, including a toxic substance, a priority toxic substance, or a substance of very high concern;

"weight of evidence approach" means a method of assessment that involves systematic assembly of all data regarding hazard, exposure, and risk from multiple sources of information and lines of evidence, transparent weighing of the totality of evidence, and subsequent synthesis of the totality of the evidence in coming to a decision;

Part 2
Public Participation

4. Section 22 is repealed and replaced with the following:

Environmental Protection Action

Right
22.(1) Every resident of Canada has a right to a healthy environment.

Government duty
(2) In addition to the duties set out in subsection 2(1), the Government of Canada shall, within its jurisdiction and in its administration of this Act:

(a) protect the right of every resident of Canada to a healthy environment; and
(b) act as trustee of the environment for the benefit of present and future generations.

Circumstances when a resident of Canada may bring an environmental protection action
22.1(1) Any person may commence an environmental protection action in the Federal Court:

(a) against the Government of Canada for:

(i) violating the right to a healthy environment;
(ii) failing to enforce this Act;
(iii) failing to fulfill its duties as trustee of the environment; or
(iv) authorizing or failing to prevent activity that may result in significant environmental harm;

(b) against any person, organization, or government body violating or threatening to violate this Act, a regulation, or statutory instrument under this Act, or where significant environmental harm has resulted or may result.

Notice
(2) A person intending to commence an environmental protection action referred to in subsection (1), shall provide the Minister and any potential defendants with 60 days notice prior to filing the action.

When environmental protection action shall not be commenced
(3) An environmental protection action referred to in subsection (1)(b) shall not be commenced if the Government of Canada has completed or commenced enforcement proceedings against the potential defendants.

Exception
(4) Notwithstanding subsection (3), an environmental protection action may be commenced or continued where the Government of Canada has, or has exercised, the power to authorize an activity that may result in significant environmental harm.

Burden of proof
(5) In an environmental protection action brought under subsection (1), once the plaintiff has demonstrated a *prima facie* case of significant environmental harm, the onus is on the defendant to prove that the acts or omissions alleged by the plaintiff will not result in significant environmental harm.

Defence
(6) It is not a defence to an environmental protection action under subsection (1) that the activity was authorized under this Act, a regulation, or other statutory instrument under this Act, or any other act, unless the defendant proves that

(a) the significant environmental harm is or was the inevitable result of carrying out the activity permitted by the Act, regulation, or other statutory instrument; and
(b) there is no reasonable or prudent alternative that can prevent the significant environmental harm.

Standard of proof
(7) The standard of proof in respect of any affirmative defence raised pursuant to subsections (5) or (6) shall be adjudicated on a balance of probabilities.

Mediation
(8) An environmental protection action shall be referred to mediation for a period of thirty days following its commencement, extendible upon agreement of all parties.

Powers of Federal Court
(9) Notwithstanding remedial provisions in other laws, if the Federal Court finds that the plaintiff is entitled to judgment under subsection (1), the Federal Court may

(a) grant declaratory relief;
(b) grant an injunction;
(c) suspend or cancel a federal permit or other authorization issued to a defendant;
(d) order the defendant to clean up, restore, or rehabilitate any part of the environment;
(e) order a defendant to take specified preventive measures;
(f) order a defendant to pay a fine to be used for the cleanup, restoration, or rehabilitation of the environment harmed by the defendant;
(g) order a defendant to pay a fine to be used for the enhancement or protection of the environment generally;
(h) order the Minister to comply with, or to monitor compliance with, the terms of any order; and
(i) make any other order that the court considers just.

Court to retain jurisdiction
(10) In making an order under subsection (9), the Federal Court may retain jurisdiction over the matter so as to ensure compliance with its order.

Dismissal
(11) A defendant may apply to the Federal Court to have an environmental protection action dismissed if

> (a) the action duplicates another legal proceeding that involves the same acts, omissions, or environmental harm;
> (b) the action is frivolous, vexatious, or harassing; or
> (c) the action has no reasonable prospect of success.

Interim orders
(12) Where an environmental protection action is brought under subsection (1), the plaintiff:

> (a) may make a motion to the Federal Court for an interim order to protect the subject matter of the action when, in the court's opinion, significant environmental harm may occur;
> (b) may be entitled to an award of advanced costs, upon application to the court if, in the opinion of the court, it is in the public interest;
> (c) in bringing a motion under subsection (12)(a) or (b) shall not be denied an interim order on the grounds that the plaintiff is unable to provide an undertaking to pay costs or damages should the action eventually be dismissed;
> (d) if required to provide an undertaking to pay costs or damages in support of continuing the action, shall not be required to pay more than $1,000.

Costs where unsuccessful
(13) Where an environmental protection action under subsection (1) is dismissed, an order for the plaintiff to pay costs shall only be made if the action:

> (a) is found by the court to not represent a test case, or raise a novel point of law; or
> (b) is found to be frivolous, vexatious, or harassing.

Judicial Review

Application for review of government decision
22.2(1) Any person, whether or not directly affected by the matter in respect of which relief is sought, may bring an application for review in the Federal Court of a government decision made under this Act that would otherwise be open to judicial review under section 18.1 of the *Federal Courts Act*.

Application to be brought under provisions of Federal Courts Act and Rules
(2) An application for judicial review commenced under this section shall be brought in accordance with the provisions of the *Federal Courts Act* and the *Federal Courts Rules*.

Part 3
Information Gathering, Objectives, Guidelines, and Codes of Practice

Interpretation

5. Section 43 is amended by deleting the definition for “hormone disrupting substance”.

Environmental Data and Research

6. Section 44(4) is amended by substituting the word “endocrine” for “hormone” where it appears in the subsection.

Information Gathering

7. Section 46(1) is amended by adding the following:

(e.1) substances that, if released to the environment, may harm a vulnerable population;

(e.2) substances of very high concern;

8. Section 46 is further amended by adding the following:

Mandatory information
(1.1) Notwithstanding subsection (1), a notice issued by the Minister under that subsection shall require information on a substance where the substance is listed in Schedule 1 of the Act, is persistent, bioaccumulative, or has endocrine disrupting effects.

Petition
(9) Any person may petition the Minister to add a substance or substances to the National Pollutant Release Inventory established under subsection (1) on the basis of the criteria established under subsection (1)(e.1) and (e.2).

Actions by Minister
(10) Within 180 days after receipt of a petition under subsection (9), the Minister shall take one of the following actions:

(a) add the substance or substances to the Inventory; or

(b) publish in the *Canada Gazette*, the Environmental Registry established under section 12, and in any other manner the Minister considers appropriate, a detailed explanation setting out the reasons why the petition is denied.

Threshold for Reporting
(10) The threshold amounts for purposes of reporting under this section a substance manufactured, processed, imported, or used at a facility are 1,000 kilograms of the substance per year.

Lower threshold at discretion of Minister
(11) The Minister may establish a threshold amount for a substance lower than the amount specified in subsection (10).

Part 4
Pollution Prevention

9. Section 56 is amended by adding the following:

Notice to specify how precautionary and other principles incorporated into plan
(2.1) Notwithstanding subsection (2)(c), the notice shall specify how the precautionary, substitution, polluter pays, and environmental justice principles have been incorporated into the plan.

10. Section 60 is amended by adding the following:

Where Minister shall issue notice
(1.1) Where five years have elapsed since a plan has been prepared under section 56 and the Minister has not issued the notice referred to in subsection (1), the Minister shall issue such notice.

Where Minister shall publish review
(1.2) Where the Minister has published a notice under subsection (1) or (1.1), the Minister shall, within one year of issuing such notice, publish in the *Canada Gazette*, and in any other manner the Minister considers appropriate, the results of the Minister's review of the adequacy of the plan.

Part 5
Controlling Toxic Substances

11. Section 64 is repealed and replaced with the following:

Interpretation

Toxic substances
64.(1) For the purposes of this Part and Part 6, except where the expression "inherently toxic" appears, a substance is toxic if it

(a) has or may have an immediate or long-term harmful effect on the environment or its biological diversity;
(b) constitutes or may constitute a danger to the environment on which life depends; or
(c) constitutes or may constitute a danger in Canada to human life or health.

Persistence or bioaccumulation not necessary for determination of toxicity
(2) A substance that is neither persistent nor bioaccumulative shall still be deemed to be toxic if it meets the requirements of subsection (1).

12. Section 65 is repealed and replaced with the following:

Definition of "virtual elimination"
65.(1) In this Part, "virtual elimination" means, in respect of a toxic substance released into the environment as a result of human activity, zero discharge.

Virtual Elimination List
65.(2) The Ministers shall compile a list known as the Virtual Elimination List.

Implementing virtual elimination
65.(3) The Ministers shall, in respect of substances on the Virtual Elimination List, employ a policy of, and develop programs that achieve, zero discharge.

13. Section 65.1 is repealed.

General

14. Section 66 is amended by removing in subsections (1), (3), and (4) the reference to December 31, 1986 and replacing it with December 31, 2018.

15. Section 68 is repealed and replaced with the following:

Research, investigation and evaluation
68. For the purpose of assessing whether a substance is toxic or is capable of becoming toxic, or for the purpose of assessing whether to control, or the manner in which to control, a substance, including a substance specified on the List of Toxic Substances in Schedule 1, the Ministers shall

(a) collect or generate data and conduct investigations respecting any matter in relation to a substance, including, without limiting the generality of the foregoing,

(i) whether short-term exposure to the substance, or its interaction with other substances, causes significant effects,

(ii) the potential of organisms in the environment to be widely exposed to the substance,

(iii) whether organisms are exposed to the substance via multiple pathways,

(iv) the ability of the substance to cause a reduction in metabolic functions of an organism,

(v) the ability of the substance to cause delayed or latent effects over the lifetime of an organism,

(vi) the ability of the substance to cause reproductive or survival impairment of an organism,

(vii) whether exposure to the substance has the potential to contribute to population failure of a species,

(viii) the ability of the substance to cause transgenerational effects,

(ix) quantities, uses and disposal of the substance,

(x) the manner in which the substance is released into the environment,

(xi) the extent to which the substance can be dispersed, including its potential for long range transboundary transport, and will persist in the environment,

(xii) the development and use of alternatives to the substance,

(xiii) methods of controlling the presence of the substance in the environment, and

(xiv) methods of reducing the quantity of the substance used or produced or the quantities or concentration of the substance released into the environment;

(b) correlate and evaluate any data collected or generated under paragraph (a) and publish results of any investigations carried out under that paragraph; and

(c) provide information and make recommendations respecting any matter in relation to a substance, including, without limiting the generality of the foregoing, measures to control the presence of the substance in the environment.

16. Section 72 is repealed and replaced with the following:

Information Gathering

When information on a substance required to be submitted
72.(1) Notwithstanding sections 70 and 71, a person who

(a) imports, manufactures, transports, processes or distributes more than one tonne of a substance in a year for commercial purposes, or
(b) uses more than one tonne of a substance in a year in a commercial manufacturing or processing activity

shall submit to the Ministers the information set out in subsection (2) within the time specified in the notice required by section 71.

Nature of information to be submitted
(2) The information required to be submitted by a person to the Ministers pursuant to subsection (1) shall include

(a) name and address of company and name, position, and authority of person submitting the information on behalf of the company;
(b) properties of the substance;
(c) manufacture and use of the substance;
(d) environmental fate and pathways of the substance;
(e) toxicological information on the substance;
(f) guidance on safe use of the substance;
(g) summaries of all research on the substance;
(h) information set out in section 68(a)(i)-(xiv).

Toxicological tests
(2.1) Notwithstanding subsection (2)(e), the Minister shall require the person to conduct toxicological and other tests on a substance where they are 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.

Report required where more than one tonne produced per year
(3) Where a person produces more than one tonne of a substance per year, the person shall, in addition to the information required in subsection (2), submit to the Ministers a report containing information on the hazards posed by the substance and an assessment of whether the substance is persistent, bioaccumulative, toxic, or results in endocrine disrupting effects.

Where substance persistent, bioaccumulative, toxic, or results in endocrine disrupting effects
(4) Where a report produced pursuant to subsection (3) indicates that a substance is persistent, bioaccumulative, toxic, or results in endocrine disrupting effects, the person submitting the information to the Ministers shall also provide to the Ministers a further report addressing the exposure and risk associated with the substance.

Priority Substances and Other Substances

17. Section 73(1) is repealed and replaced with the following:

Categorization of endocrine disrupting substances on Domestic Substances List
73.(1) The Ministers shall, within seven years from the giving of Royal Assent to this Act, categorize substances that are on the Domestic Substances List by virtue of section 66, for the purpose of identifying the substances on the List that, in their opinion

determined objectively and on the basis of available information, including information produced by international agencies, are endocrine disrupting substances.

18. Section 74 is repealed and replaced with the following:

Screening level assessment
74. The Ministers shall conduct a screening level assessment of a substance in order to determine whether the substance is a endocrine disrupting substance and shall propose one of the measures described in subsection 77(2) if

(a) the Ministers identify a substance on the Domestic Substances List to be a substance described in subsection 73(1); or
(b) the substance has been added to the Domestic Substances List under section 105.

19. Section 76.1 is repealed and replaced with the following:

Weight of evidence and the precautionary, substitution, and environmental justice principles
76.1 When the Ministers are conducting and interpreting the results of

(a) a screening assessment under section 74,
(b) a review of a decision of another jurisdiction under subsection 75(3) that, in their opinion, is based on scientific considerations and is relevant to Canada,
(c) an assessment of whether a substance specified on the Priority Substances List is toxic or capable of becoming toxic,

the Ministers shall apply a weight of evidence approach and the precautionary, substitution, and environmental justice principles.

20. Section 77 is amended by adding the following:

Where substance is not toxic or capable of becoming toxic
(1.1) Where any of the measures identified under subsection (1) indicate that a substance is not toxic or capable of becoming toxic, the Ministers shall publish in the *Canada Gazette* a statement indicating that they propose no further action in respect of the substance and a summary of the scientific considerations on the basis of which the conclusion is reached.

Where substance is toxic or capable of becoming toxic
(1.2) Where any of the measures identified under subsection (1) indicate that a substance is toxic or capable of becoming toxic, the Ministers shall publish in the *Canada Gazette* a statement indicating one of the measures referred to in subsection (2) that the Ministers propose to take and a summary of the scientific considerations on the basis of which the measure is proposed.

21. Section 77.(2) is amended by changing subparagraph (b) to (a), and subparagraph (c) to (b).

22. Section 77.(3) is amended by changing subparagraph (2)(c) to (2)(b).

23. Section 77. (4) is repealed and replaced with the following:

Proposal for virtual elimination
(4) When the Ministers propose to take the measures referred to in paragraph (2)(b) in respect of a substance and the Ministers are satisfied that

> (a) the substance is persistent and bioaccumulative in accordance with the regulations,
> (b) the presence of the substance in the environment results primarily from human activity, and
> (c) the substance is not a naturally occurring radionuclide,

the Ministers shall propose the implementation of virtual elimination under subsection 65(3) of the substance.

24. Section 77.(6)(c) is amended by changing subparagraph (2)(c) to (2)(b).

25. Section 77 is further amended by adding the following:

Considerations in respect of preventive or control actions where substance is toxic or capable of becoming toxic
(6.1) Where a substance is toxic or capable of becoming toxic, or a substance of very high concern, the considerations the Minister shall take into account in respect of developing preventive or control actions by regulation or instrument in relation to the substance shall include:

> (a) the effects of regulatory options on protection of vulnerable populations;
> (b) effects of regulatory options when aggregate exposures, cumulative and synergistic effects are taken into account;
> (c) pollution prevention actions;
> (d) application of the substitution principle, where substitution of another substance or technology for the toxic substance appears warranted, because analysis shows there are suitable, safer alternative substances or technologies that exist for the toxic substance that are technically and economically feasible;

26. Sections 79.1-79.4 are added to the Act as follows:

Re-evaluation

Ministers' discretion to initiate re-evaluation
79.1(1) The Ministers may initiate the re-evaluation of a substance if the Ministers consider that, since the substance was subjected to categorization under section 73, or

screening under section 74, new information of a material nature has come to light regarding the health or environmental risks of the substance, or a substance of the same class or kind.

Ministers required to initiate re-evaluation
(2) Without limiting the generality of subsection (1), the Ministers shall initiate a re-evaluation of a substance no later than one year after 15 years have elapsed since the substance was subjected to categorization under section 73, or screening under section 74, whichever is later.

Notice requiring information
(3) Re-evaluation of a substance is initiated by the Ministers publishing a notice in the *Canada Gazette*, and in any other manner the Ministers consider appropriate, requiring any person who

> (a) imports, manufactures, transports, processes or distributes a substance for commercial purposes, or
> (b) uses a substance in a commercial manufacturing or processing activity,

to provide information in the form and within the period specified in the notice.

Request for information from departments and provinces
(4) After the re-evaluation is initiated, the Ministers shall deliver a notice to federal and provincial government departments and agencies whose interests and concerns are affected by the federal regulatory system requesting them to provide, in the form and within the period specified in the notice, information in respect of the health and environmental risks of the substance that is under re-evaluation.

Provision of information if more than person
(5) Where the Ministers are satisfied that the information required under subsection (3) has been provided by more than one person, the Ministers shall, subject to and in accordance with the regulations, permit another person to use or rely on that information to meet the requirements under that subsection.

Evaluation of substance
(6) After the re-evaluation is initiated, the Ministers shall, in accordance with the regulations, if any, conduct any evaluations that the Ministers consider necessary with respect to health or environmental risks and shall carry out the consultations required by section 79.4.

Special Review

Initiation of special review by Ministers
79.2(1) The Ministers shall initiate a special review of a substance if the Ministers:

> (a) have reasonable grounds to believe that the health or environmental risks of the substance are not acceptable;

(b) the use of the substance in Canada has expanded significantly since the original assessment was completed; or
(c) have received new scientific findings respecting the substance's toxicity that determined objectively are cause for concern.

Special review where OECD ban
(2) Without limiting the generality of subsection (1), and notwithstanding section 75(3), when a member country of the Organization for Economic Cooperation and Development prohibits, or substantially restricts, a substance for health or environmental reasons, the Ministers shall initiate a special review of the substance.

Special review where information from department, province, or aboriginal government
(3) Without limiting the generality of subsection (1), the Ministers shall initiate a special review of a substance if a federal or provincial government department or agency, or an aboriginal government has provided information to the Ministers that relates to the health or environmental risks of a substance and if, after considering the information provided, the Minister has reasonable grounds to believe that the health or environmental risks of the substance are unacceptable.

Request for special review
(5) Any person may request a special review of a substance by making a request to the Minister in the form and manner directed by the Minister.

Decision
(6) Not more than 180 days after receiving a request under subsection (5), the Minister shall decide whether to initiate a special review and shall respond to the request with written reasons for the decision.

Notice requesting information
(7) A special review of a substance is initiated by the Ministers publishing a notice in the *Canada Gazette*, and in any other manner the Ministers consider appropriate, requiring any person who

(a) imports, manufactures, transports, processes or distributes a substance for commercial purposes, or
(b) uses a substance in a commercial manufacturing or processing activity,

to provide information in the form and within the period specified in the notice.

Request for information from departments and provinces
(8) After the special review is initiated, the Ministers shall deliver a notice to federal and provincial government departments and agencies whose interests and concerns are affected by the federal regulatory system requesting them to provide, in the form and within the period specified in the notice, information in respect of the health and environmental risks of the substance that is under special review.

Provision of information if more than one person
(9) Where the Ministers are satisfied that the information required under subsection (7) has been provided by more than one person, the Ministers shall, subject to and in accordance with the regulations, permit another person to use or rely on that information to meet the requirements under that subsection.

Evaluation of substance
(10) After the special review is initiated, the Ministers shall, in accordance with the regulations, if any, evaluate the aspects of the substance that prompted the special review and shall carry out the consultations required by section 79.4.

Burden of Persuasion and Consideration of Information

Burden of Persuasion
79.3(1) During an evaluation that is done in the course of categorization, screening level assessment, re-evaluation, special review, or assessment of substances or activities new to Canada,

> (a) the burden of persuading the Ministers that the health and environmental risks of a substance are acceptable and that there are no safer alternatives for a substance that are technically and economically feasible, rests with persons who
>
> > (i) import, manufacture, transport, process or distribute a substance for commercial purposes, or
> > (ii) use a substance in a commercial manufacturing or processing activity, and
>
> (b) the Ministers shall consider information provided by such persons in support of the substance and such other information provided as a result of consultations required by section 79.4.

Scientific approach
(2) In evaluating the health and environmental risks of a substance and in determining whether those risks are acceptable, the Ministers shall

> (a) apply a scientifically based approach; and
> (b) in relation to health risks,
>
> > (i) among other relevant factors, consider available information on aggregate exposure to the substance, including information acquired under section 72(2) and (2.1), as well as dietary and other non-occupational sources, such as drinking water and exposure to the substance in and around homes and schools, or in consumer products, as well as cumulative effects of the substance and other substances that have a common mechanism of toxicity,

(ii) apply appropriate margins of uncertainty to take into account, among other relevant factors, the use of animal experimentation data and the different sensitivities to the substance of vulnerable populations, and

(iii) in the case of a threshold effect, if the substance is used in or around homes or schools, or is contained in consumer products, apply a margin of uncertainty that is ten times greater than the margin of uncertainty that would otherwise be applicable under subparagraph (ii) in respect of that threshold effect, to take into account potential pre- and post-natal toxicity and completeness of the data with respect to the exposure of, and toxicity to, vulnerable populations, unless, on the basis of reliable scientific data, the Ministers have determined that an even greater margin of uncertainty would be appropriate,

(iv) in the case of a non-threshold effect, the substance shall be deemed to have no level below which exposure is safe.

Public Consultation

Minister to consult
79.4(1) The Ministers shall consult the public, and federal and provincial government departments and agencies, whose interests and concerns are affected by the federal regulatory system before making a decision about a substance as a result of a categorization, screening level assessment, re-evaluation, special review, or assessment of substances or activities new to Canada.

Public notice
(2) To initiate a consultation under subsection (1), the Ministers shall make public a consultation statement and shall invite any person to send written comments on the proposed decision within the period specified in the statement.

Consultation statement
(3) The consultation statement shall include

(a) a summary of any reports of the evaluation of the health and environmental risks of the substance prepared or considered by the Ministers;
(b) the proposed decision and the reasons for it; and
(c) any other information that the Ministers consider necessary in the public interest.

Consideration of comments
(4) The Ministers shall consider any comments received pursuant to subsection (2) before making a decision.

Decision statement
(5) After making a decision, the Ministers shall make public a decision statement that shall include the decision, the reasons for it and a summary of any comments that the Ministers received on the proposed decision.

Confidential test data
(6) A consultation statement referred to in subsection (3) and a decision statement referred to in subsection (5) shall contain any confidential test data that the Ministers consider to be in the public interest.

Access to information
(7) Notwithstanding subsections (3), (6), and section 53, the Ministers shall allow the public to have access to, and copies of, any information on a substance in the possession of the Ministers or their departments that

(a) is not confidential test data or confidential business information; or

(b) is confidential test data or confidential business information, if the information evaluates health or environmental hazards or risks of a substance.

27. Section 83 is amended by adding the following:

Substances and Activities New to Canada

Weight of evidence and precautionary, substitution, and environmental justice principles
(2.1) In assessing information pursuant to subsections (1) and (2) the Ministers shall apply a weight of evidence approach and the precautionary, substitution, and environmental justice principles.

28. Section 90 is amended by adding the following:

Regulation of Toxic Substances

Where application to court to add to List of Toxic Substances
(1.2) Notwithstanding subsection (1), where the finding of a:

(a) screening assessment under section 74;
(b) re-evaluation under section 79.1; or
(c) special review under section 79.2

indicates that a substance is toxic or capable of becoming toxic, and the Governor in Council has not made an order under subsection (1) two years after the date of the finding, any person may apply to the Federal Court for an order adding the substance to the List of Toxic Substances in Schedule 1.

29. Section 91 is amended by adding the following:

Publication of proposed regulation or instrument where substance added to List of Toxic Substances by court
(1.1) Where a substance has been added to the List of Toxic Substances in Schedule 1 as a result of an order of the Federal Court pursuant to section 90(1.2), a proposed regulation or instrument respecting preventive or control actions in relation to the substance shall be published by the Minister in the *Canada Gazette* within two years after the date of the order.

30. Section 92.(1) is amended by adding a reference to subsection (1.1) between the reference to subsections (1) and (6) of section 91.

31. Section 93.(1) is amended by adding the following:

(b.1) protection of a vulnerable population from substances specified on the List of Toxic Substances in Schedule 1;

32. Part 5.1, consisting of sections 103.1-103.10, is added to the Act as follows:

Part 5.1
Safer Alternatives to Priority Toxic Substances

Definition
103.1 The definitions in this section apply in this Part.

"industrial facility" means
(a) a place where a priority toxic substance is manufactured, imported, processed, or used; or
(b) a place where a product is manufactured, imported, sold, or offered for sale and the product, including a consumer product, contains a priority toxic substance;

"priority toxic substance" means a substance identified pursuant to section 103.2;

Identification of Priority Toxic Substances
103.2 (1) Not more than one year following the coming into force of this Part, and at two year intervals thereafter the Minister, utilizing the assistance of any advisory committees the Minister considers appropriate, shall identify and publish a list pursuant to subsections (4) and (5) of not less than fifteen, and not more than twenty, priority toxic substances contained in the List of Toxic Substances in Schedule 1.

Same
(2) The first list to be so published shall be known as List 1, with the second and subsequent lists to be numbered sequentially thereafter.

Criteria for identification
(3) The criteria for identification of priority toxic substances under subsection (1) shall include, but not be limited to, whether the substances are recognized by the International Agency for Research on Cancer, the National Toxicology Program of the United States Department of Health and Human Services, the European Chemicals Agency, or the National Research Council of Canada, as:

(a) carcinogens, mutagens, reproductive or developmental toxins;
(b) persistent or bioaccumulative;
(c) endocrine disruptors; or
(d) possessing other characteristics of equivalent concern including but not limited to,

(i) inherent toxicity;
(ii) level of use in Canadian industry or in products sold in Canada;
(iii) level of exposure to a vulnerable population; or
(iv) such other characteristics as set out by regulation.

Consultation on priority toxic substances
(4) The Minister shall ensure that notice of the first and subsequent lists referred to in subsection (1) is published in the Environmental Registry and shall seek comment from the public regarding prioritization of assessment of substances on, that should be added to, or that should be deleted from, the lists.

Final version of list to be published in Environmental Registry
(5) Following the consultation referred to in subsection (4), the Minister shall publish in the Environmental Registry the final version of the first and subsequent lists containing the order in which priority toxic substances on the lists shall be the subject of safer alternative assessment reports under section 103.3.

Ministerial authority to add to list
(6) Notwithstanding subsection (1), the Minister may at any time add a substance to the first or subsequent lists if it meets one or more of the criteria set out in subsection (3), in which case subsections (4) and (5) shall apply and each such list may contain more than the number of priority toxic substances at any one time identified in subsection (1).

Safer Alternatives Assessment Reports
103.3(1) Within 180 days after the publication of a list referred to in subsection (5) of section 103.2, and annually thereafter, the Minister shall select priority toxic substances from the list in the order in which they appear on the list and conduct and publish, utilizing the assistance of any advisory committees the Minister considers appropriate, a safer alternatives assessment report that evaluates the availability of safer alternatives to these substances.

Content of report
(2) The content of a safer alternatives assessment report shall include:

(a) uses and functions of the priority toxic substance;
(b) uses that result in the greatest volume of dispersion of, or highest exposure to, the priority toxic substance in the indoor, workplace, and natural environment;
(c) consideration of the potential impacts to human health and the environment, including a vulnerable population, of the continued use of a priority toxic substance;
(d) whether any of the existing uses of the priority toxic substance are unnecessary;
(e) public policy implications of a reduction in the use of the priority toxic substance where its current use is necessary;
(f) whether alternatives, including non-chemical alternatives, are available for the uses and functions of the priority toxic substance;
(g) whether the alternatives identified in subsection (f) are unacceptable, require further study, or are safer than the priority toxic substance;
(h) a qualitative discussion of the economic feasibility, opportunities, or costs associated with adopting and implementing any safer alternatives to the priority toxic substance including a qualitative characterization of,

(i) the economic impacts of adopting and implementing a safer alternative on the economy of Canada;
(ii) any impacts on the workforce or quality of work life;
(iii) potential costs or benefits to existing business;
(iv) potential impacts on the cost of providing health care if a product containing the priority toxic substance is a medical product; and
(v) the extent of human exposure to the priority toxic substance that could be eliminated and health care costs saved by adopting and implementing a safer alternative;

(i) recommendations on a course of action that should be employed with respect to the priority toxic substance including, but not limited to, whether all uses of the priority toxic substance should be prohibited; and
(j) such further or other matters as set out by regulation.

Consultation on report
(3) The Minister shall ensure that notice of a draft of a safer alternative assessment report referred to in subsection (1) is published on the Environmental Registry and shall seek comment from the public on the contents of the draft report before the report is finalized.

Final version of report to be published on Environmental Registry
(4) Following the consultation referred to in subsection (3), the Minister shall publish on the Environmental Registry the final version of a safer assessment report.

Timing for completion of reports
(5) Not more than two years after the publication of a list pursuant to section 103.2 shall elapse before all priority toxic substances on a list shall have an assessment report drafted and finalized.

National Priority Toxic Substance Alternatives Action Plans
103.4(1) Not more than one year after the publication of a safer alternative assessment report for a priority toxic substance pursuant to section 103.3, the Minister shall utilize the report to establish a national safer alternatives action plan for that substance.

Goal of plans
(2) The goal of a national priority toxic substance alternatives action plan shall be to coordinate the activities of the government of Canada and to require manufacturers, importers, processers, and users of priority toxic substances to

(a) act as expeditiously as possible to ensure substitution of a priority toxic substance with a safer alternative while

(i) minimizing job loss; and
(ii) mitigating any other potential unintended negative impacts; and

(b) achieve such other goals as may be specified by regulation.

Content of plans
(3) Each national priority toxic substance alternatives action plan shall contain:

(a) timetables, schedules, and deadlines for achieving substitution of a priority toxic substance with safer alternatives for specified uses;

(b) requirements for all industrial facilities that manufacture, import, process, or otherwise use a priority toxic substance to create substitution implementation plans that demonstrate how such facilities will substitute all specified uses of the substance with a safer alternative, including with respect to consumer products containing the priority toxic substance;

(c) where the safer alternatives assessment report indicated that safer alternatives are feasible, and that all uses of the substance should be prohibited, a requirement that the Minister promulgate regulations requiring the substitution of a priority toxic substance with a safer alternative;

(d) where the Minister determines that implementation of the national priority toxic substance alternatives action plan for the substitution of a substance, or specified uses of a substance, will take longer than five years, a requirement for plain language labeling of products containing the substance identifying that the substance is present in the product, and the impact of the substance on human health and the environment, including vulnerable populations;

(e) where the safer alternatives assessment report finds that safer alternatives are feasible, but require extensive capital expenditure or training, the Minister

shall implement technical assistance programs for small businesses and employees pursuant to this Act;

(f) where the safer alternatives assessment report finds that safer alternatives are not feasible, the national priority toxic substance alternatives action plan shall designate research and development activities to be undertaken by the Minister, including review of actions taken by other jurisdictions that have identified or adopted safer alternatives, with a view to examining the future feasibility of finding safer alternatives for the substance and report progress in achieving this goal every two years; and

(g) such other measures as established by regulation.

Consultation on plan
(4) The Minister shall ensure that notice of a draft of a national priority toxic substance alternatives action plan referred to in subsection (1) is published in the Environmental Registry and shall seek comment from the public on the contents of the draft plan before the plan is finalized.

Final version of plan to be published on Environmental Registry
(5) Following the consultation referred to in subsection (4), the Minister shall publish on the Environmental Registry the final version of a national priority toxic substance alternatives action plan for a substance.

Timing for completion of plans
(6) Not more than three years shall elapse after the publication of a list under section 103.2, before all priority substances on any such list shall have a plan drafted and finalized.

Action by federal sources
(7) Following the publication in the Environmental Registry of the plan referred to in subsection (5), all federal sources shall take any required implementing actions as set out in the plan and this Act.

Industrial Facility Substitution Implementation Plan
103.5(1) Where a final version of a national priority toxic substances alternatives action plan has been published in the Environmental Registry pursuant to subsection 103.4 (5), an owner and operator of an industrial facility that manufactures, imports, processes, or otherwise uses the priority toxic substance identified therein shall, within one year of the Environmental Registry publication, develop and complete a substitution implementation plan that implements the national priority toxic substances alternative action plan for the applicable substance at that facility.

Content of plan
(2) The content of a substitution implementation plan referred to in subsection (1) shall include:

(a) identification of all uses of a priority toxic substance by the industrial facility;

(b) identification of all alternatives considered, including cost and feasibility considerations;

(c) selection of preferred alternatives that will achieve the objectives, timetables, schedules, deadlines, and any prohibitions set out in the applicable national priority toxic substances alternatives action plan, including with respect to consumer products containing the priority toxic substance;

(d) a declaration signed by the highest ranking representative with direct operating responsibility at the industrial facility and with authority to bind the owner certifying that:

(i) he or she has read and is familiar with the substitution implementation plan;

(ii) the plan is true, accurate, and complete to the best of his or her knowledge; and

(iii) it is the corporate policy of that industrial facility to achieve the objectives, timetables, schedules, and deadlines of the plan;

(e) a certification signed by a safer alternatives planner that the plan meets the requirements of this Act, is complete and reasonable in every respect, and is capable of meeting the objectives, timetables, schedules, and deadlines of the applicable national alternatives plan for the priority toxic substance, including with respect to consumer products containing the priority toxic substance; and

(f) such other content as established by regulation.

Same
(2.1) Two or more industrial facilities may collaborate on the preparation of a plan referred to in subsection (1) so long as the other requirements of section 103.5 are met.

Variance application
(3) Notwithstanding subsection (1), the owner and operator of an industrial facility may file an application for a variance of the deadline set out in subsection (1), declaring and certifying that there is no safer alternative that is technically or economically feasible for the facility's particular use of the substance.

Burden of persuasion
(3.1) For the purposes of subsection (3), the burden of persuasion rests with the industrial facility that there is no safer alternative that is technically or economically feasible for the facility's particular use of the substance.

Content of variance application
(4) The content of the variance application referred to in subsection (3) shall include:

(a) identification of all uses by the industrial facility of the priority toxic substance;

(b) identification of all alternatives considered and their cost and feasibility considerations;

(c) the basis for the certification that there is no feasible safer alternative;

(d) documentation of efforts to be taken by the industrial facility to minimize use of the priority toxic substance and human and environmental exposures, including that of vulnerable populations, to the substance until safer alternatives are found and implemented;

(e) steps the industrial facility will take to identify safer alternatives in the one year period subsequent to the date of the variance application;

(f) a declaration signed by the highest ranking representative with direct operating responsibility at the industrial facility and with authority to bind the owner certifying that:

(i) he or she has read and is familiar with the variance application and supporting materials; and

(ii) the variance application is true, accurate, and complete to the best of his or her knowledge;

(g) a certification signed by a safer alternatives planner that the variance application meets the requirements of this Act, and is complete and reasonable in every respect; and

(h) such other content as established by regulation.

Public access to information in variance application
(5) All information submitted to the Minister as part of a variance application shall be accessible to any member of the public unless the owner and operator of the industrial facility submitting the material

(a) claims that some of the material consists of trade secrets or is confidential business information;

(b) seeks protection from the Minister from its disclosure; and

(c) provides justification for this request;

in the variance application.

Minister to decide claims of confidentiality
(6) After considering the claims, disclosure protection request, and justification with respect thereto under subsection (5), the Minister shall determine which portions of the variance application are non-confidential for the purposes of subsection (7).

Non-confidential portions of variance application on Environmental Registry
(7) Where the owner and operator of an industrial facility files a variance application pursuant to subsection (3), and following the Minister's consideration of any claims of confidentiality under subsection (5), the Minister shall forthwith place the non-confidential portions of the application on the Environmental Registry, as determined under subsection (6), and invite public comment on the variance application at least 45 days prior to making a decision on the variance application under subsection (8).

Consideration and decision by Minister of variance application
(8) The Minister, following review of the variance application referred to in subsections (3), shall accept or reject such application within 60 days of receipt of the application after applying the criteria set out in subsection (9).

Criteria
(9) The criteria to be considered by the Minister before granting or rejecting a variance application shall include whether:

(a) there is a need for the use of the substance;

(b) the substance is necessary to meet a required performance standard or specification;

(c) there is no safer alternative;

(d) use of the product containing the priority toxic substance would cause human exposure or environmental contamination, including to a vulnerable population; and

(e) such other criteria as established by regulation.

Duration of variance
(10) A variance granted under this section shall expire three years after its issuance unless, pursuant to subsection (10.1), a new application for variance has been granted by the Minister before the expiry date.

Renewal of variance
(10.1) A variance issued pursuant to subsection (10) may be renewed once for up to three additional years by the Minister upon application and subject to the criteria set out in subsection (9) and any additional criteria specified by regulation.

Notice of objection to variance decision
(11) Any person may file a notice of objection within 30 days of the Minister granting, renewing, or refusing to grant or renew a variance application.

When judicial review available
(11.1) Where the Minister fails to make a decision on whether to establish a board of review to hear the notice of objection referred to in subsection (11) within 180 days of the date of the notice, such failure shall be deemed to be a decision, and any person may apply to the Federal Court for review of the decision.

Employee consultation
(12) An owner and operator of an industrial facility evaluating the substitution of safer alternatives shall consult with facility employees prior to filing the plan referred to in subsection (1) or a variance referred to in subsection (3). Such consultation shall include:

(a) a minimum thirty day period for the provision of comments;

(b) maintenance of documentation of employees input and how it was utilized;

(c) opportunity for anonymous employee comments;

(d) analysis of the impact substitution may have on all aspects of the quality of working conditions and work life;

(e) such other matters as established by regulation.

Substitution implementation plan and pollution prevention plan
(13) An owner and operator of an industrial facility required to prepare a substitution implementation plan shall include the plan in the pollution prevention plan for the industrial facility, if any.

Conflict between substitution implementation plan and pollution prevention plan
(14) Where there is a conflict between a substitution implementation plan and a pollution prevention plan, the requirements of the plan that are more protective of human health and the environment, including a vulnerable population, shall prevail.

Plan to be provided to Minister on request
(15) The owner and operator of an industrial facility who are required under section 103.5 to ensure that a substitution implementation plan is prepared and implemented shall, if a copy is requested by the Minister, ensure that the copy is given to the Minister in accordance with the regulations.

Plan summary to be placed on Environmental Registry
(16) The owner and operator of an industrial facility referred to in subsection (1) shall provide to the Minister a summary of the plan referred to in subsection (11) for placement on the Environmental Registry in accordance with the regulations.

Update of plan
(17) Every two years after the development of the substitution implementation plan referred to in subsection (1), the owner and operator of the industrial facility shall update the plan showing progress made in substituting a safer alternative for the priority toxic substance and shall, if a copy is requested by the Minister, ensure that the copy is given to the Minister in accordance with the regulations.

Update of plan summary to be placed on Environmental Registry
(18) Every two years an update of the plan summary referred to in subsection (16) shall be provided to the Minister by the owner and operator of the industrial facility referred to in subsection (1) for placement on the Environmental Registry in accordance with the regulations.

Offence
(19) The owner and operator of an industrial facility referred to in subsection (1) that fails to give a copy of the substitution implementation plan to the Minister, provide a plan summary to the Minister, file a true, accurate, and complete declaration required by this Part, or make substantial progress in substituting a safer alternative for the priority toxic substance, is guilty of an offence.

Safer Alternatives Planners
103.6 (1) Where an individual wishes to be certified as a safer alternatives planner under this Act, the individual shall:

(a) satisfactorily complete a safer alternatives planning program developed by the Minister pursuant to the requirements of this Act and the regulations;

(b) pass a uniform certification examination which the Minister shall develop by the date established by regulation; or

(c) have at least two years of work experience in safer alternatives planning activities as approved by the Minister; and

(d) meet such further requirements as established by regulation.

Restriction where certification based only on work experience
(2) Where an individual satisfies the requirement of at least two years of work experience as set out in subsection (1)(c), but has not satisfactorily completed a safer alternatives planning program and passed the uniform certification examination as set out in

subsection (1)(a) and (b), the individual shall only be certified to engage in safer alternatives planning activities in industrial facilities owned or operated by his or her employer.

Duration of certification
(3) The duration of the certification authorized under subsection (1) shall not exceed a period greater than two years after its issuance unless renewed before its expiry pursuant to subsection (4).

Renewal of certification
(4) An individual may renew a certification issued pursuant to subsection (1) for an additional two years and thereafter under this subsection at two year intervals before its expiry if he or she successfully completes a course of continuing education instruction in safer alternatives planning activities offered by the Minister.

Fees for certification or renewal
(5) The Minister shall establish by regulation a fee to be assessed any individual when such individual obtains his or her certificate as a safer alternatives planner for the first time under subsection (1) or upon renewal pursuant to subsection (4). Such fees shall be deposited in the Safer Alternatives Fund established under this Act.

Suspension or revocation of certification
(6) The Minister may suspend or revoke the certification of an individual upon:

(a) a finding of fraud, gross negligence in the certification of substitution implementation plans, or for other good cause; or

(b) a failure by the individual to re-apply for certification by the expiry date applicable to the individual's existing certification; or

(c) a failure by the individual to pay the requisite fee established pursuant to subsection (5).

Reinstatement of certification
(7) The Minister may re-instate an individual's certification that has been suspended or revoked under subsection (5)(b) or (c) upon the filing by the individual of an application and the payment of the appropriate fee.

Agreement on certification equivalent provisions
(8) Where the Minister and a government agree in writing that there are in force by or under the laws applicable to the jurisdiction of the government

(a) provisions that are equivalent to a regulation made under a provision referred to in subsection (1) and (5), and

(b) provisions that are equivalent to subsections (2), (3), (4), (6), and (7),

the Governor in Council may, on the recommendation of the Minister, make an order declaring that the provisions of section 103.6 may be met by compliance with the provisions of the law in force in the jurisdiction of the government.

Safer Alternatives Fund
103.7 (1) Upon the coming into force of this Part, the Minister shall,

(a) establish a fund to be known as the Safer Alternatives Fund; and

(b) appoint an administrator who shall be responsible to the Minister for meeting the purpose of the Fund.

Fund purpose
(2) The purpose of the Fund is to provide monies, which shall be dedicated and used solely, to enable the Minister to implement the provisions of this Part.

Fund sources
(3) The Fund shall have credited and transferred to it on an annual basis monies from the following sources:

(a) all fees imposed on industrial facilities pursuant to section 103.8;

(b) all fees imposed on individuals pursuant to section 103.6;

(c) all penalties collected for violations of this Act;

(d) any grant, gift, or other contribution explicitly made to the Fund;

(e) any interest earned on monies in the Fund; and

(f) any other monies that may be available, or appropriated, to the Minister from consolidated revenue for the implementation of this Act.

Industrial Facility Fee
103.8 (1) Upon the coming into force of this Part, the Minister shall have established by regulation a schedule of initial and annual fees to be paid by an industrial facility to the Minister for the purposes of enabling the Minister to implement the provisions of this Part.

Criteria for establishing fee
(2) The criteria for establishing the schedule of fees referred to in subsection (1) shall include:

(a) the number of employees at an industrial facility;

(b) whether a chemical that appears on the List of Toxic Substances in Schedule 1, is manufactured, imported, processed, or otherwise used at such facility;

(c) the annual quantity of each such chemical referred to in subsection (b) that is manufactured, imported, processed, or otherwise used at such facility;

(d) the characteristics of each such chemical as set out in subsection (3) of section 103.2; and

(e) such other criteria as established by regulation.

Ministerial survey notice for obtaining information from industrial facility
(3) For the purposes of obtaining information from an industrial facility with respect to matters addressed in subsection (2), the Minister shall be authorized to publish a survey notice pursuant to sections 46 and 71, requiring regulated persons and other industrial facilities to provide information requested in the survey notice by the date specified in the notice.

Declaration
(4) The owner of, or the highest ranking representative with direct operating responsibility at, an industrial facility and with authority to bind the owner shall, at the time of filing the response to the survey notice, file a declaration certifying that:

(a) he or she has read and is familiar with the information provided in response to the survey notice; and

(b) the information provided is true, accurate, and complete to the best of his or her knowledge.

Report under Canadian Environmental Protection Act
(5) Information filed by an industrial facility required to file an annual report pursuant to the National Pollutant Release Inventory under sections 46 or 71 of this Act, shall also be used to the extent necessary by the Minister for the purposes of compliance with this Part.

Consequences of failure to pay fee, respond to survey notice, file declaration, or provide report
(6) An industrial facility that fails to pay the fee, respond to the survey notice, file a true, accurate, and complete declaration, or provide a report required by this Part is guilty of an offence.

Technical Assistance Programs for Small Businesses
103.9 (1) The Minister shall, in consultation with federal sources, other governments, colleges and universities, and private consortia, facilitate transition to safer alternatives measures by establishing a technical assistance program to small businesses.

Program content
(2) The technical assistance program for small businesses shall include:

(a) programs to evaluate technologies, encourage university research and industrial collaboration, attract funding, and additional support through federal and private sector grant and financial assistance;

(b) direct grants and loans to small businesses for costs required to implement and safer alternatives;

(c) technical support for individual companies or sectors;

(d) technical assistance in assessing safer alternatives and assistance in forming groups to assess and develop safer alternatives;

(e) research and development of safer alternatives, including demonstration projects;

(f) market development programs to create demand for safer alternatives;

(g) conferences, seminars, and workshops focused on solving problems and evaluating technology development opportunities for particular sectors;

(h) publications to assist particular sectors develop and implement safer alternatives; and

(i) such other measures as established by regulation.

Technical Assistance Programs for Employees
103.10 (1) The Minister shall, in consultation with federal sources, other governments, and colleges and universities, cooperate in facilitating employee transition to safer alternatives measures by establishing a technical assistance program for employees.

Program content
(2) The Minister in cooperation with federal sources, other governments, and colleges and universities, shall develop a plan to ensure just and fair transition to re-employment assistance, vocational re-training, or other support or arrangements such that any employee displaced as a result of the implementation of safer alternatives measures will be:

(a) eligible for an available job with at least equivalent wages, benefits, and working conditions;

(b) eligible for vocational re-training and job placement;

(c) entitled to receive re-employment assistance and health benefits; and

entitled to receive any additional benefits pursuant to the provisions of a collective bargaining agreement.

Institute on Pollution Prevention and Safer Alternatives
103.11.(1) The Ministers shall establish a body known as the Canadian Pollution Prevention and Safer Alternatives Institute, which may be affiliated as part of one or more universities or colleges in Canada.

Purposes of Institute
(2) The purposes of the Institute shall include:

(a) providing general information about, and publicizing advantages of and developments in, pollution prevention and safer alternatives;

(b) establishing courses, seminars, conferences, and other events, reports, updates, guides, publications, and other means of providing technical information for industrial facilities, and may as appropriate work in cooperation with the Ministers, other departments, other levels of government, or aboriginal governments, regarding promotion of pollution prevention and safer alternatives;

(c) developing and providing curriculum and training for higher education students and faculty on pollution prevention and safer alternatives;

(d) engaging in research, development, and demonstration of pollution prevention and safer alternatives methods including, but not limited to, assessments of the impact of adopting such methods on the environment, public and workplace health, the economy and employment within affected industrial facilities;

(e) establishing, in cooperation with the Ministers, centralized environmental contaminant and exposure data for systematic review in support of development of pollution prevention and safer alternatives methods;

(f) developing by a date to be determined by regulation and in conjunction with the Ministers, and any other departments identified by regulation, a pollution prevention and safer alternatives planning program for individuals who wish to be certified as safer alternatives planners by the Institute, such program to include training safer alternatives planners to be qualified to:

(i) assist industrial facilities in the development and implementation of current pollution planning and safer alternatives techniques; and

(ii) prepare, review, and approve industrial facility substitution implementation plans required under sections 103.5 of this Act;

(g) sponsoring research or pilot projects to develop and demonstrate innovative technologies for pollution prevention and safer alternatives;

(h) assisting in the training of inspectors and others, if so requested by the Ministers;

(i) providing pollution prevention training and assistance to individuals, community groups, workers, and municipal government representatives so as to allow them to understand and review reporting requirements, pollution prevention and other plans, or other information under this Act;

(j) conducting studies on potential restrictions on the use of toxic substances in Canada including, but not limited to:

(i) existing national and international experiences with restrictions;

(ii) social, environmental, and economic costs and benefits of adopting restrictions;

(iii) specific toxic substances that should be considered for restrictions in Canada and how such restrictions could be implemented.

Part 7
Controlling Pollution and Managing Wastes

33. Division 6.1, consisting of sections 174.1- 174.3, is added to the Act as follows:

Division 6.1
Air Pollution in Canada

National Primary and Secondary Ambient Air Quality Standards

Proposal of regulations prescribing standards
174.1(1) The Minister, within one year after the coming into force of this division, shall publish proposed regulations prescribing a national primary ambient air quality standard and a national secondary ambient air quality standard for each of the following air pollutants:

(a) lead;
(b) sulphur dioxide;
(c) fine particulate matter;
(d) carbon monoxide;
(e) ozone;
(f) nitrogen dioxide.

Promulgation of regulations prescribing standards
(2) The Minister, after a reasonable time for interested persons to submit written comments thereon but no later than 90 days after the initial publication of such proposed standards, shall by regulation promulgate such proposed national primary and secondary ambient air quality standards with such modifications as the Minister deems appropriate.

Consultation
(2.1) In carrying out the duties under subsections (1) and (2), the Minister shall offer to consult with the government of a province and the members of the Committee who are representatives of aboriginal governments and may consult with a government department or agency, aboriginal people, representatives of industry and labour and municipal authorities or with persons interested in the quality of the environment.

Minister shall act
(2.2) At any time after the 60th day following the day on which the Minister offers to consult in accordance with subsection (2.1), the Minister shall act under subsections (1) and (2) if the offer to consult is not accepted by the government of a province or members of the Committee who are representatives of aboriginal governments.

Publication
(2.3) The Minister shall publish the regulations issued under the authority of this section in the *Canada Gazette* and in any other manner that the Minister considers appropriate.

Default adoption of standards
(3) Where the Minister does not meet for any air pollutant listed in subsection (1) the deadline established in subsection (2), the Minister shall adopt as national primary and national secondary ambient air quality standards, the standards promulgated by the

United States under 40 C.F.R. Part 50 pursuant to 42 U.S. Code, §7409 of the *Clean Air Act Amendments of 1990*.

Procedure for subsequent air pollutants
(4) For any air pollutant for which air quality criteria are issued after the period described in subsection (1), the Minister shall publish, simultaneously with the issuance of such criteria and other information, proposed national primary and secondary ambient air quality standards for any such air pollutant. The procedure provided for in subsection (2) shall apply to the promulgation and revision of such standards.

National primary ambient air quality standards to protect public health
174.2(1) National primary ambient air quality standards, prescribed under section 174.1, shall be ambient air quality standards the attainment of which in the judgment of the Minister determined objectively, based on systematic scientific review of such criteria and allowing an adequate margin of uncertainty, are required to protect the public health.

National secondary ambient air quality standards to protect public welfare
(2) National secondary ambient air quality standards prescribed under section 174.1, shall specify a level of air quality the attainment and maintenance of which in the judgment of the Minister determined objectively, based on such criteria, is required to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air.

Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Development and adoption of implementation plan
174.3(1) The Minister shall, after reasonable notice and opportunity for public comment, develop and adopt within 3 years after the promulgation of a national primary and national secondary ambient air quality standard, or any revision thereof, for any air pollutant under section 174.1, a plan that provides for implementation, maintenance, and enforcement of such primary and secondary standard.

Contents of plan
(2) The plan referred to in subsection (1) shall:

(a) include enforceable emission limitations and other control measures, means, or techniques, including economic incentives such as marketable permits and auctions of emissions rights, as well as schedules and timetables for compliance, as may be necessary or appropriate to ensure attainment and maintenance of the primary and secondary standard;
(b) provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor, compile, analyze, and make publicly available, data on ambient air quality;
(c) include a program to provide for the enforcement of the measures described in subparagraph (a), and regulation of the modification and construction of any

stationary source covered by the plan as necessary to ensure that national ambient air quality standards are achieved;

(d) contain adequate provisions prohibiting any source or other type of emissions activity from emitting any air pollutant in amounts that will:

(i) contribute significantly to nonattainment of a national primary or secondary ambient air quality standard; or

(ii) interfere with measures in the plan required to prevent significant deterioration of air quality or to protect visibility;

(e) provide assurance that adequate personnel and funding are available to carry out the plan;

(f) require:

(i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources; and

(ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources;

(g) provide for plan revision:

(i) from time to time as may be necessary to take account of revisions of a national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard; and

(ii) whenever the Minister finds on the basis of information available to the Minister that the plan is substantially inadequate to attain the national ambient air quality standard that it implements;

(h) at a minimum, meet the requirements for public consultation set out in section 79.4;

(i) contain such other measures as the Minister deems necessary to achieve attainment of national primary and secondary ambient air quality standards for the air pollutants identified in section 174.1(1).

Consultation

(2.1) In carrying out the duties under subsections (1) and (2), the Minister shall offer to consult with the government of a province and the members of the Committee who are representatives of aboriginal governments and may consult with a government department or agency, aboriginal people, representatives of industry and labour and municipal authorities or with persons interested in the quality of the environment.

Minister may act

(2.2) At any time after the 60th day following the day on which the Minister offers to consult in accordance with subsection (2.1), the Minister shall act under subsections (1) and (2) if the offer to consult is not accepted by the government of a province or members of the Committee who are representatives of aboriginal governments.

Publication

(2.3) The Minister shall publish the plan issued under the authority of this section, or give notice of the plan, in the *Canada Gazette* and in any other manner that the Minister considers appropriate.

Administration and Equivalency Agreements
(3) The Minister may enter into agreements pursuant to sections 9 and 10 to effectuate the purposes of the plan.

Part 11
Miscellaneous Matters

Report to Parliament

34. Section 342 is amended to add the following:

State of the environment report
(3) The Minister shall, as soon as possible after the end of every fifth fiscal year, prepare and cause to be laid before each House of Parliament a report on the state of the environment, with such report to include an examination of the level of exposure to toxic substances, or substances of very high concern, in hot spots and an assessment of the health of vulnerable populations at those locations in light of environmental justice principles.

Parliamentary review of report
(4) The report referred to in subsection (3) shall be referred to such committee of the House of Commons, of the Senate, or of both Houses of Parliament as may be designated or established for that purpose and the committee so designated or established shall, as soon as practicable, undertake a comprehensive review of the report and submit its own report to Parliament thereon setting out a plan of action the committee would recommend.