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April 10, 2017

Michael MacPherson
Clerk of the Standing Committee on Environment
and Sustainable Development
House of Commons
131 Queen Street, 6th Floor
Ottawa, Ontario K1A 0A6

Dear Mr. MacPherson:

**Re: 2016 CEPA Review – CELA Response to Environment and Climate Change Canada
November 2016 Document Answering Questions on CEPA from Standing Committee**

In November 2016, Environment and Climate Change Canada (“ECCC”) provided the Standing Committee with a document answering questions on *CEPA, 1999* posed to it by the Standing Committee [hereinafter ECCC November 2016 Document]. One of the Standing Committee questions responded to by the ECCC was the following: “1. Can you provide a comparative analysis of pollution data collected under the National Pollutant Release Inventory (NPRI) with pollution data reported under statutes administered by certain U.S. states (as presented to the Committee by the Canadian Environmental Law Association)?” The following constitute CELA’s submissions on the comments to the Standing Committee contained in the ECCC November 2016 Document.

The NPRI Program and Reported Releases in Canada

The ECCC November 2016 Document provides a brief discussion of the authority for the NPRI program under *CEPA, 1999* as well as releases to the environment over time for the period 2005 to 2014 for over 340 NPRI-listed substances.¹ In this regard, ECCC states that since 2005 there has been a decline in total direct releases to the environment and that between 2013 and 2014 there was a 5% decline in direct releases of Criteria Air Contaminants (“CACs”)², which were the main contributor to an overall decline of 65,829 tonnes of total direct releases during this period.³

¹ Environment and Climate Change Canada, Follow-up Information Requested by the House of Commons Standing Committee on Environment and Sustainable Development During Meeting 28 on October 6, 2016 Concerning the Review of the Canadian Environmental Protection Act, 1999 [hereinafter ECCC November 2016 Document], pages 1-2.

² CACs include sulphur oxides, nitrogen oxides, volatile organic compounds, particulate matter, carbon monoxide, ammonia, and ground level ozone. CACs are the source of many respiratory and other human health problems, as well as a variety of environmental impacts: < www.ec.gc.ca >

³ ECCC November 2016 Document, page 3.

However, there are a number of concerns with the ECCC interpretation of the data presented in the ECCC November 2016 Document. First, the reductions between 2005 and 2014 still leave total releases to the environment of CACs in 2014 of over 300,000 tonnes (down from over 400,000 tonnes in 2005)⁴. Assuming a rate of reduction of approximately 100,000 tonnes per decade, we are still looking at another two decades before releases of CACs could be reduced to even 100,000 tonnes per year. Second, direct releases to air of other NPRI substances appear, on the basis of the ECCC November 2016 Document, to have remained largely unchanged in the 2005 to 2014 period.⁵ This is of significant concern because the air contaminants in this “other” category would include, with some exceptions, many, if not most, of the substances that appear in the Schedule 1 List of Toxic Substances to *CEPA, 1999*, including carcinogens, reproductive and developmental toxins, and persistent and bioaccumulative substances. Third, direct releases to surface waters of NPRI substances appear to have remained largely unchanged for the period 2005 to 2014 and in fact appeared to be increasing even before the 2014 mining facility spill in British Columbia to which the ECCC attributed most of the increases for that year.⁶

The ECCC November 2016 Document also states in respect of CELA’s May 2016 submissions to the Standing Committee and the data contained therein that:

“...the increases in releases shown by CELA are driven primarily by increases in disposals of mine tailings to tailings containment areas, as well as increased disposals of waste rock from mining activities, and the injection of pollutants into underground reservoirs. Under the NPRI, direct discharges to air, water or land are deemed ‘releases’ to the environment, whereas other activities that aim to mitigate or manage the environmental impacts, such as placing substances into a tailings management area, are deemed ‘disposals’ or ‘transfers’. With this context in mind, and to accurately portray progress towards *CEPA* objectives of pollution prevention, NPRI releases and disposals should be examined separately”.⁷

The ECCC November 2016 Document states further that: “Direct releases to air, water or land have very different environmental and human health impacts” from disposals.⁸ CELA agrees, but the latter are no less environmentally consequential as we set out below. CELA, in a number of its later submissions to the Standing Committee, did focus its analysis on on-site air releases to the environment because they represented a more direct opportunity to compare the situation in Canada with the situation in the United States.⁹ However, the ECCC suggestion that disposal (as reflected, for example, in tailings management) constitutes progress toward pollution prevention, is not consistent with *CEPA, 1999*, represents bad law, and worse policy. Disposal simply constitutes a risk to a different part of the environment and a different group of people through a

⁴ *Ibid* at 3 (outlined in blue in Figure 2).

⁵ *Ibid* at 3 (outlined in gold in Figure 2).

⁶ *Ibid* at 3 (outlined in red in Figure 2).

⁷ *Ibid* at 5.

⁸ *Ibid* at 4.

⁹ CELA Letter to Cynara Corbin, Clerk of the Standing Committee on Environment and Sustainable Development, June 29, 2016 (CELA Response to Dow Chemical Evidence Before Standing Committee – June 14, 2016) at page 2; CELA Letter to Cynara Corbin, Clerk of the Standing Committee on Environment and Sustainable Development, November 16, 2016 (CELA Response to October 6, 2016 Testimony of Mr. John Moffet, ECCC Before Standing Committee) at pages 3-6).

different exposure pathway than direct release. Furthermore, increases to disposal (and presumably away from releases) do not represent pollution prevention. Section 3 of *CEPA, 1999* defines “pollution prevention” as “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”. In short, pollution prevention is designed to avoid the creation of pollutants and waste. Disposal is simply a form of pollution abatement or management of waste created. It does not avoid the creation of pollutants or waste. Furthermore, increases to disposal, such as to tailings impoundment facilities, simply postpone the inevitable environmental reckoning that eventually occurs when such facilities fail as they did at Mount Polley, British Columbia in 2014 and directly released contaminated materials to surface waters, creating what is widely viewed as Canada’s worst environmental disaster.¹⁰

Comparing NPRI (Canada) Data to TRI (US) data

The ECCC November 2016 Document raised concerns regarding CELA’s use of NPRI data from the website of the Commission for Environmental Cooperation (“CEC”) for the period 2006 to 2012, which showed releases to air of carcinogens in Ontario to be higher than in some U.S. states. In ECCC’s view, the data presented by CELA could be misinterpreted because: (1) it allegedly did not distinguish releases from disposals; and (2) it did not use the most publicly available data including data from the 2014 reporting year.¹¹ With respect to the first ECCC point, the CELA submissions of June 29 and November 16, 2016, respectively, clearly distinguish between releases to air and disposals, so there is no merit to this ECCC comment with regard to those CELA submissions. With respect to the second ECCC point, NPRI and TRI data for 2014 were not available on the CEC website at the time CELA made its submissions. In fact, the 2014 data is not available on the CEC website even today. What was available to compare between the two countries by June and November 2016 was 2013 data, and that is what CELA used in our June 29th and November 16th submissions. By the ECCC benchmark, one could never rely on the CEC database for comparison purposes because it will never be up to date. Indeed, by the ECCC benchmark, the NPRI database itself is never up to date.¹² However, the CEC was created by the governments of Canada, Mexico, and the United States as part of the North American Free Trade Agreement (“NAFTA”) in order to be able to compare what is going on environmentally in all three countries. For the purposes of CELA’s analysis, we focused on just Canada and the United States. If ECCC is concerned about the lack of comparability of data, ECCC should ensure with its counterpart, the United States Environmental Protection Agency, that the CEC has the resources to bring its data up to date for both countries more quickly.

The ECCC November 2016 Document also makes a number of other comments on the comparative analysis CELA performed that merit a response. The ECCC states that differences

¹⁰ ECCC November 2016 Document, page 3. In 2014, a wall of the Mount Polley mine tailings pond broke and spilled 10.6 million cubic metres of water, 7.3 million cubic metres of tailings, and 6.5 million cubic metres of water mixed with arsenic, nickel, and lead into the waterways of British Columbia. “Mount Polley mine spill report released by B.C. Information and Privacy Commissioner”, CBC News (2 July 2015). “Breach of Tailings Pond Results in ‘Largest Environmental Disaster in Modern Canadian History’”, *Australian Mine Safety Journal* (12 August 2014).

¹¹ *Ibid* at 4-5.

¹² *Ibid* at 4 where the ECCC states: “Under the NPRI, facilities can and do report updates to their release and disposal numbers at any time for the latest reporting year **and/or previous years**” (boldface emphasis added).

in reporting requirements under the NPRI and the Toxics Release Inventory (“TRI”) of the United States, such as higher reporting thresholds in the U.S. for as many as 12 substances CELA used to compare Ontario and New Jersey releases to air of carcinogens for 2013, cast doubt on the comparison CELA made.¹³ To address this ECCC concern, CELA has prepared Table A, below, which eliminates from comparison any carcinogen for 2013 where the TRI reporting threshold was materially higher than the NPRI threshold for the same chemical.¹⁴

Table A: 2013 On-site Releases to Air of Carcinogens by Ontario and New Jersey Where NPRI and TRI Have Similar Reporting Thresholds for Substances Reported (Tonnes)¹⁵

Substance	Ontario	New Jersey
Styrene	234	16.351
Acetaldehyde	103	0.023586803
Formaldehyde	260	0.491694129
Benzene	173	10.4
Dichloromethane	70	10.099
Tetrachloroethylene	107	0.03628739
Ethylbenzene	168	10.319
1,3-Butadiene	12	0.057152639
Naphthalene	34	7.16
Trichloroethylene	25	6.742
Vinyl Acetate	0.615	0.55701143
Vinyl Chloride	0.402	7.942
Nickel and its Compounds	77	0.295742225
Ethyl Acrylate	0.02	0.013154179
Mercury and its Compounds	596	0.03447302
Lead and its Compounds	21,590	1.418585263
Chromium and its Compounds	2.2	0.139706480
Antimony and its Compounds	0.115	0.045812829
Cobalt and its Compounds	3.1	0.014016004
Acrylamide	0	0.003628739
Aniline	0.002	0.290299117
Asbestos	0	0
Benzyl Chloride	0	0.680388555
CI Food Red 15	0	0
Chloroform	0.226	0.020865249
Di (2-Ethylhexyl) Phthalate	0.049	0.003175147
Ethylene Oxide	0	0.545671621
N-Methylolacrylamide	0	0.003175147
Total	23,352.73	73.71

¹³ *Ibid* at 8, 12 (Table 6).

¹⁴ The pollutants listed in Table A were identified using the ECCC list from page 12, Table 6, of the ECCC November 2016 Document and the quantities listed were taken directly from the NPRI and TRI databases for 2013.

¹⁵ The quantities identified in Table A are for all industry sectors and not just the chemical sector.

What Table A shows is that for 2013 Ontario's on-site releases to air of carcinogens common to both Canada and the United States, where the NPRI and TRI reporting thresholds are similar, were more than **300 times** greater than those of New Jersey. If the releases to air of lead are removed from the comparison (21,590 tonnes in Ontario and 1.4 tonnes in New Jersey), Table A shows that for 2013 Ontario's on-site releases to air of carcinogens common to both Canada and the United States, where the NPRI and TRI reporting thresholds are similar, were more than **23 times** greater than those of New Jersey. The above comparison underscores the applicability of the comparisons conducted by CELA that were provided in our previous submissions and shows the need for dramatic improvement of risk management measures under *CEPA, 1999*.

We would ask that in addition to the attached being distributed to the Committee members that it also be posted on the Committee website.

Should Committee members have any questions arising from the attached, or wish us to re-appear before the Committee to discuss this material, please feel free to contact either myself or Ms. de Leon.

Yours truly,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION



Joseph F. Castrilli
Counsel



Fe de Leon
Researcher