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June 7, 2022

Chantal Cardinal  
Clerk of the Standing Senate Committee on Energy,  
the Environment and Natural Resources  
The Senate of Canada  
Ottawa, Ontario K1A 0A4

Dear Ms. Cardinal:

**Re: Bill S-5, An Act to Amend the Canadian Environmental Protection Act, 1999, etc. –  
Response to Mining Association of Canada letter dated May 27, 2022**

The Canadian Environmental Law Association (“CELA”) is enclosing its response to the May 27th letter to the Standing Committee from the Mining Association of Canada (“MAC”). The MAC argument focuses on a difference in increases between CELA calculations of a 10,800 percent increase in on-site disposal of arsenic and its compounds in Quebec for the period 2006-2018 and MAC calculations of a 300 percent increase for the period 2010-2018. We address the MAC arguments below. It is the CELA submission that the MAC argument does not detract from either the evidence filed by CELA before this Committee or the proposed amendments to Bill S-5 proposed by CELA. If anything, the MAC argument, underscores the need for the amendments CELA proposed for improving Bill S-5 and CEPA.

**I. CELA Experience With CEC and NPRI Databases**

CELA has substantial experience with both the Commission for Environmental Cooperation (“CEC”) and the National Pollutant Release Inventory (“NPRI”) programs. CELA has been a member of the NPRI Working Group since 2018. CELA has participated in numerous workshops and consultations on matters relevant to Pollutant Release and Transfer Registries, including the NPRI and CEC Taking Stock programs since their inception.

**II. The MAC Argument and the CELA Response**

The MAC argument consists of three points. The first two points are addressed together and italicized. The third point is addressed separately and also italicized.

## A. CEC vs. NPRI Data and Time-Period For Data Assessment

### 1. The MAC Argument

1 - MAC argues that CELA used CEC numbers but should have used corrected NPRI numbers, the latter being much lower (6-fold lower) for on-site disposal of arsenic compounds in Quebec – approximately 14 million kg (NPRI) as opposed to 85 million kg (CEC) in reporting year 2018.

2 - MAC also argues that CELA used the wrong time period because NPRI reporting thresholds and rules changed in 2009. MAC suggests that the period 2010-2018 is preferable which produces only a 3-fold increase and is said to be a function of expanding gold mining activity in Quebec.

### 2. The CELA Response

With respect to MAC point 1, above, the MAC letter does not dispute the accuracy of the CEC estimate of a 49 percent increase in on-site air emissions of arsenic in Quebec for the period 2006-2018. A 49 percent increase in emissions of such a substance<sup>1</sup> is hardly a sign of progress in preventing pollution and protecting human health and the environment from arsenic, a CEPA Schedule 1 toxic substance.

With respect to MAC point 2, above, a 3-fold or 300 percent increase in on-site disposal of arsenic and its compounds for even the reduced period MAC prefers to examine (2010-2018) is hardly acceptable either. Arsenic is one of the deadliest substances on the planet. Even if arsenic increases to on-site disposal in Quebec are not in excess of 10,000 percent as otherwise reported by the CEC based on information the agency obtained from the NPRI, apparently later corrected by the latter, increases in the hundreds of percent as identified in MAC's estimates, should still be a clarion call to reduce, not increase, releases of such a substance to on-site disposal and land.

Moreover, there is reason to doubt that the use of 2010 as the base year preferred by MAC is appropriate for assessing changes over time. MAC too readily dismisses reliance on NPRI data from 2006-2009 and, in doing so, dramatically diminishes the full impact of increases in on-site disposal of arsenic over time from 2006 up to 2018. Contrary to the MAC suggestion at page 2 of its letter that CELA (and the CEC) should not have chosen 2006 as the base year, CELA submits that MAC's choice of 2010 as the base year is not warranted.

Part of the problem with the MAC analysis is that it does not discuss the impetus for the federal government 2009 change in reporting rules for on-site disposal. The changes occurred because of a 2009 Federal Court judgment, *Great Lakes United v. Canada (Minister of the Environment)*, 2009 FC 408, 2 FCR 515, which held that the federal government was not requiring mining industry reporting to the NPRI of on-site waste rock storage areas (“WRSAs”) and tailings impoundment areas (“TIAs”) data as required under CEPA. The effect of this non-reporting was to under-estimate actual levels of substances like arsenic being deposited in such on-site facilities

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<sup>1</sup> The International Agency for Research on Cancer (IARC) has classified arsenic and arsenic compounds as carcinogenic to humans and has also stated that arsenic in drinking water is carcinogenic to humans (See World Health Organization, *Arsenic Fact Sheet* (15 February 2018). Arsenic can enter the environment through metal production, such as gold and base metal mining (See Government of Canada, *Arsenic in Drinking Water* (14 December 2006).

and potentially getting into the environment. As the Federal Court noted, the fact that TIAs and WRSAs are on-site does not prevent the release of pollutants into the environment (para 184 of the judgment); a finding that the Mount Polley tailings dam disaster several years later tragically demonstrated.<sup>2</sup> As a result, for decades mining industry environmental performance looked better than it actually was for arsenic and all other CEPA Schedule 1 substances associated with the mining industry because of the failure of the federal government to require reporting of on-site disposal despite the plain language of the Act.

In this regard, the Federal Court in *Great Lakes United*: (1) found that the Minister “erred in his interpretation of...CEPA as not requiring him to provide pollutant release information to the public through the NPRI in relation to releases and transfers to [TIAs] and [WRSAs] by mining facilities in 2006 and subsequent years”; and (2) issued an order directing the Minister to “publish pollutant release information to the public through the NPRI in relation to releases and transfers to [TIAs] and [WRSAs] by mining facilities for the 2006 and subsequent reporting years in accordance with sections 48 and 50 of...CEPA” (Orders 1 and 2 in judgment following paragraph 244).

To this Federal Court ruling should also be added the subsequent 2009 compliance with the ruling by the federal government via notice in the *Canada Gazette*, which specifically required the retroactive mining industry reporting to 2006 of arsenic contained in waste rock if the arsenic concentration was above a certain concentration<sup>3</sup>.

The MAC letter raises all sorts of rationale for why mining companies might not have been able to meet the applicable requirements of the government notice. However, the simple fact of the matter is that the Federal Court ordered the Minister to require retroactive reporting by the mining industry of on-site disposal to 2006, the Minister in turn ordered the mining industry to comply, and we have NPRI-CEC data for the 2006-2009 period that are in accord, which MAC, nonetheless, suggests should be ignored for the purpose of evaluating trends.

In CELA’s submission, MAC’s speculation about the difficulty the mining industry might have had in complying with the reporting requirements is not evidence that the industry did not in fact comply, or that the NPRI Quebec data for 2006-2009 is not to be relied upon for purposes of establishing trends. Indeed, a 2013 Environment Canada report covering the 2008 reporting year stated that: “New reporting requirements for tailings and waste rock were put in place in 2009, applying retroactively to 2006 for certain types of mining operations. Most mining operations subject to the tailings and waste rock requirements for 2008 reported, as required”.<sup>4</sup>

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<sup>2</sup> A 2014 tailings impoundment failure at the Mount Polley gold and copper mine in British Columbia released approximately 25 million cubic meters of contaminated water and waste containing arsenic, copper, lead, and other heavy metals into two lakes and a creek. See Patrick Byrne, et al “The long-term environmental impacts of the Mount Polley mine tailings spill, British Columbia” EGU General Assembly 2015, held 12-17 April 2015, Vienna, Austria, 2015EGUGA.17.6241B; and Winston Szeto, “Ecological impact of Mount Polley mine disaster confirmed by new study”, *CBC News* (25 May 2022) (research showing higher levels of metals in invertebrates taken from Polley and Quesnel Lakes).

<sup>3</sup> *Canada Gazette*, Part I, Vol. 143, No. 49 (December 5, 2009) at pages 3550-3593, Schedule 3, paragraphs 1, 4(3), 6 and explanatory note at page 3576.

<sup>4</sup> Environment Canada, Science and Technology Branch Science and Risk Assessment Directorate, *National Pollutant Release Inventory Sector Coverage Study for the 2008 Reporting Year* (2013) at 50.

Table 1, below, shows that inclusion of corrected NPRI-only Quebec data for on-site disposal/land release of arsenic and its compounds for the 2006-2009 period results in an increase of such deposits to over 1700 percent by 2018 from the 2006 base year compared to the 300 percent increase MAC relies on for the 2010-2018 period:

**Table 1: On-Site Disposal / Land Release of Arsenic and its Compounds in Quebec, 2006-2018**

Year	Quantity (kg)
2006	778,410.98
2007	2,627,429.58
2008	3,262,172.2
2009	3,760,721.95
2010	4,429,188.30
2011	4,312,594.31
2012	4,030,207.91
2013	5,914,789.77
2014	7,345,790.06
2015	13,935,874.69
2016	12,393,903.14
2017	13,599,219.46
2018	14,133,069.6

**Source: National Pollutant Release Inventory, Environment and Climate Change Canada, 2006-2018**

Table 1 shows that the increase in on-site disposal / land release of arsenic and its compounds in Quebec for the period 2006-2018 was 13,354,658.62 kilograms; a **percentage increase of 1715.63 percent**.

Furthermore, according to the latest NPRI data, on-site disposal/land release of arsenic and its compounds in Quebec continued to increase by a further 1 million kg over the previous year in each of 2019 and 2020, (roughly a 7 percent increase in each of those 2 years). This is reflected in Table 2, below:

**Table 2: On-Site Disposal / Land Release of Arsenic and its Compounds in Quebec, 2019-2020**

Year	Quantity (kg)
2019	15,826,752.74
2020	16,086,085.49

**Source: National Pollutant Release Inventory, Environment and Climate Change Canada, 2019-2020**

Table 2 shows that with the increase in on-site disposal / land release of arsenic and its compounds in Quebec for the period 2019-2020 of a further 1,953,016 kilograms over 2018; the **percentage increase since 2006 rose to 1966.53 percent**. Such a percentage increase may not be as astounding as a 10,000 percent increase, but it is still astounding.

The significant arsenic increases in Quebec are in part a function of the failure of the federal government to systematically implement either pollution prevention under Part 4 or pollution

control under Part 5 of CEPA for this Schedule 1 toxic substance associated with the mining industry. For example:

- A review of the 2018 NPRI report showed that only 22 percent of mining operations in Quebec had a pollution prevention plan under Part 4 of CEPA;<sup>5</sup> and
- As of March 2016, according to a federal government document provided to Parliament for the current CEPA review, there were few, if any, enforceable pollution control measures specific to arsenic under Part 5 of CEPA, the bulk of federal measures being either non-enforceable codes of practice or guidelines. The document also shows that the only pollution prevention plans relevant to arsenic were finalized in 2006 for base metal smelters and refineries, and 2005 for wood preservation facilities.<sup>6</sup>

Moreover, Canada is already replete with on-site problems involving arsenic that make even the MAC suggested lower Quebec increases concerning, such as:

- the abandoned Giant Yellowknife gold mine in the Northwest Territories, which is currently the repository for 237,000 tonnes of arsenic trioxide for which the Canadian taxpayer will be paying at least \$1 billion for on-site containment to prevent releases to the environment for at least the next 100 years;<sup>7</sup> and
- the NPRI category of on-site disposal, which includes WRSAs and TIAs which can fail with devastating environmental impacts as demonstrated by the 2014 Mount Polley tailings dam failure which released 25 million cubic meters of water contaminated with arsenic and other CEPA Schedule 1 toxic substances into two lakes and a creek in British Columbia.

In the submission of CELA, we can do better under CEPA if we take pollution prevention seriously and amend Bill S-5 accordingly.

## **B. Relevance of On-Site Disposal Data**

### **1. The MAC Argument**

*3 - MAC further argues that data regarding on-site disposal of arsenic and its compounds is not relevant to a discussion of CEPA Schedule 1 substances in commerce or inter-media transfer of such substances.*

### **2. The CELA Response**

With respect to MAC point 3, above, the Federal Court rejected a similar argument in *Great Lakes United*. In that case, the Federal Court made it clear that the fact that TIAs and WRSAs are on-site

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<sup>5</sup> Government of Canada, *National Pollutant Release Inventory Data Search* (Search Terms: Disposal On-site/Quebec/Arsenic/2018).

<sup>6</sup> Environment and Climate Change Canada, *Risk Management Measures Under Federal Laws for Substances Considered Toxic under the Canadian Environmental Protection Act, 1999 – Final and Proposed as of March 2016*.

<sup>7</sup> Northwest Territories Environment and Natural Resources, Giant Mine Remediation Project, undated; and Sara Minogue, “Public hearings into \$1B Giant Mine remediation begin at last”, *CBC News* (20 January 2020).

does not prevent the release of pollutants into the environment and should be reported upon to the public as part of the NPRI:

“Although TIAs and WRSAs are on-site, I do not see how this prevents some kind of release, in the sense of a deposit, seepage or interaction with air, land and water that is brought about because the natural environment has been transformed by human agency, and human agency has deposited, dumped, poured....materials into TIAs and WRSAs....” [para 184].

“The Minister’s approach is the equivalent of granting a sectorial exemption on the reporting of information that stakeholders agree should be reported to the Canadian public. This is not, in my view, reconcilable with the Minister’s duties under section 48 or with the scheme and purpose of CEPA” (para 237).

The Mount Polley tailings dam disaster makes it clear that on-site disposal is highly relevant to CEPA Schedule 1 toxic substances. We also note that Table 10 of the 2018 *Taking Stock* report issued by the CEC on releases and transfers of pollutants in the North American mining sector identifies CEPA as a key federal law “regulating pollution from the Canadian mining sector”. Table 10 notes further that CEPA “addresses pollution prevention and the protection of the environment and human health and also regulates the use and disposal of toxic substances”. The MAC is identified as a source for Table 10.<sup>8</sup> The only way a substance can be regulated under Part 4 or Part 5 of CEPA is if it is first placed in the Act’s Schedule 1 List of Toxic Substances by the federal cabinet. Once it is in Schedule 1 it is both prudent and necessary to pay attention to on-site disposal of the quantities of such substances placed in TIAs and WRSAs.

In CELA’s view, the Federal Court judgment in *Great Lakes United* stands for the proposition that once there has been human manipulation of substances in the environment for industrial or commercial purposes, even if the substance (arsenic) is not what is sought commercially by the manipulator (e.g., gold is), the result of that manipulation is of interest to the public under CEPA. CELA submits further that if the substance poses problems for human health and the environment and is otherwise listed in Schedule 1 then there is all the more reason for concern and scrutiny. The on-site presence of arsenic and its compounds in TIAs and WRSAs poses such risks and, therefore, is of interest to the public, and is within the four corners of the statute. This will particularly be the case under Bill S-5 when considering such matters as hotspots, vulnerable populations, and cumulative effects.

### III. Summary

In summary, the federal approach to toxic substances under CEPA is not satisfactory and it has not been improved upon by Bill S-5 for a substance such as arsenic that has been known as the king of poisons since the age of the Roman emperors. Moreover, the situation with arsenic is simply symptomatic of the larger problem of how cancer-causing agents that are Schedule 1 toxic

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<sup>8</sup> Commission for Environmental Cooperation, *Taking Stock 15: North American Pollutant Releases and Transfers* (April 2018) (chapter 2 on North American Mining Sector) Table 10, pages 49 and 76.

substances are not being systematically subjected to mandatory pollution prevention approaches under CEPA.

CELA repeats that however one examines the data, what one finds in the data, is a trend for cancer-causing agents that are Schedule 1 toxic substances, such as arsenic and its compounds, to remain in industry, commerce, and, therefore, the environment and to continue to pose risks to the health of Canadians. Parliament should make it a priority that this trend, which is not addressed by the “housekeeping” approach of the Bill S-5 amendments to CEPA, is reversed for the benefit of present and future generations of Canadians and the environment.

We would ask that your office post our letter to the Committee website in addition to distributing it to Committee members.

Yours truly,

**CANADIAN ENVIRONMENTAL LAW ASSOCIATION**

A handwritten signature in cursive script that reads "Joseph F. Castrilli".

Joseph F. Castrilli  
Counsel

c.c. Fe de Leon, CELA