

December 20, 2013

David Morin
Director General
Environment Canada
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Gatineau, QC K1A 0H3

Transmission by email: inrp-npri@ec.gc.ca

Dear Mr. Morin:

Re: CELA response to proposals to add pollutants and amend reporting thresholds for specific pollutants under the National Pollutant Release Inventory

The Canadian Environmental Law Association (CELA) is submitting the following comments in response to the government proposal for amendments to the National Pollutant Release Inventory (NPRI) reporting threshold on specific pollutants dated October 1, 2013 and November 1, 2013.

CELA is supportive of government efforts to expand and improve the scope of the NPRI program that includes lowering thresholds (alternate thresholds) and the addition of pollutants for reporting under the NPRI. Generally the proposed changes are in alignment with the purpose of the NPRI program, namely “encouraging actions to reduce the release of pollutants into the environment; and improving public understanding.”¹ We hope that the government directs significant resources to ensure a process for continual improvements to expand the NPRI is undertaken in a more regular manner. This would include supporting regular and comprehensive engagement with the NPRI Work Group members as well as multistakeholder engagement. CELA provides the following comments and recommendations on specific pollutants targeted for changes in reporting thresholds under the NPRI.

CELA is supportive of the overall proposal to lower thresholds for reporting on the following key pollutants:

- Bisphenol A (BPA) [Phenol, 4,4' -(1-methylethylidene)bis-] (CAS RN 80-05-7)
- Isoprene [1,3-Butadiene, 2-methyl-] (CAS RN 78-79-5)

¹ Environment Canada. 2013. National Pollutant Release Inventory - Tracking Pollution in Canada. Online: <http://www.ec.gc.ca/inrp-npri/>

Specific comments on pollutants:

➤ **Bisphenol A (BPA) [Phenol, 4,4' -(1-methylethylidene)bis-] (CAS RN 80-05-7):**

The proposal to lower the reporting threshold for BPA from 10 tonnes to 100 kg is expected to increase reporting under the NPRI of the number of facilities (particularly plastic and rubber manufacturing sectors) that release and transfer BPA. This threshold would be consistent with the requirements to complete Pollution Prevention Plans for industrial processes using Bisphenol A.² It is unclear, however, if the threshold of 100 kg will result in pulp and paper recycling facilities that use, release and transfer BPA to report under NPRI.³ Obtaining the BPA releases and transfers from these facilities would be essential to improve the coverage of facilities under NPRI and provide the public with expanded pollution information.

Recommendation: CELA supports lowering the threshold for reporting for BPA to 100 kg. This reporting threshold should increase reporting of BPA releases and transfers from plastics, rubber as well as pulp and paper recycling facilities.

➤ **Isoprene [1,3-Butadiene, 2-methyl-] (CAS RN 78-79-5)**

The proposal to lower the reporting threshold for isoprene from 10 tonnes to 100 kg is expected to increase reporting by facilities, particularly those in the petroleum, synthetic rubber manufacturers and chemical sector. The proposed alternate threshold of 100 kg is consistent with the pollution prevention plan requirements for isoprene applicable to the synthetic rubber manufacturing facilities. This new threshold may contribute to improve pollution information as well as knowledge on pollution prevention activities undertaken by facilities on isoprene.

Recommendation: CELA supports the proposal to lower the reporting threshold for isoprene.

➤ **Quinoline (CAS RN 91-22-5):**

The proposal to change reporting of quinoline from a Part 1A substance (10 tonne mass threshold) to a Part 2 substance (50 kg mass threshold for total PAHs including quinoline, and 5 kg mass threshold for reporting quinoline itself) is a significant change for NPRI reporting. It is

² Government of Canada. *Canada Gazette*. Vol. 146, No. 15 — April 14, 2012

Notice requiring the preparation and implementation of pollution prevention plans with respect to bisphenol A in industrial effluents. Online: <http://www.gazette.gc.ca/rp-pr/p1/2012/2012-04-14/html/sup-eng.html>

³ *Ibid.* The Pollution Prevention Plans for BPA states: Notice does not apply to any person or class of persons who releases an effluent containing bisphenol A resulting exclusively from pulp and paper recycling, scientific research or laboratory testing.

expected to increase reporting from facilities in sectors that report for other PAHs, but are not currently required to report for quinoline (e.g., utilities, steel plants, wood preservation facilities, aluminum smelters, and waste incinerators). Obtaining pollution data for quinoline as a Part 2 PAH substance and as a separate pollutant will improve public knowledge significantly on releases and transfers of quinoline from specific facilities.

Recommendation: CELA supports proposed reporting changes for quinoline.

➤ **Hydrazine (CAS RN 302-01-2):**

The proposal to change the NPRI mass threshold for hydrazine from 10 tonnes to 1 tonne may not be adequate. While there is an expectation that the proposed alternate threshold will result in increased reporting from facilities in the electric power generation, transmission and distribution sector, there is a concern that the thresholds would only result in increased reporting from nuclear power generating facilities. It may be more appropriate that the threshold for reporting be set substantially lower to 100 kg to reflect the toxicity of hydrazine and the need for pollution information from facilities in the electric power generation, transmission and distribution sector.

Recommendation: CELA supports lowering the threshold for hydrazine from 10 tonnes to 100 kg to capture facilities throughout the electric power generation, transmission and distribution sector.

➤ **Nonylphenol and its Ethoxylates:**

The proposal to reduce reporting threshold for nonylphenol and its ethoxylates from 10 tonnes to 1 tonne is inadequate. Since 2004, Canada has taken steps to manage the release of nonylphenol and its ethoxylates, particularly with Pollution Prevention Plan requirements targeted at the textile industry using wet processes.⁴ The NPRI reporting threshold for these pollutants should capture all sources of releases and transfers. The reporting approach taken with other toxic chemicals such as dioxins and furans should be considered for nonylphenol and its ethoxylates.

Recommendation: CELA does not support the 1 tonne threshold proposed for nonylphenol and its ethoxylates. Consideration should be given to lower the threshold and apply an approach for reporting that seeks to require reporting on these pollutants from all sources.

CELA supports the addition of the following pollutants to the NPRI

➤ **Ethanol, 2-(2-methoxyethoxy)- (CAS RN 111-77-3) [DEGME]**

DEGME was listed on the List of Toxic Substances of the CEPA 1999 in 2011. It is used extensively (e.g. jet fuel additive; active ingredient in pest control products in pulp and paper

⁴ See: Government of Canada. *Canada Gazette*. Notice Requiring the Preparation and Implementation of Pollution Prevention Plans in Respect of Effluent from Textile Mills that Use Wet Processing and Nonylphenol and its Ethoxylates. Vol. 138, No. 49 Vol. 138, no 49. Online: <http://publications.gc.ca/gazette/archives/p1/2004/2004-12-04/pdf/g1-13849.pdf#page=38>

industry; solvent in paints, floor care products and brake fluid). Since 2011, DEGME has been prohibited in cosmetic products through the Cosmetic Ingredient Hotlist.

The current proposal to add DEGME to NPRI for reporting as a Part 1A substance, with MPO thresholds of 10 tonnes and 1% concentration requires reconsideration. While the proposed threshold was based on data submitted by the industry under section 71 of CEPA 1999, the data only reflected use for one year – 2006. This information may not be adequate to reflect the use and release of DEGME prior to and post 2006. In addition, response to the survey and voluntary data from industry indicates imports of DEGME to Canada is significant (range from 1 million to 10 million kg). The information also indicates that the major use of DEGME is as an additive in jet fuel. However, DEGME may also be relevant in the production of pest control products used by the pulp and paper sectors; and as a solvent in floor finishes, in various cleaners and degreasers, and in paints. Finally, the survey results show that DEGME releases to air measured between 10 000 and 100 000 kg; releases to water of DEGME measured between 10 000 and 100 000 kg and releases to land was estimated at 0.1 kg.

At the 1 tonne threshold, facilities in the pulp and paper sector and chemical manufacturing sector would be required to report on DEGME releases and transfers. At the proposed threshold of 10 tonnes, only 80% of the sectors that use, release or transfer DEGME would be required to report. The government does not provide adequate rationale to exempt reporting of key facilities in the pulp and paper, and chemical manufacturing sectors that contribute to the overall releases of DEGME. Similarly, relying on the Significant New Activity provision applied to DEGME does not provide adequate justification for proposing a 10 tonne reporting threshold for this pollutant. It would take substantial resources and time by government and stakeholders to propose changes to review the threshold requirements for DEGME.

Recommendation: CELA does not support the 10 tonne threshold proposed for DEGME. To improve the knowledge on DEGME pollution releases and transfers in Canada, a 1 tonne threshold is more appropriate. The Consultation Document indicates that at the 1 tonne threshold 100 % of the pulp and paper and chemical manufacturing sectors will be required to report.

➤ **Thallium – Alternate Threshold**

CELA is please that thallium has been proposed for addition to the NPRI. Thallium was proposed for NPRI reporting in 2004 with a 50 kg threshold. The proposal to apply an alternate threshold for reporting on thallium (and its compound) releases and transfer at a 100 kg MPO with a concentration threshold of 1% should be reconsidered.

Based on the information provided in the consultation document stating that “thallium is one of the more toxic metals, with adverse effects on living organisms comparable to those of mercury and lead. thallium is considered one of the 25 substances with the highest Toxic Equivalency Potentials (TEPs).”⁵ Furthermore, the consultation notice also stated that “thallium has been

⁵ Ibid.

detected in elevated concentrations in bodies of water and sediments in close proximity to industrial facilities releasing thallium.”⁶ Evidence to demonstrate that thallium is being detected in the Canadian population should be a cause of concern and provide the necessary rationale to identify all sources of thallium releases and transfer.

In addition, the NPRI reporting for other heavy metals such as Arsenic (and its compounds), Cadmium (and its compounds), Hexavalent chromium (and its compounds), Lead (and its compounds), Mercury (and its compounds), Selenium (and its compounds), Tetraethyl lead are set at .1% concentration or less (in the case of Selenium). Setting a concentration of 1% for thallium is not justified and should be reconsidered. A concentration level in alignment to the .1% set for other heavy metals reported under NPRI should be more appropriate.

Recommendation: CELA supports the addition of Thallium for reporting under NPRI.

Recommendation: CELA does not support the proposed reporting threshold for thallium at 50 kg at 1% concentration. In keeping with the approach taken with other heavy metals reported under NPRI, thallium should be reported at 5 kg with .1% concentration or lower.

Proposed Deletions

Environment Canada is proposing to delete the following pollutants from the NPRI substance list:

1. Allyl chloride (CAS RN 107-05-1)
2. C.I. Solvent Orange 7 (CAS RN 3118-97-6)
3. 3-Chloro-2-methyl-1-propene (CAS RN 563-47-3)
4. Ethyl chloroformate (CAS RN 541-41-3)
5. 1-Bromo-2-chloroethane (CAS RN 107-04-0)

The rationale provided for these deletions is that these pollutants are not expected to be manufactured, processed or otherwise used by industrial facilities in Canada, and that they have had no or very limited reporting to the NPRI (e.g. ethyl chloroformate was reported to the NPRI in 1996, other pollutants have never been reported to the NPRI).

CELA expresses concern that deletion of these pollutants may be premature. Once deleted, it would be difficult and cumbersome to justify a review and reconsideration of these pollutants to NPRI. The absence or limited reporting to NPRI on these pollutants do not necessarily mean these pollutants are not in use in Canada. The government should give additional consideration to review the reporting thresholds applied to these chemicals and assess if lower thresholds would result in submission of pollution data from facilities. Furthermore, additional evidence to demonstrate that these chemicals are no longer in use in Canada should be undertaken. It may be appropriate to consider an update of Domestic Substances List (DSL) inventory for these pollutants to substantiate the finding of no use in Canada. The five pollutants proposed for

⁶ Ibid.

deletion were not subject to the two phases of the DSL Inventory Update completed to date.⁷ Finally, in following a precautionary approach, CELA would flag these chemicals to apply a notice for Significant New Activity in the event that these chemicals are re-introduced into the Canadian market.

Recommendation: CELA recommends taking a precautionary approach to address the proposal to delete pollutants from reporting under the NPRI. Environment Canada should find additional evidence to confirm the pollutant is not used in Canada (i.e. DSL inventory update. Furthermore, a Significant New Activity notice may be applied for pollutants not found to be manufactured or imported in Canada for a specific reporting year.

We hope these comments to the consultation document posted on the CEPA Registry for amendments to the NPRI are helpful. If you have any questions regarding our comments, please do not hesitate to contact our office.

Yours truly,
CANADIAN ENVIRONMENTAL LAW ASSOCIATION



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⁷ Government of Canada. Chemical Substances - Domestic Substances List Inventory Update. Online: <http://www.chemicalsubstanceschimiques.gc.ca/plan/approach-approche/dsl-lis-eng.php#a2.1>