

June 3, 2015

Ms. Vincenza Galatone
Executive Director
Environment Canada
351 Saint-Joseph Blvd.
Gatineau, Quebec K1A 0H3

Ms. Louise P. Wise
Deputy Assistant Administrator
US Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Original: by email

Re: A NGO response for Public Comments to Draft Binational Summary Reports for Candidate Chemicals of Mutual Concern in the Great Lakes under Annex 3 of the Great Lakes Water Quality Agreement

Dear Ms. Galatone and Ms. Wise:

Our organizations are submitting the following comments on the Binational Summary Reports for candidate Chemicals of Mutual Concern (CMCs) now out for public comment. We also include comments regarding the structure and processes of the Identification Task Team (ITT), an expert task team established under Annex 3 of the Great Lakes Water Quality Agreement (GLWQA) to review each of the seven candidate Chemicals of Mutual Concern (CMC) [(Polychlorinated Biphenyls (PCBs); Nonylphenol and its Ethoxylates; Mercury; Chlorinated Paraffins (Short, Medium and Long Chain); Bisphenol A (BPA); Perfluorinated Chemicals (PFOS, PFOA and Long-Chain PFCAs); and Brominated Flame Retardants (PBDEs and HBCD)] and develop recommendations on their status as CMCs in the Great Lakes Basin. The review conducted by the ITT was governed by the “Binational Considerations when Evaluating Candidate Chemicals of Mutual Concern” Flow Chart Framework established by the Parties.

The findings and the recommendations of the ITT review of the seven candidate CMCs resulted in four chemicals groups proposed as CMC (i.e., PCBs, Mercury, Perfluorinated Chemicals and PBDEs as part of the brominated flame retardant group), and four candidate chemicals received a recommendation for no determination (i.e., Nonylphenol and its Ethoxylates; Chlorinated Paraffins; Bisphenol A; HBCD as part of the Brominated Flame Retardant group) with respect to their designation as CMC. While we are pleased to receive and support the recommendations of the ITT with respect to the four chemicals recommended as CMCs, the results for “no determination” for the four remaining candidate chemicals demonstrates a problematic and unacceptable outcome under Annex 3. We will highlight several key issues that we believe represent weaknesses in the current approach and framework for implementing Annex 3 of the GLWQA which have contributed to the recommendations for no determination on these four chemicals.

Our organizations urge the Canadian and US governments to follow their commitments in the GLWQA by developing prevention measures to achieve zero discharge for the chemicals recommended as CMCs. In addition, we urge the governments to reject the recommendations for the four candidate CMCs with “no determination”. With respects to these candidate CMCs, we strongly urge the governments to apply the precautionary principle as required by the GLWQA’s principles and conclude that the four remaining candidate chemicals (i.e., Nonylphenol and its Ethoxylates; Chlorinated Paraffins; BPA; HBCD) also be adopted as CMCs. In all cases, these Binational Summary Reports noted that insufficient data and/or information made it difficult for the ITT to provide a determination. We conclude that this “no determination” finding is unacceptable as it is the result of the inadequate structure and functioning of the ITT as prescribed in the Parties’ framework.

Structure and Function of the Identification Task Team

ITT Composition

The ITT was composed of 17 members, eight of whom were from government (US, Canada, Great Lakes states and Ontario), four from industry or industry consultants, three academics, and two from environmental non-governmental organizations (ENGOs). The work of the ITT was initiated in Spring 2014 and was completed in March 2015. Despite the efforts of the ITT co-chairs to apply the Parties’ framework, several developments should be noted, including that several of the government representatives did not participate in the drafting of the ITT reports, but did participate in limited review of the reports and the ITT’s final deliberations.

Concerns

Two of the ITT reports were drafted by industry representatives alone: the BPA and Non Nonylphenol and its Ethoxylates reports. Pairing together of two industry members was raised as a concern by ENGOs early in the process, but the ITT members were assured by the government co-chairs of the ITT that the reports would be reviewed by the entire ITT so that any concerns could be addressed. Similar concerns were also raised by the ENGO members of the Annex 3 Extended Subcommittee (EC3) under the GLWQA early on in the process.

However, contrary to that commitment, the draft BPA report received limited review by ITT members because it was provided to the ITT with approximately only one week before the deliberations. ENGO and academic ITT members provided written and verbal comments raising concerns regarding numerous unsubstantiated scientific statements,¹ the omission of any discussion about BPA and endocrine disruption, the fact that FEQG exceedances were ignored,

¹ Many statements in the draft BPA report had no scientific references or were unbalanced in reflecting the literature, for example, the claims by the report authors that there was no evidence of long range transport (page 10).

and inaccurate representation of Environment Canada's risk assessment findings² on BPA in the draft report. It is our understanding that the government representatives on the ITT did not have a chance to fully review and correct the report prior to the deliberations of the ITT. As a result, it was left to the efforts of ENGOs and academic representatives to identify unsubstantiated and inaccurate statements in the report, and to ensure that they were changed. Unfortunately, however, some of the required edits occurred only *after* the ITT had deliberated on and voted based on the problematic draft report, which seriously undermined the credibility and integrity of the entire process. The ITT members were also led to believe that subject matter experts from within government on each substance would carefully review, correct and augment the reports, and while some review and editing did occur, it was limited and not as comprehensive as expected.

Flaws in the “Binational Considerations when Evaluating Candidate Chemicals of Mutual Concern” Flow Chart Framework and the elimination of the principles of the GLWQA from the ITT

The framework used to make determinations on a candidate CMCs, “Binational Considerations when Evaluating Candidate Chemicals of Mutual Concern” (BC), is severely flawed. The BC represents a decision flow chart, the objective of which is to result in each of the proposed CMCs receiving a specific designation, or recommendation to be proposed to the Annex 3 Subcommittee (C3) who then vote on those recommendations and forward their recommendations to the GLEC. Each chemical could be either “Recommended as a candidate chemical of mutual concern”; “Not recommended as a candidate CMC”; or reported back as having “Insufficient information on which to base a determination”, that is, “No determination”. This process, as set out in the flow chart is inconsistent with the GLWQA and Annex 3.

The principles and approach of the GLWQA are centered on precaution, as clearly required in Article 2 paragraph 4(i) of the Agreement. The mandate is very clear: to ‘incorporat[e] the precautionary approach, as set forth in the Rio Declaration on Environment and Development, the Parties intend that, "Where there are threats of serious or irreversible damage, lack of full

² For example, on page 2 of the draft report, in reference to the Canadian review of BPA under the *Canadian Environmental Protection Act 1999* (CEPA), the authors cite a quote from a fact sheet on Environment Canada's web site (see: Bisphenol A - Fact Sheet posted at <http://www.chemicalsubstanceschimiques.gc.ca/fact-fait/bisphenol-a-eng.php>), stating that the general public need not be concerned about BPA as exposures are low. It fails to note, however, the findings of the CEPA risk assessment completed in 2008 designated BPA as a toxic substance because of the risk it poses to human health, specifically the health of pregnant women/fetuses and infants. On page 11, the draft report quotes the BPA fact sheet as if it was a scientific data source, although it is only a general communications piece available on Environment Canada's web site, rather than the actual CEPA screening assessment itself. On pages 7 and 8, the draft report refers to a higher predicted “no effect concentration” (PNEC) than used in the CEPA risk assessment, claiming the PNEC used in the CEPA risk assessment was of limited reliability, however the draft report gives no reference to support this critique. While some of these information misstatements were removed from the first draft report, the correct information, for example on the findings of the CEPA risk assessment, was not inserted into the report until *after* the ITT deliberations, and only upon the insistence of a few ITT members when the proposed final reports were provided.

scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.” In addition the flow chart is contrary to the principle of prevention as required in Article 2 paragraph 4(j) to “anticipate and prevent pollution and other threats to the quality of the Waters of the Great Lakes to reduce overall risks to the environment and human health.”

Members of the ITT were selected based on their scientific expertise and would not necessarily be selected on the basis of their familiarity with or understanding of the GLWQA. Integrating the principles and values of the GLWQA into the work of the ITT was never part of the Terms of Reference nor was it included in the mandate the ITT was given. As a result, some members of the ITT may not have fully taken into account the purpose or principles of the GLWQA. The primary document the ITT members were given to use to guide their work was the “Binational Considerations” flow chart, with the direction that they should use it as their guidance for the entire process of assessing the candidate CMCs to be recommended as CMCs, including the basis for how they should vote on the substances. This framework is essentially eliminates any focus on the key environmental principles of ‘prevention’ and ‘precaution in favor of the Parties’ emphasis on and objective of risk management. As a result, the recommendations for each candidate CMC along with the deliberations made by the ITT members do not reflect consideration of these principles.

Uncertainty Regarding Significance of a Finding of “No Determination”

In the absence of clearly articulated strategies for addressing the fate of chemicals in each of the possible designation categories, the voting process was severely compromised and failed entirely to achieve its original mandate: determining which chemicals should be recommended to the Great Lakes Executive Committee (GLEC) as CMCs. Rather than reflecting decisions based on a clear understanding of the consequences of the recommendation, and accurate reporting of the relevant information, members’ votes reflected significant disagreement over the implications of their vote. Voting was allowed to proceed, even while conflicting assessments were expressed by members of the ITT regarding what the meaning of a ‘no determination’ recommendation would be. Some believed that a ‘no determination’ recommendation would send a message to the Parties to increase the research effort to fill in the information gaps with respect to a substance, while other ITT members thought it would result in the substance receiving less, if any attention, from the Parties. Government scientists may have voted in favor of “no determination” in hopes of getting more funding, while ENGOs may have voted *against* ‘no determination’ out of concern that the substance would be dropped completely.

This failure to clearly define the outcome and implications of each recommendation type can be traced directly back to the “Binational Considerations” document, and the failure of the Annex 3 leadership to clearly define each recommendation type. Lack of transparency and accountability were serious problems with all the recommendation designations, but especially with the “No designation” and “Not recommended” because neither requires a clear justification for the

recommendations. Uncertainty regarding the fate of chemicals receiving a ‘no determination’ recommendation exacerbated the weaknesses of the ITT process.

This lack of clarity and consistency associated with the voting recommendations raises serious questions for the Annex 3 Subcommittee as to their ability to legitimately adopt and forward final recommendations to the Great Lakes Executive Committee. Given the significant disparity in reasoning and motivations observed by ITT members on how ITT members cast their votes, the validity of both the voting process and the outcomes must be challenged and can no longer be accepted at face value. There is no longer any assurance that the votes represent the true will of the ITT members given the complete absence of coherent voting criteria and category definitions. The lack of certainty in the Annex 3 process to address these chemicals in the immediate short term has long term implications for the integrity of the entire GLWQA Annex 3 work going forward. This failure to make the proper decisions could be directly responsible for on-going contamination of the Great Lakes, and contribute to our failure to protect the health of the Great Lakes and their inhabitants.

Specific Issues Related to the Binational Summaries for Candidate CMCs

Absence of Analyses on the efficacy of current regulatory and non-regulatory measures for candidate chemicals

As part of their assessment of the efficacy of current management practices for each chemical, it was the mandate of the ITT to document current regulatory and non-regulatory measures undertaken by the US and Canadian governments on candidate CMCs. However, analysis of the efficacy of regulatory and non-regulatory measures falls outside of the ITT mandate. Substantial effort by ITT members was made to compile this information, but they continued to face challenges from the lack of available data that would demonstrate whether or not existing control measures are resulting in reductions in candidate CMCs. More specifically, what the impact of these control measures has been on the levels of candidate CMCs in the Great Lakes Basin was considered a significant information gap.

Questions about how to interpret management data from different sources, and how to assign degrees of significance to data from inside versus outside the Basin, highlight the weakness of the framework applied to the ITT review. The lack of clear criteria and guidance to assure consistency in how data was assessed may have contributed to the quality of the recommendations by the ITT. All candidate CMCs are ubiquitous in the environment. In Canada all candidate CMCs have been identified as toxic under its federal legislation with some management measures already in place for most of these candidate chemicals. However, very few regulatory and non-regulatory measures are directly focused on the Great Lakes Basin. The availability of monitoring data does not, as a rule, speak specifically to the threat to the Great Lakes from these candidate CMCs. In Canada, all the measures taken on chemicals such as BPA

are designed to manage the chemical from a national perspective. In the absence of good data from sources in the Great Lakes, decisions were made using concentration levels of the candidate CMCs in the Great Lakes Basin when available, which is not an adequate basis for the ITT to make a proper Great Lakes-specific determination. The terms of reference for the ITT excluded conducting any necessary additional analyses to assess the benefits of existing measures to the Great Lakes. In these situations where data gaps are identified or additional analyses are required to assess efficacy of management measures, the only appropriate approach for the ITT to take would be to apply the precautionary approach.

The absence of an analysis by government on the efficacy of existing regulatory measures is evident in the Binational Summary conducted on BPA, which includes general and overarching statements on milestones (page 18-20) and reiterated in Question 3 (page 22) highlighting Canadian management activities. However, it should be noted that only one of the seventeen actions enumerated is a regulation, while the remainder of the management measures focus on information-gathering, establishing acceptable release limits, or voluntary actions. No information was provided to the ITT Review outlining the efficacy of existing measures on BPA. With the exception of the prohibition of BPA in polycarbonate baby bottles in Canada, current regulatory and non-regulatory measures do not establish reduction targets for BPA. This observation is also relevant for Nonlyphenols and its Ethoxylates and Chlorinated Paraffins, which have been managed in Canada, but no analyses of their efficacy was provided for the ITT review. The absence of a clear definition or criterion to describe what constitutes a “management action” may have increased uncertainty for ITT members, thus affecting the final recommendations of the ITT.

The Binational Summary Report on Mercury provides substantial evidence outlining the existing measures taken at the federal and also state/provincial levels. However, existing monitoring data demonstrates on-going releases of mercury in the Great Lakes Basin (pp. 5, 10). Analyses regarding the efficacy and potential impact of regulatory and non-regulatory measures would have been of significant value in improving the ITT recommendations. In the case of mercury, which has been a focus for regulatory measures for the past three decades, the general approach for management action has been on control rather than prevention. While the ITT submitted a recommendation that mercury is a CMC, the basis for considering additional measures to achieve reductions of mercury in the Great Lakes would have greatly benefited from an analysis on the efficacy of measures, but was outside the scope of the ITT.

Applying Precaution in Final Recommendations by the ITT

While the GLWQA outlines key principles such as precaution and prevention, the BC framework does not provide any guidance in applying precaution in the review of candidate CMCs. The ITT recommendations for all candidates were based on the consideration of available data. The four

candidate CMCs recommended as “no determination” cited insufficient data to make a determination. However, there is no indication from the reports if the application of the precautionary principle was considered in the deliberation. Where there was insufficient data, the ITT recommendation should have been revised to support a recommendation of CMC and highlight the need to address data. Including data collection in the actions for a CMC was clearly seen by the Agreement’s negotiators as shown in Annex 3 section B 1 and section C on science, as actions to be taken **after** a substance had been designated as a CMC. A designation as a “Is a CMC” will establish some level of certainty in the Parties response, thus leading to identifying necessary measures to address the gap on the chemical. It is critical that the Parties’ approach outline a finite timeline of six months to address the CMC.

Consideration of health impacts limited

There are significant gaps in the approach taken in the review process to consider human health effects and ecotoxicology effects from candidate CMCs. The scope of investigation into health impacts associated with candidate CMCs is very narrow and could not expect to conclude that the Great Lakes population is at risk from the candidate CMC. First, the body of evidence on health effects for candidate chemicals based on exposure to contamination in the Great Lakes ecosystem is not always available, making it difficult to substantiate a finding as a CMC under the current framework. Second, the framework also requires the ITT review to quantify if health effects result from exposure to the Great Lakes ecosystem. Third, the review of health impacts from specific candidate CMCs would not be able to consider cumulative and synergistic impacts, including cumulative impacts of chemicals with similar modes of action or the interaction of the candidate CMC with other chemicals. Attempting to determine the degree of exposure to candidate CMCs through the Great Lakes ecosystem diminishes efforts to be precautionary and preventative as it eliminates the consideration of other sources of exposure to the candidate CMCs including consumer products or transboundary emissions. The current approach places an inappropriate level of emphasis on detecting the candidate CMC in the Great Lakes Basin water and sediment, and Great Lakes fish, rather than embracing an ecosystem perspective.

Some of these limitations are exhibited in the Binational Summary Report for Mercury. While the ITT recommended mercury meets the designation as “is a CMC”, the report does not document whether any Great Lakes populations are experiencing impacts of mercury exposure other than through fish consumption. Issuance of fish consumption advisories based on mercury levels in Great Lakes fish demonstrates the degree of concern associated with exposure to mercury through fish consumption in the Great Lakes Basin. Indeed, it is inadequate to assess the health of the Great Lakes population by relying on just fish consumption advisories, since there are other sources of mercury exposure not specific to the Basin.

Inability of review to evaluate time trends undermines prevention

For all of the candidate CMCs with no determination, insufficient data are creating substantial challenges for required next steps by the Parties. Based on the Binational Reports for specific candidate chemicals such as BPA, the absence of temporal data creates unnecessary challenges to advance prevention and reduction efforts. The data gap perpetuates the status quo promoted in the framework. Management measures can only be considered when data is available.

Insufficient data were evident in the four candidate CMCs (e.g. Nonylphenol and its Ethoxylates; Chlorinated Paraffins; BPA; HBCD) where no determination was reached. Insufficient data may result in significant delays in making a conclusion on the candidate chemical and does not provide adequate justification for a “no designation” recommendation. This is compounded by the lack of certainty on the roles of the government, industry or other stakeholders to fill the data gaps. Finally, the absence of time requirements adds to the problem. In order for progress to be made on CMCs in the Great Lakes Basin and advance the work under the GLWQA using the current framework, “no determination” decisions are not acceptable as stated in the introductory comments. In the absence of data, the application of the precautionary principle should be applied to these candidate CMCs and proceed to next step for the Parties to consider preventative measures.

If you have any questions regarding our submission, please contact Elaine MacDonald, Ecojustice at 416-368-7533 ext 527 or Fe de Leon, Canadian Environmental Law Association at 416-960-2284 ext 223.

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