June 13, 2018

Dear Dr. Mona Nemer,

We are four health, science and environmental not-for-profit organizations that have been working for over a decade to strengthen health and environmental protections through stronger regulations of harmful pesticides and transparent, science-based decision-making.

We commend the Government of Canada's new commitment to encourage openness and transparency in government science and decision-making. We applaud the actions that the government has taken to increase public and media access to government scientists, and to ensure science integrity in policy making. However, we are deeply concerned that the current regulatory process at the Pest Management Regulatory Agency (PMRA), under the authority of the Minister of Health and the *Pest Control Products Act,* contravenes the government's commitment to openness, transparency and evidence-based decision-making. We would like to request a meeting with you to discuss this matter.

The PMRA recently evaluated the risks posed by some of the most highly hazardous pesticides, and has proposed important regulatory decisions. Our evaluation of the PMRA's policy-making and scientific assessment process relating to these decisions raises serious questions about scientific integrity and the lack of transparency within the pesticide regulatory system.

The appendix attached provides a brief description of a selection of recent regulatory decisions to help exemplify our concerns. These concerns are largely confirmed by the conclusions of The Commissioner of the Environment and Sustainable Development whose 1999 and 2015 audits underscored similar concerns about transparency and openness in pesticide regulation.

As Chief Science Advisor, we understand that you are responsible to examine issues of scientific integrity within the public service; to encourage transparency and ensure that government science is fully available to the public; and to recommend ways that the government can better support quality scientific research. Your role also enables you to review and recommend relevant improvements to existing science advisory mechanisms and processes used in government decision-making. We think that one critical opportunity to pursue this mandate is through an investigation of the scientific process at the PMRA, and how it meets the legislated requirements under the *Pest Control Products Act*.

We look forward to the opportunity to meet with you and your team at your earliest convenience to further discuss the issues we raise in our letter.

Sincerely,

Annie Bérubé
Director - Government Relations
Équiterre

Kim Perrotta
Executive Director
Canadian Association of Physicians for the Environment

Katie Gibbs
Executive Director
Evidence for Democracy

Tim Gray
Executive Director
Environmental Defence Canada

Brief summaries of recent PMRA regulatory decisions illustrating concerns about scientific integrity and transparency

Neonicotinoids

The PMRA was alerted to potential risks posed by neonicotinoids in 2012 when Canadian beekeepers reported unprecedented levels of bee deaths and colony collapse. Since then, the PMRA has conducted multiple narrowly scoped evaluations of risks, including several on the risks to pollinators that came to much more limited regulatory conclusions than the assessments conducted by the European Food Safety Authority (EFSA). While the PMRA is proposing to replicate some of the European Union's partial restrictions from 2013 with an even more limited scope, in light of new evidence of harm, the EFSA updated its pollinator risk assessments in 2018 and as a result, will ban all outdoor uses of neonicotinoids by the end of this year.

An open letter to policy makers signed by hundreds of Canadian and international scientists and published in the June 1 2018 edition of *Science* emphasizes the weight of evidence and the need to act. The scientists state *"It is the view of the undersigned scientists that the balance of evidence strongly suggests that these chemicals are harming beneficial insects and contributing to the current massive loss of global biodiversity. As such, there is an immediate need for national and international agreements to greatly restrict their use, and to prevent registration of similarly harmful agrochemicals in the future."* The Canadian pollinator assessments relied, in large part, on data that was not public, not published, and not peer-reviewed despite the fact that there is a robust body of public, peer-reviewed scientific literature on the topic. It is not surprising, then, that the risk management strategies proposed did not reflect current scientific evidence and global systematic reviews, and as a consequence, Canada's regulatory decisions continue to lag behind other jurisdictions in protecting pollinators.

In a separate risk assessment, the PMRA has proposed to phase-out one neonicotinoid, imidacloprid, by 2021 at the earliest, as a result of scientific evidence of unacceptable risks aquatic invertebrates. This proposed timeline to deauthorize imidacloprid is also indicative that science is not being properly taken into account in government decision making because the scientific evidence points clearly to an immediate need for a ban. It must be science -- not political factors or otherwise-- that drives swift government decision making when evidence of risks is confirmed by our regulator.

It is also worth noting that two of the most popular neonicotinoids were registered in Canada back in 2010 on a conditional basis, which means that there was not enough data on risks when the pesticides were authorized for sale by the PMRA. It is now eight years later and the PMRA has yet to seek additional data despite acknowledging the information gap in its original registration of these products for use in Canada.

Glyphosate

Health Canada also recently evaluated glyphosate, Canada's most used herbicide. The evaluation took over 7 years to complete, and while it should have been comprehensive as required by the law, it dismissed or did not consider certain results or studies without providing a scientific rationale. It also relied in large part on unpublished, non-peer-reviewed data from lab reports conducted in the 1980s and 1990s, which is hard to understand considering there is a substantial body of public, peer-reviewed scientific literature on the subject that has been published since the 2000s. This over-reliance on unpublished, out-of-date, non-peer reviewed data is problematic for replicability, credibility and rigour, and also presents the potential for conflict of interest, particularly because pesticide registrants are provided the opportunity by law to review and provide feedback on the PMRA's use and interpretation of peer-reviewed literature, as a component of the evaluation process, and before regulatory decisions are made. This legal requirement for consideration of evidence by the pesticide registrants has, in our view, led to an unjustifiable imbalance between published and unpublished

data, which must be reconsidered in the statutory review of the *Pest Control Products Act* scheduled for 2020.

Furthermore, the reference list provided in the glyphosate evaluation cites Confidential Business Information (CBI) studies that are repeated under different reference codes which could mean that multiple identical sources are being used to substantiate points, raising concerns that the weight of evidence is being misrepresented. It must be noted that the content of these CBI studies are only accessible in person via the Reading Room located in Ottawa, which is inconvenient and inaccessible to most Canadians.

Atrazine

In the case of atrazine, a herbicide that has been banned in Europe for over a decade, the PMRA's scientific review was so narrow in its considerations of risks that after a period of public consultation, the PMRA announced the need to launch a secondary review in order to examine all evidence associated with all risks. This inefficient scientific process has led to a multi-year delay in the implementation of appropriate risk management strategies, and Canadians are still exposed to a pesticide that has been banned for over a decade in Europe. It is our concern that if Canada's scientific approach to pesticide regulation is not comprehensive, risk management strategies cannot be comprehensive and will not appropriately reflect current scientific evidence about contamination and impacts.

What is consistent across all of these risk assessments is that it is independent scientists, Canadian citizens and other stakeholders to determine how the PMRA comes to its regulatory conclusions. Without trust in the science that defines regulatory outcomes, Canadians cannot rest assured that their health and environment are properly protected as prescribed by the *Pest Control Products Act*. Other countries, however, are taking important steps to ensure more transparency and rigour in pesticide regulation. For instance, the food law in the European Union will soon mandate that the raw data of all industry-funded studies related to pesticides will be made publicly available, including all aborted industry studies, and that the criteria for what qualifies as CBI will be more stringent.