



1 TACKLING TOXICS AND PESTICIDES



Photo: H. Ramovnick

Recommendation Summary

Environment and Climate Change Canada and Health Canada lack adequate resources to meet federal legislative requirements for assessing and managing toxic substances, including pesticides, on an ongoing basis. To protect the health of Canadians and our environment from toxic exposures, the Green Budget Coalition recommends the following investments:

1. Next generation chemicals management:

- a. Preparing to implement legislative changes to modernize the *Canadian Environmental Protection Act, 1999 (CEPA)*: **\$25 million over two years** for ECCC and HC;
- b. Ongoing chemical assessment, research and monitoring, and risk management activities beyond Phase 3 of the Chemicals Management Plan: **\$100 million annually**, starting in 2021-22 and ongoing for ECCC and HC;

- c. Enforcement of CEPA and pollution prevention provisions in the *Fisheries Act*: **\$50 million in 2019, and then \$100 million annually ongoing** for ECCC.

2. Improving pesticide regulation:

- a. Fulfilling obligations under the *Pest Control Products Act* (PCPA) to assess risks from pesticides, and upgrading compliance and enforcement: **\$50 million in 2019, and then \$100 million annually ongoing** for Health Canada’s Pest Management Regulatory Agency (PMRA).
- b. Reviving and expanding the National Pesticides Monitoring and Surveillance Network: **\$10 million over five years** for ECCC.

Background and Rationale

Pollution and exposure to toxic substances have a significant impact on Canadians’ health, the environment and our economy. The annual economic cost of adverse health effects caused by toxic exposures is estimated to be in the tens of billions of dollars.¹ There is growing scientific evidence that toxic chemicals, including pesticides, are associated with cancer, learning and behaviour problems in children, asthma, allergies, diabetes and other chronic conditions. Nearly nine in ten Canadians are concerned about children’s exposure to toxics from consumer products and impacts on wildlife.²



Photo: Bjoern Wylezich

1. International Institute for Sustainable Development, *Costs of Pollution in Canada: Measuring the impacts on families, businesses and governments*, June 2017. <http://www.iisd.org/library/cost-pollution-canada>
 2. The Gandalf Group, *Canadian Public Opinion on Toxics*, June 2017. Commissioned by Environmental Defence.

GBC Feature Recommendations – Alignment with Political Priorities

1

Toxics & Pesticides

Meeting Public Expectations	✓
Improving Health & Wellbeing	✓
Reducing GHG Emissions	
Climate Resilience	
Reconciliation with Indigenous Peoples	✓
Healthy Waters	
Protecting Nature & Wildlife	✓
Clean Growth & Innovation	✓
Economically Sustainable Rural & Remote Communities	



Photo: N Humster

Pesticides are a unique category of toxic substances. Toxicity to targeted pests is intentional. However, pesticides can contaminate the environment and sometimes harm non-target organisms, as well. Human exposure to even very low levels of pesticides is also associated with a wide range of adverse health effects.³

To address these challenges and meet legislative requirements for assessing and managing toxics, the Green Budget Coalition recommends investments in the following areas.

1. Next-generation chemicals management

a. CEPA reform: \$25 million over two years. The *Canadian Environmental Protection Act, 1999*, Canada's main law governing pollution prevention and management of toxic substances, needs to be updated to respond to scientific developments in the understanding of environmental and health risks, changing use patterns and new products on the market. In June 2018, the government committed to advance reforms to CEPA in future parliamentary sessions in response to recommendations of the House of Commons Standing Committee on Environment and Sustainable Development for strengthening the Act.⁴ Key recommendations related to chemicals management include: cumulative risk assessment; alternatives assessment; recognition of the human right to a healthy environment and protections for vulnerable populations; and prohibiting certain categories of substances of very high concern (such as carcinogens and reproductive toxicants) unless industry demonstrates that a particular use is safe. ECCC and HC will need to develop or refine processes for implementing these recommendations. The recommended investment would support a scan of approaches in other jurisdiction, review of applicable methodologies, stakeholder engagement and development of policy, guidance and regulations.

b. Early renewal of the budget for chemicals management: \$100 million annually starting in 2021. The Chemicals Management Plan (CMP) was launched in 2006. Current funding (\$491.8 million over five years) will sunset in March 2021. Pursuant to CEPA, the government has committed to completing assessments of 4,300 high priority legacy toxic substances by 2021. This presents an important opportunity to refocus the program for the future. At the same time, there will be an ongoing need to assess — and in some cases reassess — chemicals, and implement risk management plans.

3. Roberts, J. R., C. J. Karr, et al. "Pesticide Exposure in Children." *PEDIATRICS* 130, no. 6 (December 1, 2012): e1765-88. <https://doi.org/10.1542/peds.2012-2758>.

4. Environment and Climate Change Canada, News Release, June 29, 2018. <https://www.canada.ca/en/environment-climate-change/news/2018/06/government-of-canada-is-working-to-improve-canadas-law-on-pollution-prevention-and-toxic-chemicals-the-canadian-environmental-protection-act-1999.html>; Standing Committee on Environment and Sustainable Development, *A Review of the Canadian Environmental Protection Act, 1999, Report and Government Response*. <http://www.ourcommons.ca/Committees/en/ENVI/StudyActivity?studyActivityId=8817796>

The CMP has also funded important monitoring and research on chemicals in the environment. This research informs decision-making under CEPA, PCPA, and other legislation. Renewed funding at current levels will be necessary to allow these longitudinal studies to continue, and indeed expand their scope.

ECCC and HC are currently consulting on new directions for chemicals management in the next decade that must address emerging challenges such as nanomaterials and the continuous presence of certain substances in widespread use resulting in constant exposure, challenging traditional definitions of persistence or bioaccumulation. It is crucial that Budget 2019 confirm ongoing investment in chemicals management to support appropriate preparations and enable a smooth transition in 2021.

c. Enforcement: \$50 million in 2019, and then \$100 million annually.

ECCC's Enforcement Branch is responsible for enforcing many of the requirements under CEPA, as well as pollution prevention provisions in the *Fisheries Act*. This work includes enforcing more than 56 CEPA regulations. Planned spending on compliance and enforcement activities related to minimizing pollution in 2018-19 is \$34 million⁵, down from \$43.2 million in 2011-12 — although the number of CEPA regulations has increased. The department's Forward Regulatory Agenda, 2018-2020, indicates plans to develop or amend 21 new CEPA regulations to deliver on its mandate to protect the environment.⁶ Furthermore, enforcement challenges are increasingly sophisticated and require new resources — not only additional environmental inspection officers and training, but also new investigative and intelligence capabilities. The recommended investment would support modernizing environmental enforcement in Canada to ensure federal pollution prevention laws and regulations achieve the intended results.



Photo: Jarun Ontakrai

Photo: Living Lakes Canada

5. Departmental Results Report 2016 to 2017, Department of Environment. <https://www.canada.ca/en/environment-climate-change/corporate/transparency/corporate-management-reporting/departmental-results-report/2016-2017/analysis-trends-spending-hr.html>

6. Forward Regulatory Plan 2018 to 2020, Environment and Climate Change Canada <https://www.canada.ca/en/environment-climate-change/corporate/acts-regulations/forward-regulatory-plan/2018-2020.html>



Photo: I. Tipon

2. Improving Pesticide Regulation

a. Fulfilling legal obligations to assess risks from pesticides, and upgrading compliance and enforcement: \$50 million in 2019, and then \$100 million per year. *The Pest Control Products Act* requires pre-market assessment and periodic post-market re-evaluation of every pesticide used in Canada but Health Canada's Pest Management Agency (PMRA) lacks adequate resources to fulfill these legal obligations. The level of funding for federal pesticide regulation has remained unchanged in recent years — at around \$40 million per year — despite a significantly expanded workload and compliance challenges. The recommended investment would enable PMRA to accelerate/expand work in the following areas:

- **Re-evaluations and special reviews**

More than 400 pesticide active ingredients registered before 1995 must be re-evaluated applying modern scientific methods. PMRA has committed to complete this work by 2020, but 35 large and complex reviews remain incomplete. Concurrently, the PCPA requires the re-evaluation of every registered pesticide on a 15-year cycle, as well as unscheduled special reviews of health or environmental risks in certain circumstances. In recent years, PMRA's re-evaluation workload more than doubled from 35 planned decisions in 2015-16 to 82 in 2017-18. Concerningly, PMRA expects delays in 20 percent of re-evaluations and special reviews, due in large part to resource constraints, and this will result in a growing backlog.⁷

- **Conditional registrations**

In 2016, the government committed to ending the controversial practice of registering a pesticide on the basis of incomplete information, conditional on data being submitted later. However, as of November 2017, 37 pest-control products remain conditionally registered. PMRA requires resources to review any new data provided to determine whether conditional registrations should be converted to full registration or cancelled.

- **Cumulative risk assessment**

In April 2018, PMRA published a framework for assessing cumulative risks of groups of pesticides with a common mechanism of toxicity. Implementing the new framework, as required by law, will be complex and must be properly resourced.

7. Health Canada, PMRA Stakeholder Web Session, 1 November 2017, Sir Frederick Banting Research Centre. Presentation by Margherita Conti.



Photo: Foto Kotic

- **Compliance and enforcement**

Re-evaluations frequently result in changes to use requirements or restrictions intended to reduce risks to human health and/or the environment, and these are specified on the product label.⁸ A robust compliance and enforcement program is essential to ensure pesticide applicators follow label instructions. However, in 2016-17 Health Canada conducted just 1,300 targeted oversight inspections. This equates to less than 1 per cent of the 193,000 farms in Canada (not to mention non-agricultural uses of pesticides). The average rate of compliance was just 65 per cent and nearly one in four regulated parties previously identified as out of compliance were found to still be out of compliance in follow-up surveillance inspections.⁹ A more robust compliance and enforcement program is needed to ensure the risk reduction requirements and restrictions are implemented.

- b. Revive and expand ECC's National Pesticides Monitoring and Surveillance Network: \$10 million over five years.** PMRA relies on monitoring data from other government departments, particularly ECC, and external sources in assessing risks from pesticides. Funding for the former National Pesticides Monitoring and Surveillance Network (approximately \$1.2 million per year) was discontinued in 2009. A comprehensive, national water-monitoring program for pesticides is needed to deliver robust data, for both environmental and human exposure assessment, in support of regulatory decisions. This will complement other recommended investments in freshwater protection (see *Freshwater Protection recommendation later in this document*).

8. A 2015 audit found that of the 238 historical re-evaluations then completed, 90 per cent resulted in label changes. See 2015 Fall Reports of the Commissioner of the Environment and Sustainable Development, Report 1 — Pesticide Safety. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201601_01_e_41015.html#hd4c

9. Health Canada's Pest Management Regulatory Agency/Regulatory Operations and Regions Branch Compliance and Enforcement Report 2016-2017.



Toxics and Gender

Women and young children are disproportionately exposed to toxic substances. Physiologically, women have more body fat than men, increasing their body burdens of toxic substances that bind to fats. Likewise, babies carry extra fat. Fat from being passive storage, body fat, or adipose tissue, is active endocrine tissue dynamically involved in all aspects of metabolism, growth and development.

Women's bodies are our first environment. Toxic chemicals can cross the placenta and also bioaccumulate in breastmilk. Fetal development is the time of greatest vulnerability to toxic substances, and often highest exposure. Toxic substances are associated with birth defects, impacts on healthy brain development, low birthweight and/or preterm birth, and associated impacts on immune system development contributing to risks for allergies and asthma.

Women tend to be exposed to greater levels of toxic substances from personal care products, household cleaners, and sales receipts, and in some female-dominated jobs such as retail sales or hair/nail salons, compared to men. As well, women are often responsible for household purchasing decisions. In the absence of a strong regulatory regime to prohibit toxic chemicals in products, or clearly label them, the consumer is ill-equipped to identify and choose safer products, and the burden of navigating this landscape falls predominantly to women.

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