CHEMISTRY INDUSTRY ASSOCIATION OF CANADA | ASSOCIATION CANADIENNE DE L'INDUSTRIE DE LA CHIMIE

Freshwater in Canada

Submission to the Standing Committee on Environment and Sustainable Development for its Study on Freshwater

May 7th, 2021

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Dear Members of the Standing Committee on Environment and Sustainable Development,

The Chemistry Industry Association of Canada (CIAC) has been working to protect water quality in Canada through our U.N.-recognized environmental, social and governance (ESG) initiative, Responsible Care. All CIAC member companies commit to the Responsible Care Ethic and Principles for Sustainability and the Responsible Care Codes, which covers all aspects of the company's business and product lifecycle. As part of Responsible Care, members are committed to being responsible stewards of water resources by managing their business to conserve and minimize water use, preventing incidents that would be detrimental to water quality or quantity, and controlling effluent streams to protect water bodies, groundwater, and habitat.

Since 1992, and in accordance with Responsible Care, CIAC members have reported all substance releases to CIAC, even when the substance or amount released falls below the reporting threshold of Canada's National Pollutant Release Inventory (NPRI). Emissions data are obtained in cooperation with Environment Canada's Single Window (SW) online reporting system through the association's National Emissions Reduction Masterplan (NERM) and Environment Canada's NPRI.

The chemistry industry remains committed to working with the federal government to develop effective long term regulatory policies which foster innovation, investment, jobs, and growth. Through active engagement and partnership with our sector, the government can spur the innovation and demand needed to ensure Canada successfully achieves its environmental goals. The chemistry industry looks forward to working with the federal government to develop successful and effective long-term regulatory policies to improve freshwater management in Canada.

Interaction and Collaboration with Federal Departments and Agencies

The federal departments that CIAC engages with on water policy include Health Canada and Environment and Climate Change Canada. Health Canada is responsible for working in collaboration with the provinces and territories to develop Guidelines for Drinking Water Quality. Our sector also engages with Environment and Climate Change Canada, who work in collaboration with the United States Environmental Protection Agency to support the Canada-US Great Lakes Water Quality Agreement (GLWQA). The GLWQA promotes the advancement of lake wide management and science as well as targeted commitments to address legacy and emerging issues such as aquatic invasive species, climate change impacts, nutrients, chemicals, and other environmental concerns related to Great Lakes water quality. Through the GLWQA, Canada and the United States work in consultation and cooperation with state and provincial governments, Tribal governments, First Nations and Métis, municipal governments, watershed management agencies, and other local public agencies. These groups work collaboratively to develop programs, technologies, and other measures necessary to better understand the Great Lakes ecosystem and to restore and protect water quality and ecosystem health.

CIAC is directly involved in the GLWQA through the Chemicals of Mutual Concern Annex extended sub-committee. Through this annex, Canada and the United States have committed to contribute to the achievement of the General and Specific Objectives of the GLWQA by protecting human health and the environment through cooperative and coordinated measures to reduce the anthropogenic release of chemicals of mutual concern into the waters of the Great Lakes.

CIAC also engages with the federal government and Environment and Climate Change Canada and Health Canada through various programs administered through the Canadian Environmental Protection Act, including the Chemicals Management Plan.

Canada Water Agency

The proper tools to address water quality in Canada exist, as outlined by the work of the CCME and various provinces and municipalities. The CCME has already developed a Canada-wide approach to manage water quality which includes watershed management, water quality monitoring, and wastewater management. These existing programs include a great deal of collaboration between various levels of government, and in some cases, internationally.

CIAC members are and will continue to be committed to the stewardship of freshwater. Currently, our members are actively engaged in water management by using various methods to treat wastewater. Figure 1 shows the different water treatment methods that our members use, and notably, significant resources have been devoted to implement on-site water treatment programs. As our members are actively engaged in water management, we believe the proposed Canada Water Agency (CWA) should aim to reduce regulatory burden across various levels of government.

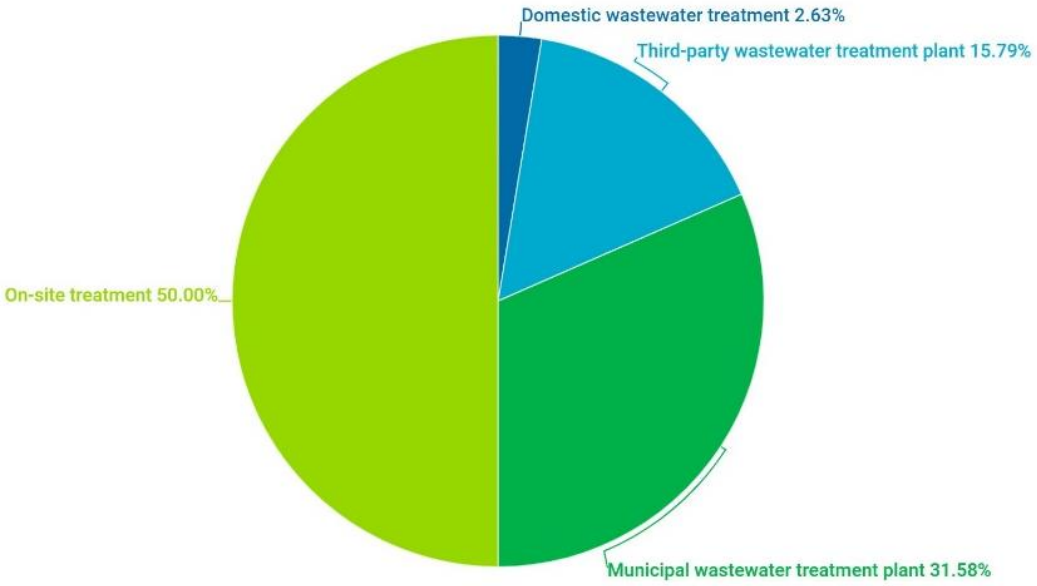

Figure 1 *CIAC Members Water Treatment Methods*

The CWA will relate to our sector in two ways. The first area relates to the role industry plays in sustainable freshwater management and ensuring our present use of freshwater does not compromise access to freshwater for future generations. The second area relates to the need for industry to ensure freshwater is used efficiently and treated appropriately. The CWA should be designed in collaboration with provinces and territories to identify opportunities to support their work. The CWA should also focus on reducing duplication and administrative burden and building on current laws and regulations to address existing gaps.

We look forward to engaging with the federal government to design a CWA that improves collaboration and coordination between freshwater management programs to ensure efficient and successful management of our water resources.

Collection of Information and Data

In accordance with Responsible Care, CIAC members have reported all substance releases to water, air, and land to CIAC, even when the substance or amount released falls below the reporting threshold of Canada's

National Pollutant Release Inventory (NPRI), through the National Emissions Reduction Masterplan (NERM). NERM is a database that pre-dates and informed the development of the NPRI.

In 2012, CIAC members made the decision to also collect key water use and treatment metrics through the NERM supplemental survey of waste and water. As demonstrated in Figure 2, surface water is the most common source of water our members intake. Furthermore, Figure 3 demonstrates that the majority of our members intake water from the province of Ontario, or more specifically the Great Lakes region. In Ontario, water intake places a greater focus on non-consumptive water use. While the region experiences large water consumption, most of the water is returned to the source. Further analysis of this data is presented publicly through CIAC's annual Responsible Care report and may also be included in CIAC's advocacy initiatives.

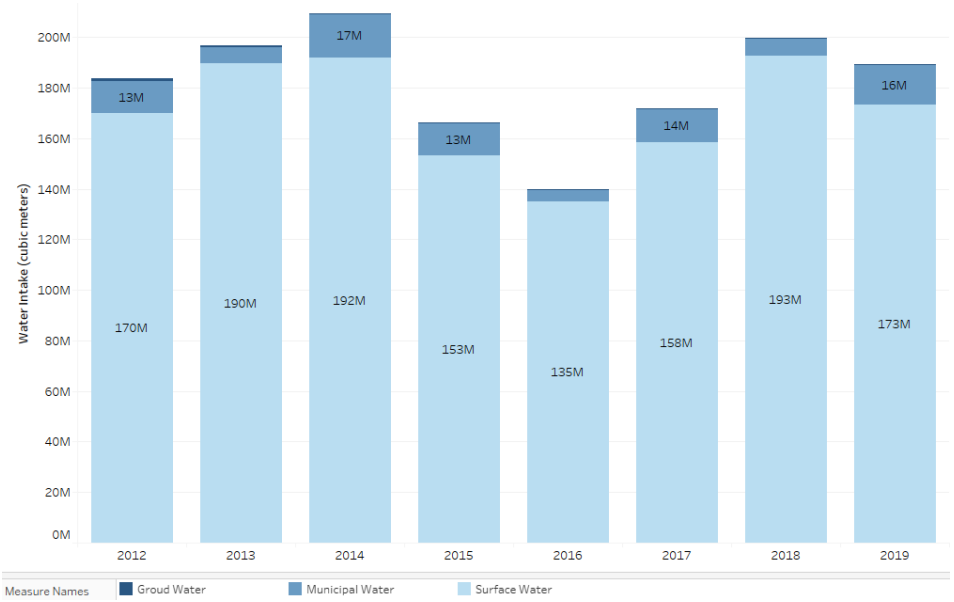

Figure 2 *Water intake by CIAC members between 2012 and 2019 by source, based on NERM data.*

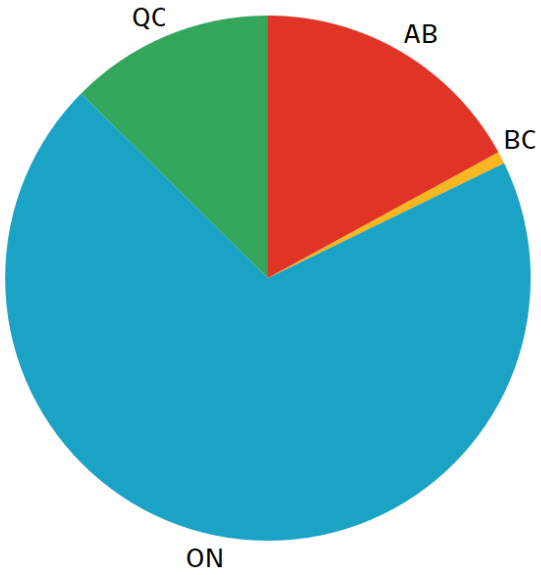

Figure 3 *Distribution of surface water intake by CIAC members in 2019 by province, based on NERM data.*

CIAC is also engaged with the Sarnia Landon Environmental Association (SLEA) Downriver Monitoring Station, an arms-length association independently funded by SLEA located on the Canadian side of the St. Clair River at a location that is directly south of concentrated upstream industrial activities in Sarnia and St. Clair Township. The station includes an auto sampling system that pulls from an inlet that extends out from the shoreline into the main flow of the river. Samples are then automatically sent to modern analytical equipment located at the station for immediate processing. Outliers in the data are reported into SLEA members for review and response as required. In the event of an incident at any site, all SLEA members and regulatory officials are provided with downriver readings as needed.

Additionally, through the NPRI, Environment and Climate Change Canada collects data on freshwater quality and pollutant releases to water from wastewater treatment plants and large industrial facilities, such as mines, metal smelters, and pulp and paper plants. The NPRI Water Quality data integration showcases how pollution emissions reported to the National Pollutant Release Inventory may influence recordings by Canadian monitoring stations.

Industry-operated monitoring sites and databases, in combination with those administered by governments (i.e., the NPRI and other local freshwater quality monitoring data) are crucial to understanding freshwater issues and crafting effective regulations. However, any additional data collection efforts should be mindful of potential administrative burden. Sufficient funding and harmonization with existing programs are also important considerations for any new data collection efforts.

As a first step, we encourage the federal government to consider improving research and data collection on wetlands. Wetlands naturally treat many compounds, including those needed to treat industrial water. Over the years, the number of wetlands have begun to decrease in provinces such as Ontario. As these areas can reduce the need for costly chemical treatment and restore natural wildlife habitats, further research and data collection should focus on how wetlands can be preserved and designed to improve water quality.

Federal Water Legislation, Policies and Regulations

While we support government actions to strengthen the existing approach for the development of Guidelines for Canadian Drinking Water Quality, including through improved transparency of the program and a more robust priority setting process, the federal government should aim to streamline the management of freshwater and provide provinces and municipalities with the resources needed to carry out daily operations and monitoring activities.

CIAC believes that the most valuable freshwater policies, legislation, regulations, and/or initiatives occur when there is a division of labour between the federal and provincial governments that allows provinces to enforce their own standards. Provinces and territories are generally responsible for managing water resources within their boundaries and have all developed their own pollution control regulations. Respecting and empowering provincial knowledge and expertise allows for tailored solutions to local situations and supports regional partnerships. Consequently, the federal government should aim to carry out high level actions related to freshwater management such as improved intergovernmental coordination, setting policies and regulations, and providing resources and acting as a backstop as needed. All affected parties at the national, regional, and local levels should be engaged and consulted to ensure actions and policies reflect each stakeholders' diverse responsibilities, needs, and concerns.

About the CIAC

The Chemistry Industry Association of Canada is the association for leaders in Canada's chemistry and plastic sectors—adding $54 billion and $28 billion respectively to the Canadian economy. The Association represents close to 200 members and partners across the country. We provide coordination and leadership on key issues including innovation, investment, plastics, taxation, health and safety, environment, and regulatory initiatives.
Please contact us to discuss any questions or comments.

Sincerely,

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