Permissions Modernization Team
Client Services and Permissions Branch
135 St. Clair Avenue West, Floor 1 Toronto, ON M4V 1P5

October 25, 2023

Re: ERO 019-6928 - Streamlining environmental permissions for stormwater management under the Environmental Activity and Sector Registry

Thank you for the opportunity to comment on streamlining environmental permissions for stormwater management under the Environmental Activity and Sector Registry. Please note the recommendations listed through the letter below.

The Bay of Quinte is a long, narrow Z-shaped embayment located on the northeastern shore of Lake Ontario (44.15 N, 77.25 W). The Bay of Quinte is 70 km in length, 255 km² in surface area, 2.67 km³ in volume and roughly 4-8 m in depth, and is considered a major freshwater source for drinking, recreational and industrial uses.

The system has long suffered from water quality problems, including harmful algal blooms, bacterial contamination, fish toxicity, taste and odour problems as a result of decades of cultural eutrophication. In 1985, the Water Quality Board of the International Joint Commission (IJC) identified the Bay of Quinte as an Area of Concern (AOC), as defined by the Canada-United States Great Lakes Water Quality Agreement, due to the fact that water quality in the area had deteriorated and the derived beneficial uses of the water were considered impaired.

Currently, of the 11 beneficial use impairments (BUIs), originally identified for the Bay of Quinte, eight (8) BUIs are assessed to be restored due to restoration efforts, such as reduction of nutrient, bacterial, and toxic loads originating from the Bay of Quinte watershed. Two of the remaining BUIs (Eutrophication or Undesirable Algae and Degradation of Phytoplankton and Zooplankton Populations) persist mainly due to high levels of phosphorus encountered in the bay.

Despite the decreases in phosphorus loads made to date, the amount of phosphorous in the bay continues to be at a level that contributes to outbreaks of algae (both toxic and non-toxic) mainly due to legacy based internal nutrient loading. As a result, the Bay of Quinte Remedial Action Plan (BQRAP) developed a "Phosphorus Management Plan" to ensure long-term protection of the bay's water quality, in order to reduce harmful algae blooms and still maintain a healthy foodweb and sustainable fishery.

A key action recommended in the long-term Phosphorus Management Plan to achieve long-term phosphorus targets is to:

Reduce urban non-point stormwater phosphorus loadings by 50%. The current loading estimate for stormwater inputs is 6.8 metric tons of TP per year. This can be accomplished through adoption and implementation of existing recommended Pollution Prevention Control Plans, enhanced stormwater management controls, retrofits, and use of Low Impact Development technologies.

The proposed 50% phosphorus loading reductions can be achieved by recommending that all new stormwater management facilities adopt Tier-1 or Enhanced protection level as per the Stormwater Planning and Design Manual (MECP, 2003), which calls for at least 80% long-term suspended solids removal. This is because, the studies done in the Bay of Quinte watershed identified that more than 80% of the Total Phosphorus are in the form of Particulate Phosphorus.

The above mentioned BQRAP recommended policy on stormwater management facilities should be widely distributed to the municipal planners and potential developers within the Bay of Quinte watershed, specifically to the municipal area fronting the Bay of Quinte shoreline (City of Quinte West, City of Belleville, Prince Edward County, Town of Deseronto, Town of Greater Napanee, Township of Tyendinaga and Loyalist Township).

In the absence of the oversight provided by Environmental Compliance Approvals, it will be challenging to ensure that stormwater management facilities in these areas will achieve requirements to meet the targets of the Phosphorus Management Plan. As a result, it is recommended that stormwater management facilities covered by the Bay of Quinte Phosphorus Management Plan not be eligible for the Environmental Activity and Sector Registry and that they continue to be managed through Environmental Compliance Approvals.

Sincerely,

Anne Anderson

Manager, Community Outreach and Special Projects

