

Project Memorandum: Problem Statement

Phase 1 of the Municipal Class Environmental Assessment (Class EA) planning process includes the identification and description of the problem or opportunity. The objective of this phase is to develop a clear statement of the problem or opportunity being addressed.

Problem Identification and Statement:

In 2000, the City became aware that the Water Pollution Control Centre (WPCC) effluent was exceeding the Certificate of Approval compliance criteria for Biochemical Oxygen Demand (BOD₅) concentration and loading. Notwithstanding evaluation and optimization measures undertaken to improve the WPCC's treatment performance, the existing facility is unable to achieve compliance with the effluent criteria for BOD₅.

The Ministry of Environment (MOE) has issued a Provincial Officer's Order to the City of Brockville to assess alternative solutions following the Municipal Class EA process. The Order includes a request for the following specific Problem Statement description:

“The Existing Water Pollution Control Centre is in a chronic state of non-compliance with the prescribed Biochemical Oxygen Demand (5 day) effluent criteria, and does not meet the “normal” level of treatment prescribed by the Ministry of the Environment. The “normal” level of treatment is secondary or equivalent.”

The WPCC is a chemically assisted primary plant. It is not designed to remove soluble BOD. The “normal” level of treatment referred to in the Provincial Officer's Order is defined as a minimum of secondary treatment in the MOE Policy F-5. Also, both provincial and federal effluent standards are being more stringently set to protect receiving water courses and to achieve an effluent which is non-toxic to aquatic life.

The above requirements create the need to upgrade the Brockville WPCC and improve the effluent quality by providing secondary or equivalent treatment. Principle considerations of the undertaking are to include:

- Upgrade activities are to address the issues of non-compliance with respect to effluent criteria, and “normal” level of treatment in accordance with work activities and timelines contained in the MOE Provincial Officer's Order.

- Site area and location, plant outfall, and existing facility rated capacity are not currently identified as a deficiency.
 - Upgrade activities are to also consider possible implementation of a septage receiving facility, and assess appropriate effluent disinfection methods to meet 'non-toxic' effluent requirements.
 - Several leading practical and cost-effective alternatives for a Plant upgrade are to be developed for confirmation of the Class EA 'project schedule' type and for further pre-design considerations. As no third-party funding support commitments have been received to date, financial viability can significantly affect implementation timelines.
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