

Ministry of the Environment,
Conservation and Parks

Ministère de l'Environnement,
de la Protection de la nature et des
Parcs

Office of the Minister

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RECEIVED

SEP 26 2019

TOWN OF ERIN

AUG 29 2019

357-2019-1533

Lisa Campion
Deputy Clerk
Corporation for the Town of Erin
5684 Trafalgar Road
Hillsburgh ON N0B 1Z0
Lisa.Campion@erin.ca

Dear Ms. Campion:

Between June 13, 2018 and June 26, 2018, the ministry received three Part II Order requests asking that the Town of Erin be required to prepare an individual environmental assessment for the proposed Erin Urban Centre Wastewater Servicing Class Environmental Assessment.

I am taking this opportunity to inform you that I have decided that an individual environmental assessment is not required. This decision was made after giving careful consideration to the issues raised in the requests, the project documentation, the provisions of the Municipal Class Environmental Assessment, and other relevant matters required to be considered under subsection 16(4) of the *Environmental Assessment Act*.

The reasons for my decision may be found in the attached table. In the interest of transparency, I encourage you to make this letter available to the greater public on Town's project website.

With this decision having been made, the Town can now proceed with the project, subject to any other permits or approvals required. The Town must ensure the project is implemented in the manner it was developed and designed, as set out in the project documentation, and inclusive of all mitigating measures, commitments and environmental and other provisions therein.

Lisa Campion
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Lastly, I would like to ensure that the Town understands that failure to comply with the Act, the provisions of the Municipal Class Environmental Assessment, and failure to implement the project in the manner described in the planning documents, are contraventions of the Act and may result in prosecution under section 38 of the Act.

I am confident that the Town recognizes the importance and value of the Act and will ensure that its requirements and those of the Class Environmental Assessment are satisfied.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Jeff Yurek', written over a faint, illegible stamp or background.

Jeff Yurek
Minister

Attachment

c: Requesters
Gary Scott, Senior Project Advisor, Ainley Group
EA File No. 18061
Erin Urban Centre Wastewater Servicing

Erin Urban Centre Wastewater Servicing – Town of Erin Municipal Class Environmental Assessment

Minister’s Review of Issues Raised by Requesters

Issue	Response and Analysis
Class Environmental Assessment Process	
<p>Downstream communities were not adequately consulted because of the distance from the proposed project, however, impacts from the project will be realized downstream.</p>	<p>The Town of Erin followed the requirements of the Municipal Class Environmental Assessment document for consultation, along with guidance from Ministry of Environment, Conservation and Parks.</p> <p>The Town developed a list of local residents, agencies, and Indigenous groups and it was updated throughout the class environmental assessment process. The list of agencies included the Town of Caledon and Region of Peel which are downstream of the project site. The consultation list was used for the distribution of project notices and communications related to the project. The Town also published notices in local newspapers and on the Town’s website. Two public information centers were held in 2016 and 2018 to provide the public the opportunity to submit comments to be considered in the preparation of the environmental study report. This consultation included the communities located downstream. Concerns about the discharge location, quality of drinking water, and odour impacts were discussed during the consultation process.</p> <p>I am satisfied that the City met the consultation requirements of Municipal Class Environmental Assessment.</p>
<p>Decentralized plant alternatives (subsurface disposal and a two-treatment plant system) were not considered resulting in an inadequate examination of alternatives.</p> <p>Cost comparisons between a single system solution and decentralized systems</p>	<p>The Municipal Class Environmental Assessment requires that proponents consider alternatives based on existing baseline conditions and identify if alternatives will have a potential impact on the natural, social, and economic environments. Based on feedback from the public consultation process following the Servicing and Settlement Master Plan in 2014, a further examination of servicing options such as subsurface disposal (septic tank) solutions and a two-treatment plant alternative was undertaken.</p> <p>It was determined that subsurface disposal options were limited due to the topography, system of wetlands, source water protection areas, and lack of available land space.</p>

Issue	Response and Analysis
<p>was not undertaken.</p>	<p>Credit Valley Conservation has indicated that future development should not include septic systems due to potential cumulative impacts these systems may have on the natural environment and water quality.</p> <p>A two-treatment plant alternative was investigated in the environmental study report. The evaluation examined the feasibility of having a wastewater treatment plant dedicated to Hillsburgh and Erin Village rather than having a single plant servicing both communities. It was determined that costs to build and operate two treatment plants were higher than operating a single plant. The cost difference exceeded the \$5 million required to construct a connection pipe between the two communities to a single treatment plant.</p> <p>It was determined that subsurface disposal systems and a two-plant alternative were not viable and as such further cost analysis was not undertaken. The ministry and Credit Valley Conservation reviewed the subsurface disposal and the two-plant alternatives analysis and are in agreement with the conclusions.</p> <p>I am satisfied that the Town fulfilled the alternative evaluation requirements of the Municipal Class Environmental Assessment.</p>
<p>Natural Environment</p>	
<p>Impacts to river water quality and fish health from chemicals in effluent discharge including chloride and ammonia.</p>	<p>The wastewater treatment plant will have to operate under requirements of an environmental compliance approval issued by the ministry that sets strict effluent limits and operating conditions related to chloride, ammonia and other contaminants.</p> <p>Credit Valley Conservation provided recommendations to the Town following the filing of the environmental study report to control the input of chloride at the source. For example, Credit Valley Conservation recommended that agreements for new subdivisions contain conditions requiring high efficiency water softeners for each lot to reduce chloride in wastewater (water softeners are a significant source of chloride). The Town has agreed to implement the comments and recommendations received from Credit Valley Conservation during project implementation. Ministry technical staff and the Ministry of</p>

Issue	Response and Analysis
	<p>Natural Resources and Forestry support the recommendations provided by Credit Valley Conservation.</p> <p>Ministry technical staff will require the ongoing monitoring of chloride levels in the influent, effluent, and the West Credit River receiving water in the Town's environmental compliance approval. The Town has agreed to the ministry's requirement for ongoing monitoring of chloride levels after the wastewater treatment plant has been constructed. The Ministry of Natural Resources and Forestry and Credit Valley Conservation support the ministry's chloride monitoring condition in the environmental compliance approval.</p> <p>Toxicity of ammonia to fish species was a key factor in Town's development of effluent limits and objectives for effluent discharge to the West Credit River. The proposed criteria for ammonia was selected after analysis and modelling of the receiving water and considering protection of aquatic life. The proposed effluent limits represent a high level of treatment for ammonia at 0.6 milligrams per litre at full build out and remain below the Provincial Water Quality Objective. The ministry and Credit Valley Conservation are satisfied with the proposed effluent limits including ammonia discharge limits. The proposed effluent limits for ammonia will be subject to meeting the requirements under the plant's environmental compliance approval.</p> <p>I am satisfied that the Town's proposed effluent limits meet ministry requirements for wastewater treatment operations discharging to surface waters.</p>
<p>Pharmaceuticals and personal care products in effluent discharge will impact hormone systems in fish and their reproductive success.</p>	<p>Pharmaceuticals and personal care products can originate from numerous sources in wastewater effluent. Some pharmaceutical products are endocrine disruptors, some of which have estrogenic properties that can interfere with hormone systems resulting in the feminization of male fish and impacts to fish reproductive success. Ministry technical staff are aware of the potential effects of pharmaceutical compounds and other endocrine disruptors, as this is an active research field.</p> <p>The Ministry of Natural Resources and Forestry recommended that the proposed Erin wastewater treatment plant include higher treatment processes to assist with the removal of pharmaceutical compounds with estrogenic</p>

Issue	Response and Analysis
	<p>properties.</p> <p>In recognizing the need to protect an important fish community in the river, the Town chose tertiary treatment as it was necessary to achieve a high quality of effluent. The advanced wastewater treatment process (Membrane Bioreactor) that is being proposed for the treatment plant can generally achieve high removal rates of endocrine disruptors/estrogen compounds compared with conventional wastewater treatment processes.</p> <p>It has been the observation of scientists and engineers, including ministry technical experts, that the higher the level of treatment employed by a wastewater treatment plant, the greater the reduction of pharmaceutical and other compounds in final effluent.</p> <p>I am satisfied that the Town considered measures to reduce impacts associated with pharmaceuticals and personal care products in wastewater effluent.</p>
<p>The effluent discharge mixing zone in the river will create a barrier for fish movement.</p>	<p>No barrier to fish movement is predicted for the discharge outfall. Under the full wastewater treatment plant capacity modelling, the effluent discharge mixing zone will not extend across the full width of the river. Water quality modeling of the effluent mixing zone defined the extent of the plume before the effluent is fully mixed and water quality parameters are below the Provincial Water Quality Objectives for surface waters. The outfall mixing zone would be non-toxic in nature and has been modelled to occupy approximately 40% of the channel width.</p> <p>In order to maintain safe passage for fish and avoid the effluent mixing plume to extend over the entire width of the river, the outfall pipe will include multiple openings for better effluent mixing and will be configured parallel to the south bank of the West Credit River. The preferred design minimizes the width of the river which effluent would mix and maintains a larger area outside the zone of mixing allowing for fish to pass along the opposite side of the diffuser.</p> <p>I am satisfied that the Town considered outfall design alternatives to accommodate fish passage.</p>
<p>Direct spills of raw</p>	<p>The Erin Urban Wastewater Servicing class environmental</p>

Issue	Response and Analysis
<p>sewage from flood conditions, dry conditions and unreported sewage dumps will pollute the downstream river.</p>	<p>assessment proposed mitigation and management practices to ensure the protection of the river through flooding and dry conditions. The proposed wastewater system will be a new system designed for peak flows beyond the proposed servicing capacity in accordance with ministry guidelines and to protect the West Credit River. The recommended size of the wastewater system and daily flow rate ensures long-term performance and the avoidance of potential spills. Potential spills are avoided by preventing the capacity of all wastewater system components from exceeding any flow conditions.</p> <p>The environmental study report includes an overflow risk management technical memorandum that addresses the potential for spills and mitigation actions to minimize the risk of spill, including inspections and preventative maintenance. Credit Valley Conservation is satisfied and will be consulted during the final design stage of the project on how the mitigation actions will be implemented into the final design.</p> <p>The West Credit River must have enough river flow under dry conditions to receive treated effluent and maintain river water quality. A dry weather low flow model was used for water quality modeling. Based on the water quality modelling and analysis, the effluent discharge location has been assessed for the projected worse case scenario when the wastewater system is operating at full capacity.</p> <p>I am satisfied that adequate design capacity and mitigation measures are proposed to protect the West Credit River from potential spills.</p>
<p>Environmental impacts to the cold-water fishery (Rainbow Trout, Brook Trout, Brown Trout, Chinook Salmon) and species at risk in the Credit River Valley was not adequately considered.</p>	<p>While the project will generate short-term impacts on the natural environment through construction, potential long-term impacts are not expected. Credit Valley Conservation and ministry technical staff reviewed the project documentation and are satisfied with the proposed effluent discharge objectives and limits. Final effluent limits and objectives for treated wastewater discharge will be issued and regulated by the ministry's environmental compliance approval.</p> <p>The environmental study report recognizes the local ecosystem in the valley of the West Credit River that supports an important population of fish and species at risk. Water quality modeling defined effluent objectives and limits</p>

Issue	Response and Analysis
	<p>to ensure appropriate treatment was set to meet water quality objectives and protect important cold-water fish species in the river. In addition, a detailed thermal assessment was done to ensure effluent discharge temperatures did not pose a threat to cold-water fish survival, growth and reproduction.</p> <p>Potential impacts to the environment and species as well as mitigation measures are documented in the environmental study report. The proposed mitigation measures include performing construction activities outside of the breeding or spawning season of sensitive species or species at risk and developing an environmental management plan prior to construction. The environmental management plan will further define environmental mitigation and protection measures, establish inspections and monitoring, and provide contingency planning.</p> <p>I am satisfied with the proposed effluent discharge limits and mitigation measures for species at risk.</p>
Project	
<p>The size of the wastewater facility and proposed wastewater flow rate of 380 litres per person per day is beyond what is needed for population projections and does not align with other communities that are implementing water conservation initiatives.</p> <p>A reduction of the proposed inflow and infiltration rate (90 litres per person) would reduce costs and the size of the facility.</p>	<p>The recommended flow rate is similar or below other adjacent municipalities' design standards. The population projection utilized to estimate full build out in the Town of Erin was identified in the Town's Official Plan and agreed with Wellington County Planning Department. The proposed project is within design parameters to ensure efficient and reliable performance and does not conflict with water conservation initiatives by the Town. The ministry and Credit Valley Conservation reviewed the capacity technical memorandum for compliance with capacity requirements and are in agreement with the sizing of the proposed wastewater system.</p> <p>A 380 litres per person per day wastewater flow rate was developed by combining the residential flow rate of 290 litres per person per day and the inflow and infiltration rate (groundwater and stormwater that enter into the wastewater system) of 90 litres per person per day. The proposed wastewater flow rate value was based on actual water usage records from the communities between 2013 and 2015 with the addition of a safety factor for water consumption to account for future variations and extra</p>

Issue	Response and Analysis
	<p>growth. Extra capacity is an industry standard intended to offset loss of efficiency as the wastewater system ages over an 80-year lifecycle.</p> <p>The 380 litres per person waste flow rate per day falls within the ministry's guidelines for recommended municipal wastewater system flow rates.</p> <p>I am satisfied that the Town has appropriately characterized the wastewater system capacity as part of the Municipal Class Environmental Assessment study.</p>
<p>Operating and maintenance costs should be fully estimated so that long-term economic impacts on the Town and residents are considered.</p>	<p>The Municipal Class Environmental Assessment requires a consideration of the economic impacts of any proposed undertaking that is restricted to capital, operating, and maintenance cost estimations. Government grants pay for infrastructure that services the existing community. Funding is expected to be generated through the development charges that will result from new residential and commercial development approvals in the Town of Erin.</p> <p>Based on public feedback and concerns on the system cost, a capital cost summary report was prepared and included in the environmental study report. The environmental study report outlines the estimated cost of all aspects of the project including capital and operating costs that references user rates from similar and adjacent wastewater facilities. The cost estimate is based on the actual length and depth of sewers, connection pipes, and pumping stations and is considered accurate. Capital and operating cost estimates were based on similar neighbouring wastewater treatment plants as well as quotations obtained from a range of vendors for equipment.</p> <p>The capital cost of full development build out is approximated at \$118 million. The cost share between the Town and developers has been identified as between \$50 to \$60 million for the Town, and \$58 to \$68 million for the developers. The Town requires government financing for the project or it cannot proceed.</p> <p>I am satisfied that adequate consideration of economic impacts was provided as per the Municipal Class Environmental Assessment requirements.</p>

Issue	Response and Analysis
<p>The assimilative capacity study did not have ten years of river flow data required by Credit Valley Conservation Authority for the Town to make adequate project decisions.</p>	<p>The environmental study report includes an assimilative capacity study that modeled the West Credit River's capacity to receive wastewater effluent without damaging water quality and quantity. The Credit River Conservation established a low river flow value for the West Credit River which was used as the design flow for the assimilative capacity modeling. While there was no river flow data for a 10-year period at the preferred effluent discharge site located at 10th Line and Winston Churchill Boulevard, the low flow index was based on accumulated flow data on the same river at two other locations downstream. The data use for the projections was greater than 10 years and was combined with recent flow data at the project location to calculate a flow index. The combined data was approved for the required analysis by the Credit River Conservation and the ministry.</p> <p>I am satisfied that adequate data was used to make project decisions.</p>