

18 February 2021

Mayor Allan Alls Town of Erin 5684 Trafalgar Road Hillsburgh, Ontario N0B 1Z0 By email to: <u>Allan.Alls@Erin.ca</u>

Re: Town of Erin Urban Center Wastewater Servicing Class Environmental Study Report

Dear Mayor Alls:

Thank you again for your invitation to meet. We very much welcome the opportunity to discuss our concerns with you and your representatives. Prior to scheduling our meeting, it would be more productive if you could address the questions below in writing. Our expectation is that your answers to the questions below will provide a framework for our meeting. Details of our concerns are outlined in the updated "Briefing Notes"- attached.

The questions that follow do not represent all our questions and concerns; however, we would appreciate detailed answers to the following:

- 1. Your effluent temperature modeling in the Thermal Assessment was based on only one year of effluent temperature data from a much cooler than average summer.
 - a. Why was only one year of effluent temperature data used?
 - b. Will the Town agree to running the modeling again using 10 years of temperature data?
 - c. If not, please explain why?
- 2. The Hutchinson Assimilated Capacity Study (ACS) first recognized the previous recommendation by MECP and BM Ross that the Environmental Compliance Approval (ECA) should have an effluent temperature limit of 19°C and an effluent temperature objective of 17°C. However, the final ACS (and thus the ESR) dropped the effluent temperature limit and objective with no explanation. It would appear that Erin, your consultants and unfortunately the MNRF and the CVC no longer believe that effluent temperatures can be controlled. The Ontario Rivers Alliance letter of June 23, 2020 estimated that the effluent temperatures will be as high as 25°C in the future due to climate change. This temperature will be fatal to the brook trout and the coldwater ecology of the West Credit River especially when very minimal dilution of the effluent will be provided by the small summer flows in the West Credit.
 - a. Why were effluent temperature limits and objectives not committed to in the ESR?
 - b. Will effluent temperature limits and design objectives be included in the ECA?
- 3. Please address our specific concerns with regard to meeting federal guidelines for Dissolved Oxygen and Ammonia criteria and how this will be addressed in the final plant design and approvals.

- 4. Please provide your current schedule for:
 - a. Advertisement of Tenders
 - b. Submitting an application for an ECA from MECP
 - c. Submitting a Request for Review/Fisheries Authorization from DFO
 - d. A realistic construction start date
- 5. It is a significant gap in the ESR that no allowances or mitigation measures were made for the potential of an increasingly warming climate on effluent temperature and stream temperature.
 - a. Why was climate change not considered in relation to effluent and stream temperature?
 - b. Please provide specific details about all the effluent temperature mitigation techniques that will be incorporated into the final design of the wastewater treatment plant and all other associated infrastructure to ensure effluent temperature is kept at or below 19°C both now and into the future?
- 6. The Ontario Rivers Alliance submission recommended removing two control dams (upstream of the discharge pipe) to help mitigate stream temperature. In efforts to lower stream temperature, please inform:
 - a. Will the Town remove its Churchill Lane Dam.
 - b. Please describe what measures the Town take to encourage the privately owned Charles St. Dam and 10th Line Dam are also removed?
- 7. The current population of Erin is 4,500 persons and the ESR estimates the future population equivalent will be over 18,000. To support such a large increase in population, more groundwater will have to be pumped to provide domestic water supplies. Given the future average sewage flow is 7,172 cubic meters per day, and the estimated water use now is approximately 1,500 cubic meters per day, the extra +/- 5,500 cubic meters of water per day (64 l/s) will come from the same aquifers that supply base flow to the West Credit. Such an increase in ground water pumping (64 l/s) will be very likely to cause baseflow in the West Credit to drop by the same amount. We therefore project the 7Q20 baseflow estimate of 225 l/s in the West Credit will drop by 64 l/s... resulting in a much-reduced baseflow of only 161 l/s. This dramatically reduces the stream flow available for dilution of effluent and magnifies our concern with the impacts of the effluent on temperature, oxygen and ammonia in particular.
 - a. Please explain in detail why reduced stream flows resulting from greater pumping of groundwater was not considered in the ESR?
 - b. Please explain the rationale for why population growth equivalent expanded from 6,000 in 2014 to 18,873 in the final ESR in 2018?
- 8. The effluent discharge structure/s will run along and/or directly impact on some riparian landowners' properties, and they were not notified or consulted by the Town.
 - a. What will the Town be required to do to gain access rights for the construction and maintenance of the effluent discharge structures (e.g., manholes, stairs, diffuser pipe) from the owner on the south side of the river and immediately west of Winston Churchill Blvd.?
 - b. Why were these property owners that abut the effluent discharge pipe area not notified directly and consulted with during the consultation process?

Please let us know who would be participating in your proposed meeting with our Coalition. Our Coalition will likely have a group of 4 or 5 participants from our Technical and Steering Committees.

Please let us know if you have any specific questions for us prior to the meeting. Once we have received your response to our questions, we can schedule a meeting to discuss.

Respectfully,

Judy Mabee

Judy Mabee Belfountain Community Organization

Enclosure 1