

City of Guelph- Consolidated Linear Infrastructure Environmental Compliance Approval (CLI ECA) Threat Assessment Procedure

Revised April 15, 2024

The following steps are required:

Step 1-Determine where the project is located on the City of Guelph Vulnerability Map

Determine if project is located in a vulnerable area with a vulnerability score of 8 or higher.

- If it is the project will require additional documentation (i.e. TOR Checklist and Source Protection Supplementary Report).
- If it is not, simply provide vulnerability mapping information to document that the project is not in a vulnerability score of 8 or higher.

Determine if the proposed construction work will be within 500 m of a municipal drinking water well.

- If so, contractor must follow City of Guelph SOP for construction projects located within 500 m of a municipal well. The SOP is available upon request.

Step 2- Once you have determined the location-what is (are) the vulnerability score(s) across the proposed construction footprint?

If the project is within areas with a vulnerability score of 8 or higher, proponent will be required to complete:

- TOR Checklist
- Source Protection Supplementary Report

Step 3-Prepare the Source Protection Supplementary Report

When preparing the Source Protection Supplementary Report, the proponent must ensure the following headings are included:

1. Complete Supplementary Source Protection ECA Application Form for Sewage Works Significant Drinking Water Threats (**Appendix A**)
2. Provide scaled site plan identifying the following:
 - the proposed sewage works and property boundaries
 - delineation of the vulnerable drinking water area(s)/ zone(s) and associated vulnerability score(s) (This information can be found in the approved Assessment Report [Grand River - Assessment Report - Drinking Water Source Protection](#))
 - the location of the drinking water system(s), specifically the municipal drinking water wellhead or intake
 - immediate discharge point
3. Provide details outlining how the proposed sewage works meets the circumstance(s) of the [Table of Drinking Water Threats, 2009, \(What are threats? - Drinking Water Source Protection\)](#) to be considered a significant drinking water threat (e.g. chemical and pathogen threats).

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4. Complete **Appendix B, Table 1** (Circumstances for Sub-threats) for *only* the sub-threats applicable to the ECA application. In the case of sanitary sewers and related pipes, no additional questions need to be answered.
5. Details outlining how the ministry's design and operational requirements (Table 3 of the Source Protection Information Bulletin: Environmental Compliance Approvals for Sewage Works) were applied to the proposed sewage works.
6. Details outlining how the threat is managed to ensure that the sewage works does not become a significant threat to drinking water or, if the activity is already taking place, the activity ceases to become a significant threat to drinking water. This includes any mitigations measures (e.g. *Risk Management Measures Catalogue*, other design and operational measures) to manage the risk to the drinking water source(s).

Regarding Item 5, the following requirements must be considered:

Design Requirements

Design must include a Source Protection Supplementary Report that demonstrates that the proposed design recognized the significant drinking water threat and has implemented appropriate mitigation measures to protect drinking water sources.

The report should identify drinking water sources, how the sewage works has met the requirements of the CWA and the ministry's design and operational requirements and how the works considered the Provincial Risk Management Measures Catalogue (e.g. monitoring, reporting requirements), as amended, to address the risks.

- Designs must be accompanied with a monitoring and reporting plan.
- Designs must be accompanied with a Spill Prevention and Contingency Plan, covering information requirements as per O. Reg. 224/07 to prevent, eliminate or ameliorate any adverse drinking water effects that result or may result from spills of pollutants. This includes steps taken in the event drinking water sources are contaminated for example, notifying members of the public who may be directly affected by a spill.

Operational Requirements

- The Spill Prevention and Contingency Plans must be kept up-to-date.
- Regular and annual reports to include maintenance, inspections, and monitoring details.
- All reports are required to be kept on-site (where the reports can be kept on-site) and at the operating authority's office.

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- All reports are required to be made readily available upon request by ministry staff, Source Protection Authority or any other parties identified in Source Protection Plans.

Step 4-Submit the Source Protection Supplementary Report and drawings to City of Guelph’s Water Services Sourcewater Protection Department for review

The proponent will submit all relevant drawings and reports to the City of Guelph for review. The proponent must outline how the proposed works will be managed to mitigate the contamination of sources of drinking water through the construction, design and operation of the proposed activity.

Step 5- City of Guelph Water Services Sourcewater Protection Department reviews submission and provides a response to the proponent

The City will either approve the submission or identify a list of deficiencies.

If the submission is approvable, a letter of recommendation from the City of Guelph’s RMO confirming that the works have been reviewed in accordance with the Clean Water Act and the applicable policies in the local Source Protection Plan will be provided. The letter from the RMO will be kept on file with the project documents.

Typical Risk Management Measures that are considered for sanitary sewer projects

For the installation of the sanitary sewers, the City of Guelph conducts the following as a normal course of installation:

- Full time inspection during construction phase
- 3rd party compaction testing during construction
- CCTV 30 days after installation of the sewer pipe
- Pull a mandrel through the pipe post at about the same time as the 1st CCTV
- CCTV prior to the end of the 2-year warranty completed by the City and not the contractor
- City maintains Guelph specific specifications for the installation of sanitary sewers
- O&M manual for the long-term operation and maintenance of the sewers
- Watertight resilient connectors for the pipe/MH connection
- Low pressure air testing for sanitary sewers on new subdivisions

The above risk management measures will need to be considered for inclusion in the Supplementary Source Protection Report.