

5.2 Impact of Identifying an Issue

According to Rules 114, 115, 131 and 141, activities or conditions that contribute to drinking water quality issues (known to be partially or wholly due to anthropogenic sources), are deemed significant drinking water threats regardless of assigned vulnerability scores. This applies to intake protection zones and wellhead protection areas only, for drinking water systems identified in the Source Protection Area Terms of Reference.

If an issue is identified, the activities that contribute to the identified issue and the areas where they occur (within vulnerable areas, as described above) must also be identified. A third intake protection zone (IPZ-3) for surface water intakes may be delineated to include the activity and area known to contribute to the drinking water quality issue.

For the activities or conditions contributing to issues that are deemed to be significant threats as described above, the risks the activities or conditions pose must be reduced through the source protection plan.

Further, issues in HVAs or SGRAs or those linked to a system not identified in the Terms of Reference may lead to the identification of moderate drinking water threats (not significant threats). Systems not identified in the Terms of Reference may be those included in the source protection planning process through municipal council resolution or by the Minister (MOE).

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¶¶ The area and the *activity* contributing to a *drinking water* quality *issue* must also be identified. Further, a third *intake protection zone (IPZ-3)* for surface water intakes may be delineated to include the *activity* and area known to contribute to the *drinking water* quality *issue*. These tasks are yet to be completed and will be part of an amended Assessment Report.

5.3 Issue Evaluation Methodology

Identifying *issues* is a key step in the overall process of protecting *drinking water* quality. *Issues* were identified in the St. Clair Region Source Protection Area by following the Thames-Sydenham and Region Issues Evaluation Methodology (May 14, 2009), depicted in Figure 5-1. The methodology is provided in Appendix 8. The evaluation is a two-step process. Firstly, in the screening step, raw (untreated) water quality data is compared to a benchmark and *parameters* may be flagged if they meet the screening criteria. The benchmarks for chemical, physical and radioactive *parameters* are generally half the applicable human health based Ontario Drinking Water Quality standards (*Maximum Acceptable Concentrations*, or *MAC*), and the full levels of the *Aesthetic Objectives (AO) and Operational Guidelines (OG)*, and any plant operating

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