

An Examination of Drinking Water Quality Management in Ontario using the Australian Framework as a Benchmark

By David Jonathan Amernic

Abstract

The newly created Safe Water Drinking legislation in Ontario requires the Ontario government to adopt a drinking water quality management standard (which was one of the recommendations in the Honorable Dennis R. O'Conner's report to the Walkerton Inquiry) for Ontario municipal water systems.

In order to examine the current state of municipal drinking water quality management systems in Ontario, a survey, based on a newly created Australian guideline for drinking water quality management systems (the *Framework for Drinking Water Quality Management*), was conducted.

The results of the survey indicated a number of areas where Ontario municipal water systems are not up to par with the guidelines within the Australian framework.

These areas of drinking water quality management include:

- Watershed management as part of a multiple barrier strategy
- Partnership arrangements with stakeholders
- Formal risk assessment
- Formal hazard identification
- Reviewing and Practicing emergency response plans

In addition, it was found that water systems that serve large (as defined in the methods) populations are substantially more in agreement with the Australian framework than water systems that serve small populations. Areas where systems that serve small populations are not as consistent with the Australian Framework are the following:

- Research and development
- Internal and external auditing
- Water quality improvement plans
- Senior management review of drinking water quality management
- Drinking water quality policy
- Risk communication and consumer complaint response
- Engaging the public in decisions that affect the level of service and costs

Future studies may want to build upon this preliminary look at drinking water quality management in Ontario in order aid in the construction of an implementation strategy for smaller water systems when the Ontario drinking water quality management standard is finalized.