Chapter 15 Summary of Recommendations

The following is a compilation of recommendations that I have made in two chapters of this report. The recommendations are related to the findings I have reached in Part 1 of this Inquiry. Many are adopted from recommendations made by the Chief Coroner of Ontario in his closing submissions in Part 1.

In the Part 2 report, I will be making comprehensive recommendations relating to all aspects of the drinking water system in Ontario, including the protection of drinking water sources; the treatment, distribution, and monitoring of drinking water; the operation and management of water systems; and the full range of functions involved in the provincial regulatory role. The recommendations included in this report are not intended to be comprehensive and will fit into and form part of the broader framework being recommended in the Part 2 report. As such, many of the recommendations will be expanded upon in the Part 2 report.

Recommendation 1

The *Health Protection and Promotion Act* should be amended to require boards of health and the Minister of Health, acting in concert, to expeditiously fill any vacant Medical Officer of Health position with a full-time Medical Officer of Health.

Recommendation 2

Random assessments should be conducted on a regular basis by the Minister of Health, or his or her delegate, pursuant to the *Health Protection and Promotion Act*, of public health boards in Ontario to ensure their compliance with the Mandatory Health Programs and Services Guidelines of the Public Health Branch. Further, the Public Health Branch or the Minister of Health's delegate should continue to track, on an annual basis, trends in non-compliance by public health boards in Ontario, in order to assess whether altered programs and services guidelines are required and whether resourcing allocations by the Province of Ontario require adjustment to ensure full compliance.

Recommendation 3

The role of the local Medical Officers of Health and health units in relation to public health issues concerning treated and untreated municipal water systems, should be clarified and strengthened. In particular, clarification is required as to whether local Medical Officers of Health are required to implement a proactive approach to responding to adverse drinking water sample test results upon receiving notification of those results.

Recommendation 4

Written guidance – developed in cooperation with Medical Officers of Health and the MOE – should be provided to Medical Officers of Health by the Public Health Branch. It should include steps to be taken by Medical Officers of Health upon receipt of MOE inspection reports and adverse drinking water sample test results.

Recommendation 5

Regular meetings should be scheduled between the local MOE office and local health unit personnel to discuss public health issues, including issues related to waterworks facilities as documented in MOE inspection reports. Any affected operator or laboratory should be invited to attend the meeting.

Recommendation 6

Upon the implementation by the MOE of the Integrated Divisional System (management information system), access to it should be made available to local health units and, where appropriate, to the public. This should include access to profiles of municipal water systems, and data concerning adverse drinking water quality sample test results, as included in that database.

Recommendation 7

The Public Health Branch should develop a Boil Water Protocol – a written protocol outlining the circumstances in which a boil water advisory or a boil water order could and should be issued. I will be commenting on the government's current draft proposal in the Part 2 report.

Recommendation 8

The Boil Water Protocol should be developed by the Public Health Branch in consultation with Medical Officers of Health, municipalities, and the MOE. The Boil Water Protocol should provide guidance concerning an effective communications strategy for the dissemination of a boil water advisory or order.

Recommendation 9

The MOE should develop criteria for identifying "groundwater under the direct influence of surface water."

Recommendation 10

The MOE should maintain an information data system that includes all relevant information arising from an approval application process – in particular, information relating to the quality of source water and relevant details from expert reports and tests.

Recommendation 11

The MOE should require continuous chlorine and turbidity monitors for all groundwater sources that are under the direct influence of surface water or that serve municipal populations greater than a size prescribed by the MOE.

Recommendation 12

All Certificates of Approval should be limited to a specific period of time, probably five years, and be subject to a renewal process that considers the current circumstances, including recent indicators of water quality. Conditions should be added as required.

Recommendation 13

The MOE's inspections program for municipal water systems should consist of a combination of announced and unannounced inspections. The inspector may conduct unannounced inspections when he or she deems it appropriate, and at least once every three years, taking into account such factors as work priority and planning, time constraints, and the record of the operating authority.

Recommendation 14

The MOE should develop and make available to all MOE inspectors a written direction or protocol, for both announced and unannounced inspections:

- outlining the specific matters to be reviewed by an inspector in preparing for the inspection of a water system;
- providing a checklist of matters that an inspector is required to review, as well as matters that it may be desirable to review, during an inspection of a water system; and
- providing guidance concerning those matters to be discussed with the operator of a water system during an inspection.

Recommendation 15

As a matter of policy, inspections of municipal water systems, whether announced or unannounced, should be conducted at least annually. The government's current program for annual inspections should be continued.

Recommendation 16

There should be a legal requirement that systems with significant deficiencies be inspected at least once per year. Ontario Regulation 459/00, also known as the Drinking Water Protection Regulation, should be amended to require that an inspection be conducted within one year of any inspection that discloses a deficiency as defined in the regulation. In this regard, deficiencies include any failure to comply with the treatment, monitoring, or testing requirements, or with specified performance criteria, set out in the regulation or in the accompanying drinking water standards.

Recommendation 17

The government should ensure that adequate resources are provided to ensure that these inspections are thorough and effective.

Recommendation 18

Copies of MOE inspection reports should be provided to the manager of the water system, the members of the operating authority, the owner of the water system, the local Medical Officer of Health, the MOE's local office, and the MOE's Approvals Branch.

Recommendation 19

The MOE should establish and require adherence to time lines for the preparation and delivery of inspection reports and operator responses, and for the delivery of interim status reports regarding remedial action.

Recommendation 20

The government should require all water system operators, including those who now hold certificates voluntarily obtained through the grandparenting process, to become certified through examination within two years, and to be periodically recertified.

Recommendation 21

The materials for water operator course examinations and continuing education courses should emphasize, in addition to the technical

requirements necessary for performing the functions of each class of operator, the gravity of the public health risks associated with a failure to treat and/or monitor drinking water properly, the need to seek appropriate assistance when such risks are identified, and the rationale for and importance of regulatory measures designed to prevent or identify those public health risks.

Recommendation 22

The government should amend Ontario Regulation 435/93 to define "training" clearly, for the purposes of the 40 hours of annual mandatory training, with an emphasis on the subject matter described in Recommendation 21.

Recommendation 23

The government should proceed with the proposed requirement that operators undertake 36 hours of MOE-approved training every three years as a condition of certification or renewal. Such courses should include training in emerging issues in water treatment and pathogen risks, emergency and contingency planning, the gravity of the public health risks associated with a failure to treat and/or monitor drinking water properly, the need to seek appropriate assistance when such risks are identified, and the rationale for and importance of regulatory measures designed to prevent or identify those public health risks.

Recommendation 24

The MOE should inspect municipal water systems regularly for compliance with Ontario Regulation 435/93, enforce the regulation strictly, and follow up when non-compliance is found in order to ensure that operators meet certification and training standards.

Recommendation 25

The MOE should proceed expeditiously to complete the design and implementation of the management information system now under development (that is, the Integrated Development System, or IDS). That system should include the capacity for the creation and maintenance over time, in electronic form, of water system operator profiles consisting of any hydrogeological or other consultant's report relating to the water system; relevant operator chlorine residual measurements; past inspection reports; drinking water test results for a reasonable period; all operator responses to inspection reports; and all applicable Certificates of Approval, Permits to Take Water (PTTW), Field and Director's Orders, occurrence reports, and information concerning the safety and security of public water sources and supplies.

Recommendation 26

A full needs assessment for training should be undertaken for MOE technical staff, and a component of that assessment should focus on communal drinking water.

Recommendation 27

The MOE, on the basis of the needs assessment, should develop and maintain both introductory and advanced mandatory courses for environmental officers pertaining to communal drinking water systems. These courses should emphasize science and technology, including all matters that could present a risk to public health and safety; emerging pathogen risks; existing, new, and emerging treatment technologies; the limits of particular technologies; and the proper interpretation and application of government regulations, guidelines, and policies.

Recommendation 28

The MOE should devote sufficient resources to technical training to allow the ministry to meet the challenges outlined in its "Human Resources Business Plan and Learning Plan for Fiscal Year 2000–2001."

Appendices