

## 2.15 Water Quality Management

In May 2001, Government released a report entitled *Source to Tap - Water Supplies in Newfoundland and Labrador* (*Source to Tap* report). The report was prepared in response to drinking water contamination tragedies in Canada and contained information on the status of public water supplies, presented Government's action plan to enhance the protection of public water supplies, and outlined initiatives to ensure drinking water safety.

The Province indicated in the *Source to Tap* report that it had adopted a "multi-barrier approach" to ensure that public water supplies provide clean and safe water. The main responsibilities for Government under this approach are: source protection; water quality monitoring; water quality reporting; regulatory inspection and mitigation planning; and operator education and training. While the Department of Environment and Conservation is the lead department on water quality issues, other departments have involvement as well.

Our review indicated that while Government is making progress toward its commitments outlined in its *Source to Tap* report, it has not met all these commitments and is not always complying with Provincial standards for monitoring drinking water. Specifically:

*Source protection* - While Government committed in the *Source to Tap* report to continue its efforts to protect the remaining public water supplies, as of October 2003, 256 of the 532 (48%) public water supplies were still not protected. Under the *Water Resources Act*, the Department of Environment and Conservation may designate areas around a public water source as protected, thereby prohibiting or limiting activities within the protected area that have the potential to impair the quality of the water or diminish the amount of water available.

*Water quality monitoring* - The Department of Environment and Conservation is not conducting Trihalomethanes (THM) and other *chemical* water quality testing in accordance with the commitment contained in the *Source to Tap* report or in accordance with Provincial standards. The number of communities and public water supplies in the Province known to have THM levels above the maximum

acceptable concentration (and the number of people exposed) is increasing. THMs are compounds formed in chlorinated drinking water supplies. Their possible adverse health effects have received extensive media attention in recent years.

Of the 25 water supplies we reviewed for *chemical* water quality testing, 4 were not tested with the required frequency. Furthermore, of these 25 water supplies reviewed, 23 were chlorinated and required testing for THMs. Of these 23, 7 were not tested with the required frequency.

As well, the Department of Government Services is not conducting *microbiological* water quality testing in accordance with the *Source to Tap* report commitment or in accordance with Provincial standards. Such testing determines the total coliforms and escherichia coli (E.coli) in water supplies. Of the 10 water supplies we reviewed for *microbiological* water quality testing, 7 were not tested with the required frequency.

*Water quality reporting* - Government has met the commitments made in the *Source to Tap* report regarding reporting of water quality data. These commitments include reporting annually to the House of Assembly, providing drinking water quality data to the public, and reporting annually to the operator of each public water supply system in the Province.

*Regulatory inspection and mitigation planning* - The Department of Environment and Conservation is not inspecting water systems under the *Water Resources Act* in accordance with the commitment contained in the *Source to Tap* report. While the commitment was to conduct these inspections at least once each year, Department officials indicated that inspections are conducted only when operational problems are encountered, relating to a proposed upgrade, or in response to infrastructure funding need assessment.

*Operator education and training* - Progress is being made on the commitments Government made in the *Source to Tap* report regarding education and training of water system operators; however, certification of water system operators is currently on a voluntary basis with mandatory certification being an area which requires further attention.