

Report To:	Chair and Members of the Health and Social Services Committee
From:	Bob Nosal, Commissioner and Medical Officer of Health
Date:	September 11, 2008
Report No. - Re:	MO-50-08 - Feasibility of Mandatory Private Well Water Testing in Halton

RECOMMENDATION

THAT Regional Council endorse a voluntary well water testing program that would educate, remind and encourage residents to sample their private water supplies, as set out in Report No. MO-50-08 re: “Feasibility of Mandatory Private Well Water Testing in Halton”.

REPORT

Purpose

The purpose of this report is to report back to Regional Council on two recommendations from the Region’s February 19, 2008 Health and Social Services Committee meeting with respect to Report No. MO-11-08 re: “Halton Region Rural Drinking Water Study 2007, Phase 2”. The two recommendations were:

1. THAT staff be directed to look at identification of additional locations where residents can pick up bottles and drop off water samples for testing; and
2. THAT staff be directed to review and report back on the feasibility of a mandatory well water testing program with the possibility of imposing fines for non-compliance.

Background

Report No. MO-11-08 outlined the results of the Phase 2 Rural Drinking Water Study that was completed in Halton Region in 2007. The results indicated that 37% of the wells tested were found to be bacteriologically unsafe. The results of the study also indicated that only 17% of participants tested their well water for indicator bacteria three or more times per year, the recommended sampling frequency. The presence of indicator bacteria suggests an increased risk that the water is also contaminated with disease-causing bacteria or other microorganisms, which the test does not detect directly. The most common reason identified by residents for not sampling their water was that they simply forgot. The second most common reason given by well users was inconvenient locations and hours for water bottle pick up and drop off.

Halton's results are similar to the findings of other well water surveys. The Well Wise Resource Centre in Orono, Ontario reports that a survey conducted in 1991/92 of 1200 rural wells in Ontario found 34% of wells tested high for bacteria. Although several well water studies (City of Hamilton Public Health, Waterloo Public Health, Well Wise and Halton Region Health Department) have identified the need to provide relevant well water information to assist well owners with the management of their wells, Halton's 2007 well water survey concluded that a one time intervention was not sufficient to change well owners' behaviours on well water management. This finding suggests that there is a need for multiple strategies to educate and remind well users of the need for testing and maintaining their private well supplies.

This report will present information on the feasibility of a mandatory well water testing program as well as present an alternative approach that will provide ongoing support for private well owners in their efforts to manage their water supplies.

Feasibility and challenges of implementing a mandatory well water testing program

Consultation between Legal Services and Health Department staff has indicated that the Region possesses the legislative jurisdiction to establish and implement a mandatory well water testing program for the owners of private domestic wells and to provide penalties, including fines, if owners with wells did not comply. Such a system would have to be carefully designed in order not to be in conflict with provincial jurisdiction in this area. The program would require private well owners to sample their water supply a prescribed number of times yearly; however it is important to note that the program would not include requirements for well maintenance. Even with a very specific program scope, there are operational challenges to implementing a mandatory well water testing program.

The program would have to specify what testing is required. Presently, the Ministry of Health and Long-Term Care (MHLTC) tests private water supplies free of charge only for indicator bacteria. Private well owners are responsible for paying the costs of other tests such as chemical testing. If a mandatory program requires only bacterial testing, this may be interpreted by well users as indicator bacterial testing being all that is required to ensure well water is safe for drinking. If other parameters were included, there would be additional costs to well users.

While a mandatory private well water testing program may increase the number of samples submitted by well owners, it may not change well owners' behaviours with regard to well inspection and maintenance, which ultimately ensures well water safety. Private well owners may simply collect and submit water samples to meet the mandatory testing requirements but they may not conduct the follow-up sampling and well maintenance that is required to protect their water supplies.

The development and implementation of a mandatory well water testing program through the use of a Regional by-law would have significant financial and staffing implications. To begin, a database of all private well locations and owners would have to be developed. This information is not readily available. Staff anticipate that some well owners would not volunteer this information knowing they could possibly be charged in the future for non-compliance. Staff resources would be required to locate wells and well owners. There are an estimated 7,800 private wells in Halton.

Staff resources would also be required to maintain the database, determine compliance/non-compliance with the by-law and follow up on non-compliance issues.

A mandatory well testing program may lead to a decrease in education of well users as staff resources are directed towards compliance and enforcement issues related to sampling rather than education and promotion of well maintenance. A recent study of Ontario's private well owners, conducted by the Well Wise Resource Centre, concluded that more education and outreach programs are needed to educate well owners on the importance of well maintenance. The study reports that there were few if any, media campaigns focusing on well maintenance and water testing. Presently, staff resources are used to assist well owners with well water concerns/questions and to promote well maintenance. There is a need for more strategies to educate and remind well users of the need for testing and maintaining their private well supplies.

The use of a mandatory well testing program has the potential of creating an adversarial relationship between the Health Department and well owners. As previously stated, the Health Department presently responds to well users who request assistance with their well water; staff interpret water reports and recommend corrective actions. Staff also attend rural community events and provide well water information sessions to promote well awareness. If a by-law is implemented, instead of being seen as a resource for information and assistance, the Health Department may be viewed as a threat and some well owners may not seek assistance.

Voluntary well water testing program

The Health Department is recommending the establishment of a voluntary well water testing program rather than a mandatory program. As previously noted, the most common reason identified by residents for not sampling their water was that they simply forgot. The Health Department is recommending the establishment of a registry, whereby well owners would be reminded and encouraged to take water samples to monitor the safety of their well water.

The voluntary well water testing program would include the following:

1. The creation of a private well owner registry.

Residents would be encouraged, through a media campaign, to have their contact information added to a registry created and maintained by the Health Department. Through the registry, water sample bottles and notifications would be sent to well owners three times a year, reminding them to sample their well water for indicator bacteria. Communication would include information on the importance of well testing and its limitations and well maintenance.

2. The creation of additional Well Water Depots.

As recommended by Regional Council and to address one of the main barriers to sampling identified by Halton's well water survey, staff has identified additional water depots where water bottles could be picked up and dropped off. Water depots must meet specific requirements laid out by the Ministry of Health and Long-Term Care Public Health Laboratories. There are presently five water depots in Halton. The locations are: Halton

Regional Centre, Conservation Halton office in Lowville, Health Department office in Georgetown, Market Place Plaza in Acton, and the Milton Public Library (re-located from the Town of Milton office). Three additional water depots have been identified and staff is presently working with the identified locations to ensure compliance with the Ministry's requirements. The additional locations identified have hours outside regular weekday business hours. The additional locations, one in Acton (Acton Public Library), Brookville (Brookville Veterinary clinic), and Georgetown (Georgetown Public Library) are expected to be in operation by early October 2008. The location of an additional site in Milton is presently being sought. Other locations may be considered in the future if a need is identified.

3. Promotional Activities that would include the following:

- A media campaign during the spring, summer and fall to remind and encourage private well owners to test their well water. This component of the Health Department's promotional activity would include advertisement of the well water registry and information on access to water bottles and drop off locations. Water bottles can presently be ordered through the Halton website or by calling the Health Department; however, increased profile of this service is anticipated to increase the use of this service by rural residents. The campaign would also educate on what the free laboratory testing includes and excludes (e.g. chemical parameters), and where testing for other parameters can be obtained.
- Continued attendance at rural community events that well owners may attend for other purposes, such as fall fairs, for the purposes of promoting well awareness.
- Continuing to provide promotional events such as the Well Water Information Sessions.

Conclusion

Regular water testing is a vital part of maintaining a private well. Testing allows the well owner to understand the risks to their water supply and it establishes a record of water quality. Rather than a mandatory program that would impose fines for non-compliance, the Health Department is recommending the establishment of a voluntary well water testing program to remind residents to sample their well water. A voluntary program would have fewer financial implications, it would promote a co-operative rather than an adversarial relationship between the Health Department and well owners, and it would provide education and information to well users on how to ensure and maintain a safe water supply.

The creation of additional water sample depots with extended hours would make the submission of samples for indicator bacteria testing more convenient for well users, therefore addressing one of the main barriers to more frequent water testing. A voluntary private well owner registry would facilitate a reminder program. All would be supported by a promotional program.

FINANCIAL/PROGRAM IMPLICATIONS

Activities of the rural well water project are included in the approved base budget. The recommended voluntary well water testing program does not carry any new financial implications. Water bottles and water sampling is provided by the Ministry of Health and Long-Term Care free of charge, therefore there would be few additional local costs even if uptake is increased considerably. A mandatory well water testing program would carry significant financial implications. As there are approximately 7,800 private wells in Halton Region, additional staff resources would be required to implement a mandatory testing program.

RELATIONSHIP TO THE STRATEGIC PLAN

The Health Department activities contained in this report are consistent with Theme 2 of the Strategic Plan, Protect and Enhance Our Natural Environment. The activities relate to Goal 5 of theme 2 which is to “Enhance, protect and maintain quality, quantity and safety of groundwater and surface water”. One of the actions identified under goal 5 is to “Implement strategies to increase public awareness and education on the assessment of private use wells and on the protection of drinking water” (Action 5 e under the Planning and Public Works Committee Plan)

Respectfully submitted,



Mary Anne Carson
Director, Health Protection Services



Robert M. Nosal MD FRCPC
Commissioner and Medical Officer of Health

Approved by



Pat Moyle
Chief Administrative Officer

If you have any questions on the content of this report, please contact: Mary Anne Carson Tel. # 7863
Bob Nosal Tel. # 7806