



TOWN OF GEORGINA

26657 Civic Centre Rd., R.R.#2, Keswick, Ontario L4P 3G1

SAFE DRINKING WATER ACT 2012 ANNUAL REPORT

Regulations passed under the *Safe Drinking Water Act* require owners of municipal water systems to publish annual reports describing the operation of the water system and the results of testing required to ensure that residents are provided with safe drinking water. This report covers the period from January 1st to December 31st, 2012.

Effective December 31, 2012, Section 19 of the *Safe Drinking Water Act* requires specific legal responsibility for decision-makers with authority over the Town's municipal drinking water system.

The source of supply for the Keswick-Sutton system is Lake Simcoe. The Region of York owns and operates a water treatment plant at Clarlyn Drive and Metro Road and another plant on Kennedy Road in Willow Beach. Water is taken from Lake Simcoe at each plant and undergoes a complete treatment process consisting of screening, filtration, taste and odor control, disinfection and fluoridation before being supplied to the water distribution system. The Region carries out extensive testing at each plant and residents may wish to obtain a copy of the annual report for these plants by contacting the Region at 905-895-1200, extension 3000, accessing their web site at <http://www.york.ca/Services/Environmental+Services/Water/Water+Quality+Reports.htm> or obtaining a copy at the Operations Centre of Town of Georgina located at 3182 Baseline Road, Sutton, Ontario. The York Region reports describe the treatment process in more detail and the chemicals used in the process. The Region also owns and operates a water storage tank at Westpark Heights, one at Deer Park Drive in Keswick and a third tank on Dalton Road in Sutton.

The Town of Georgina owns and operates the water distribution system that receives water from the Region of York treatment plants. The Town is responsible for operating and maintaining the watermains, valves, booster pumping stations, hydrants, meters and service connections that comprise the distribution system. The Town does not add chemicals to the water flowing through the distribution systems.

Licensed Town Operators take water samples from various premises serviced by the Keswick- Sutton system every week. Each sample is delivered to the York-Durham Laboratory in Pickering to test for the presence of bacteria. This certified laboratory is owned jointly by the Region of York and Durham and is staffed by employees of the Region of Durham.

Microbiology Testing from January 1 to December 31, 2012

A total of seven hundred and five (705) samples from the Keswick-Sutton distribution system were analyzed for the presence of coliform bacteria between January 1st and December 31st, 2011. All samples tested negative for the presence of coliforms (bacteria) and ecoli with the exception of one. In this case water was resampled three times and tested immediately as required by the *Safe Drinking Water Act*. These resamples tested negative for the presence of coliforms (bacteria) and ecoli and would indicate the original samples produced adverse results due to faulty sampling or testing procedures. This incident was reported to the required authorities in accordance with the requirements of the legislation.

Three hundred and twenty-nine (329) samples were analyzed by using the heterotrophic plate count method to check for background colonies within the water which determines the quality of water in terms of bacterial content. This test is used as a supplement to the routine analysis for coliform bacteria.

Results from two hundred and sixty-nine (269) heterotrophic plate count (HPC) samples showed readings of less than one. Sixty (60) HPC samples showed low readings from 1 to 26 units, well within the maximum allowable HPC count of 500 units.

Chlorine Residual

The Town is also required to monitor chlorine residual concentrations to ensure that bacteria does not develop within the systems. Four thousand eight hundred and fifty-four (4854) samples were analyzed. All samples had sufficient chlorine residual levels.

Leading Testing

The Town was not required to test for lead in 2010 and reduced lead sampling was to begin for Round One between December 15, 2011 and April 15, 2012. No samples were taken in 2011. Round One sampling commenced on January 23, 2012. Round Two sampling commenced on June 27, 2012.

Results from samples in 2012 are as follows:

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	66	<0.0001 - 0.0020	0
Distribution	8	<0.0001 - -0.0009	0

As no exceedances occurred in the lead sampling results from Round One and Round Two the Town as set out in Regulation 170/03, Section 15.1-5(3)(c) the Town is now exempt from lead sampling within the plumbing system but must continue to sample within the distribution system. The table bellows set out our sampling requirements.

YEAR	1 st Round	Date of Sampling	2 nd Round	Date of Sampling	# of Samples	Sampling Requirements
1	Dec 15/12 to Apr 15/13	March 13, 2013	Jun 15/13 to Oct 5/13	September 11, 2013	4	Alkalinity and pH
2	Dec 15/13 to Apr 15/14	March 2014	Jun 15/13 to Oct 5/13	September 2014	4	Alkalinity and pH
3	Dec 15/14 to Apr 15/15	March 2015	Jun 5/15 to Oct 5/15	September 2015	4	Alkalinity, pH and Lead

After three consecutive years of sampling as set out above, the three year cycling begins again unless otherwise notified by the Director of the Ministry of the Environment.

Other Testing

Twelve (12) samples were tested for trihalomethanes in the Keswick area and the Sutton area with the average levels being 70.0ug/L and 57.5ug/L respectively compared to a maximum allowable of 100ug/L.

Detailed lab reports are available for review at the Civic Centre in the Department of Engineering and Public Works.

The *Safe Drinking Water Act* requires that a Summary Report listing the requirements of the Act, the Regulations, the system's approval and any order that the system failed to meet at any time during 2012 be given to the members of Municipal Council prior to March 31, 2013. This report will be submitted as required and will available in the Office of the Clerk on April 1, 2013.

Private Wells

Residents that obtain water from private wells are encouraged to take samples periodically to determine if their water is safe to drink. Sample bottles may be obtained at the Civic Centre and returned to the same location for testing by the Ministry of Health laboratory at no cost.

Further Information

If you have any questions or concerns with respect to this Report, please contact Dan Pisani, P.Eng., Director of Operations and Engineering 905-722-6889 extension 3530 or Robert Fortier, Operations Manager 905-722-6889 extension 3521.

/hay