



2019 Annual Compliance Report

Drinking Water System General Information

This report has been prepared in accordance with the reporting requirements of the Safe Drinking Water Act 2002 O. Reg 170/03, s 11(1), (3), (6), (7), (8), (9.1) and 10 as well as Schedule 22-1 and 22-2.

This annual report has been included in the Water Summary Report presented to Council and can be viewed on the Municipal website at www.meaford.ca

Drinking Water System Information

Drinking Water System Number	260065312
Drinking Water System Name	The Leith Distribution System
Drinking Water System Owner	Municipality of Meaford
Drinking Water System Category	Large Municipal Residential
Period being reported	January 1, 2019 to December 31, 2019
Does your Drinking Water System serve more than 10,000 people?	No

Drinking Water System Description

The Leith Distribution System is situated on Georgian Bay in Meaford, Ontario. The Leith water plant was shut down in 2005 following agreement with the City of Owen Sound to supply drinking water to the Hamlet of Leith. The system consists of a Booster pumping station, a flow metering Chamber and a Rechlorination Facility.

Leith Rechlorination Facility

The Leith Rechlorination facility consists of two sodium hypochlorite chemical feed pumps, each paced to flow with automatic switchover control. One sodium Hypochlorite chemical storage tank with secondary containment is also onsite. This station communicates back to the

main SCADA at the Meaford Water Treatment Plant for online monitoring. There is no method for back-up power at this facility.

The UTM Coordinates are Zone 17, E 507320 m, N 4940120 m

Leith Booster Station

The Leith Booster station located on Grey Road 15, provides pressure to the residences to the south of the station heading up towards Annan. The station has two centrifugal pumps each rated at 0.9L/s, 27 m TDH, along with two 450 L hydro pneumatic tanks. This station has no communication capabilities for online monitoring or back-up power.

The UTM Coordinates are Zone 17, E 510180 m, N 4940850 m

Leith Metering Chamber

The Leith Metering Chamber is located at the municipal boundary at the intersection of 36th Street Each and East Bayshore Road, It consists of one flowmeter to measure water flow from the Owen Sound System into the Leith System.

The UTM Coordinates are Zone 17, E 506930 m, N 4939310 m

Summary of Water Treatment Chemicals Used Over this Reporting Period

Sodium Hypochlorite – is a disinfectant used to rechlorinate and disinfect water going through the Leith distribution System.

Summary of Monetary Expenses Incurred in 2019

SCADA Programming and PLC upgrades \$26,566.54

Summary of Adverse Drinking Water Quality Results

There were no instances of adverse drinking water in the Leith system during the 2019 reporting period.

Summary of Microbiological testing done under Schedule 10, 11 or 12 of Regulation 170/03 during this reporting period

Parameter	Number of Samples	Range of E. Coli or Fecal Results Min-Max	Range of Total Coliform Results Min-Max	Number of HPC Samples	Results of HPC Results Min # to Max #
Distribution	117	0	0	52	0-110

Details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or Section 16-4 of Schedule 16 of O. Reg 170/03 and reported to Spills Action Centre

N/A

Summary of Operational Testing completed under Schedule 7, 8, or 9 of Ontario Regulation 170/03 during this reporting period

	Number of Grab Samples	Range of Results Min # to Max #	Unit of Measure
Chlorine			
Distribution	8760	0.60 to 1.71	mg/L

Summary of additional Testing and Sampling

Please see attached additional sampling results for Haloacetic Acids, pH, Alkalinity and Trihalomethanes

Haloacetic Acid

Quarter	HAA Sample Result # 1 ug/L	Sampling Location
A	25.3	359115 Grey Rd. 15
B	29.5	359115 Grey Rd. 15
C	20.9	359115 Grey Rd. 15
D	19.2	359115 Grey Rd. 15
RAA	23.7	

Trihalomethanes

Quarter	THM Sample Result # 1 ug/L	Sampling Location
A	34	303051 Grey Rd. 15
B	30	303051 Grey Rd. 15
C	48	359466 Bayshore Rd.
D	44	359466 Bayshore Rd.
RAA	39	

pH & Alkalinity Results

Sample Date	Location	pH	Alkalinity mg/L as CaCo3
March 25, 2019	359466 Bayshore Rd. (Old WTP)	8.03	86
September 23, 2019	Old Leith WTP Yard Hyd.	7.46	66
	Rechlorination Building	7.57	66

Summary of Lead Testing

Location Type	Number of Samples	Range of Lead Results (min-max)	Unit of Measure	Number of Exceedances
Distribution	3	0.12-0.35	Ug/L	0