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October 29, 2019

The Corporation of the Town of Cobourg
55 King St. W,
Cobourg, Ontario K0A 2M2

Attention: Stephen Peacock, Chief Administrative Officer

**RE: Cobourg Drinking Water System (220000825)
Drinking Water Inspection Report 1-L4DMH**
File: SI NO CO DA 540

Please find attached the Ministry of the Environment's inspection report for the above facility. The report details the findings of the inspection that began on August 20, 2019.

In the inspection report, any "*Actions Required*" are linked to incidents of non-compliance with regulatory requirements contained within the Act, a regulation, or site-specific approvals, licenses, permits, orders or instructions. Such violations could result in the issuance of mandatory abatement instruments including Orders, tickets, penalties, or referrals to the ministry's Environmental and Enforcement Compliance Office.

"*Recommended Actions*" convey information that the owner or operating authority should consider implementing in order to advance efforts already in place to address such issues as emergency preparedness, the availability of information to consumers, and conformance with existing and emerging industrial standards. Please note that items which appear as recommended actions do not, in themselves, constitute violations.

Section 19 of the Safe Drinking Water Act (Standard of Care) creates a number of obligations for individuals who exercise decision-making authority over municipal drinking water systems. Please be aware that the Ministry has encouraged such individuals, particularly municipal councillors, to take steps to be better informed about the drinking water systems over which they have decision-making authority. These steps could include asking for a copy of this inspection report and a review of its findings. Further information about Section 19 can be found in "*Taking Care of Your Drinking Water: A guide for members of municipal council*" found under "Resources" on the Drinking Water Ontario website at www.ontario.ca/drinkingwater.

I would like to thank the staff for the assistance afforded to me during this compliance assessment. If you have any questions or concerns please contact myself or Jacqueline Fuller, Water Compliance Supervisor, at 705-768-0436.

Yours truly,

Brittney Wielgos

Yours truly,



Brittney Wielgos

Water Inspector

Ministry of the Environment, Conservation and Parks

Drinking Water and Environmental Compliance Division

300 Water Street, 2nd Floor South

Peterborough, ON K9J 3C7

705-768-8195

cc:

Larry Szyrka, Manager of Water System, Lakefront Utility Services

Shawn Bolender, Water Systems Supervisor, Lakefront Utility Services

Sarah Whitton, Water Compliance Coordinator, Lakefront Utility Services

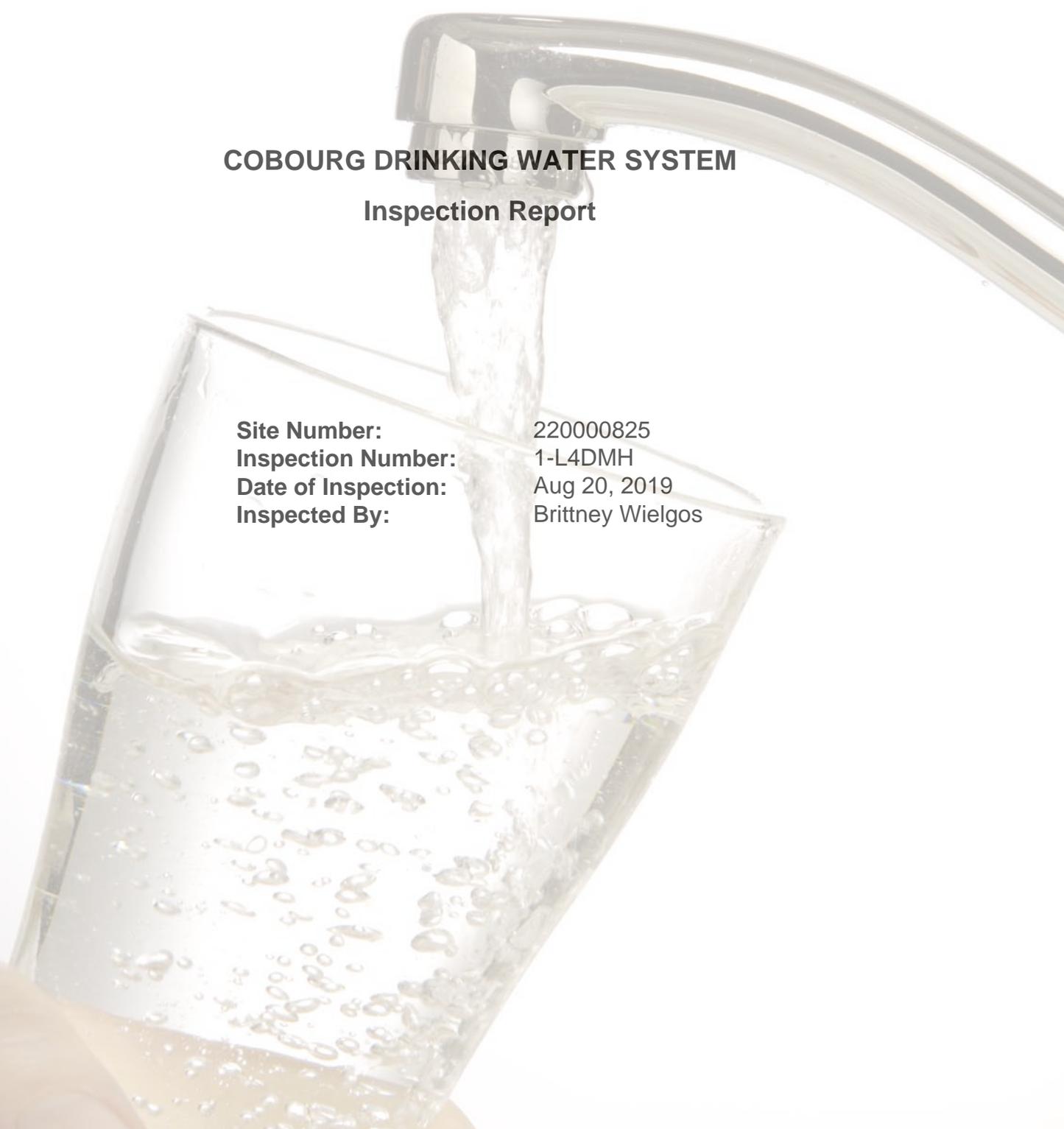
Dr. Lynn Noseworthy, Medical Officer of Health, Haliburton, Kawartha, Pine Ridge District Health Unit

Linda Laliberte, CAO/Secretary – Treasurer, Ganaraska Region Conservation Authority

Jacqueline Fuller, Water Compliance Supervisor, Peterborough District Office, MECP



Ministry of the Environment, Conservation and Parks

A close-up photograph of a chrome faucet pouring clear water into a clear glass. The water is captured mid-pour, creating a dynamic splash and bubbles within the glass. The background is a plain, light color.

COBOURG DRINKING WATER SYSTEM
Inspection Report

Site Number:	220000825
Inspection Number:	1-L4DMH
Date of Inspection:	Aug 20, 2019
Inspected By:	Brittney Wielgos



TABLE OF CONTENTS

1. Drinking Water System Owners Information
2. Drinking Water System Inspection Report

Appendix:

- A. Stakeholders Appendix**
- B. Inspection Rating Record**

OWNER INFORMATION:

Company Name:	COBOURG, THE CORPORATION OF THE TOWN OF	Unit Identifier:	
Street Number:	55		
Street Name:	KING St W		
City:	COBOURG	Postal Code:	K9A 2M2
Province:	ON		

CONTACT INFORMATION

Type:	Owner	Name:	Stephen Peacock
Phone:	(905) 372-4301 x41	Fax:	(905) 372-7421
Email:	speacock@cobourg.ca		
Title:	Chief Administrative Officer, The Town of Cobourg		

Type:	Operating Authority	Name:	Larry Spyrka
Phone:	(905) 372-2193	Fax:	(905) 372-2581
Email:	lspyrka@lusi.on.ca		
Title:	Manager of Water Systems, Lakefront Utility Services Inc.		

Type:	Operating Authority	Name:	Shawn Bolender
Phone:	(905) 372-2193	Fax:	(905) 372-2581
Email:	sbolender@lusi.on.ca		
Title:	Water Systems Supervisor		

Type:	Operating Authority	Name:	Sarah Whitton
Phone:	(905) 372-2193	Fax:	(905) 372-2581
Email:	swhitton@lusi.on.ca		
Title:	Water Compliance Coordinator		

INSPECTION DETAILS:

Site Name:	COBOURG DRINKING WATER SYSTEM
Site Address:	6 D'ARCY Street COBOURG ON K9A 3Z4
County/District:	COBOURG
MECP District/Area Office:	Peterborough District
Health Unit:	HALIBURTON, KAWARTHA, PINE RIDGE DISTRICT HEALTH UNIT
Conservation Authority:	
MNR Office:	
Category:	Large Municipal Residential
Site Number:	220000825
Inspection Type:	Unannounced
Inspection Number:	1-L4DMH
Date of Inspection:	Aug 20, 2019
Date of Previous Inspection:	Jul 24, 2018

COMPONENTS DESCRIPTION

Site (Name): MOE DWS Mapping
Type: DWS Mapping Point
Sub Type:

Site (Name): RAW WATER - LAKE ONTARIO
Type: Source
Sub Type: Surface Water

Comments:
The Cobourg Water Treatment Plant obtains its raw water from Lake Ontario. The raw water inlet structure consists of a 1050 mm diameter steel intake pipe located approximately 850 metres south of the Water Treat Plant. It is protected by an outer hexagonal timber crib with additional protection provided through an inner hexagonal wall constructed of concrete that surrounds the intake pipe. Coarse screening is provided by timbers that form a grid with 1525 mm x 200 mm openings. A zebra mussel control system is in place which consists of a 50 mm, schedule 80 PVC chlorine diffuser mounted at the mouth of the intake pipe. A 50 mm PE pipe contained within the raw water conduit allows chlorine gas to be pumped from the water treatment plant to the intake. Raw water flows by gravity through 856 metres of 1050 mm conduit from the intake structure to the plant's inlet well. The entire length of the raw water conduit is buried from the shore to the crib. The intake structure terminates with a 1050 mm gate valve that is manually operated from the low-lift pumping area of the Plant. The raw water passes through a stationary coarse screen constructed of 25 mm openings of #12 stainless steel mesh before entering the inlet well. Raw water then passes through a travelling screen consisting of 600 mm x 1524 mm 12 gauge wire screen with 9.5 mm openings at the entrance to the low lift well.

Site (Name): TREATED WATER – WATER TREATMENT PLANT
Type: Treated Water POE
Sub Type: Treatment Facility

Comments:
The Cobourg Water Treatment Plant is a conventional treatment facility consisting of coagulation (alum), flocculation, clarification, filtration (activated carbon and silica) and disinfection (chlorination). Disinfection at the plant is provided through the injection of chlorine gas which is delivered to the plant in one ton cylinders and injected through one of four Wallace & Tiernan chlorinators. Chlorine may be added to the raw water at the intake (during the zebra mussel season) or at the influent wet well (17,500 L) during the rest of the year. Water from the influent wet well passes through a travelling screen before entering the low lift wet well (393,000 L). One of four vertical turbine pumps directs the water through a common 500 mm discharge header that leads to the solids contact clarifier. The discharge header incorporates a 300 mm magnetic flow meter, an aluminum sulphate injection point, as well as temperature, turbidity, and chlorine residual monitoring points. The Graver 'Reactivator' Upflow Clarifier consists of a circular tank (24.5 m diameter x 6.0 m deep) equipped with tube settlers, variable speed mixer, fixed weir, and automated sludge removal system. The Engineer's Report by KMK Consultants (Brampton, ON) reports the clarifier provides 112 minutes of detention time at the rated capacity of 36,368 m³/day. A 600 mm conduit directs the clarified water past a second on-line turbidity analyzer to a common inlet trough that leads to two rapid gravity filter units. The dual media filters contain 600 mm of granular activated carbon and 150 mm of silica sand media with a surface area of 53.1 m². Both filters are equipped with air scour assisted backwash that may be initiated automatically by preset head-loss, turbidity, or run-time parameters. Backwash cycles may also be manually initiated by the operators. Backwashes are provided on an alternating basis through one of two filter backwash pumps rated at 433 L/s at 9.1 m TDH. Filtered water is directed via separate 600 mm conduits (equipped with continuously operating turbidimeters) into the former chlorine contact chamber. Upgrades in 2003, converted the 566.4 m³ contact chamber into a backwash well, thus permitting use of unchlorinated water for backwashes (extending the life of the filter media and eliminating the requirement to dechlorinate backwash wastewater). Chlorine gas is injected into the filtered water at the outlet of the backwash well, prior to entering the dual celled, in-ground concrete contact tank. All in-plant chlorination is provided through chlorine gas delivered in one ton cylinders and discharged through a 32 mm line via one of four Wallace & Tiernan model V2000 chlorinators. The 34 m³ inlet chamber directs filtered water into two baffled contact cells (with a baffle factor of 0.7 and detention time of 51.0 minutes) via separate 750 mm inlet conduits. An overflow weir located on the centre partition connects the two 916 m³ cells, allowing a total contact volume of 1,840 m³. The flow from both cells passes over separate weirs and connects with a common 900 mm stainless steel conduit leading to the treated water reservoir. Each cell of the treated water reservoir measures 27.4 m x 24.4 m x 4.67 m providing a total volume of 6,244 m³. The two cells are interconnected with a 600 mm sluice gate permitting treated water to

pass through both cells before entering the high lift wet well. An overflow weir permits excessive volumes of treated water to be directed into a sewer connection which leads to the supernatant pond, prior to discharge to Lake Ontario. Water passes from the clearwell through a 600 mm conduit to the 502.8 m³ concrete high lift wet well. Four vertical turbine high lift pumps connect to a 600 mm discharge header directing treated water into the distribution system. The high lift pumping gallery consists of: • one constant speed pump rated at 121 L/s at 67 m TDH, • one constant speed pump rated at 223 L/s at 67 m TDH, and • two VFD pumps rated at 227 L/s at 67 m TDH

Site (Name): DISTRIBUTION SYSTEM – PRESSURE ZONE 1 TOWER
Type: Other **Sub Type:** Reservoir

Comments:
The Cobourg Water Treatment Plant was constructed in 1971 to supply treated water to the Town of Cobourg. Treated water from the Cobourg WTP is also supplied to private residences of a "Stand Alone Distribution System" located in the southeastern portion of Hamilton Township. The distribution system serves two separate pressure zones and consists of 130 km of varying size and type of pipe, two elevated storage tanks and one pressure booster station. The elevated storage tank serving Pressure Zone 1 is located at 665 Victoria Street. It was constructed in 1985 and is comprised of steel and concrete. The tank has a useable storage volume of 1,360 m³. Upgrades completed upon the elevated storage tower in 2005, included installation of a rechlorination system, 300 mm bi-directional magnetic flow meter, pressure relief valve, overflow detection sensor and continuously operating chlorine residual analyzer. The rechlorination system (installed in a dedicated chemical storage/chlorination room) consists of a 60 L sodium hypochlorite storage tank, two duty and standby chemical metering pumps (each rated at 7.5 L/hr at a backpressure of 1,000 kPa) and a chlorine residual analyzer provided with SCADA output. The Zone 1 Tower is also equipped with a 20 kw standby generator which is tied into the alarm system and SCADA systems at the Cobourg Drinking Water System.

Site (Name): DISTRIBUTION SYSTEM – PRESSURE ZONE 2 TOWER
Type: Other **Sub Type:** Reservoir

Comments:
A second elevated storage tank serving Pressure Zone 2 (north and western portions of the Town of Cobourg) is located at 60 Strathy Road. The steel and concrete reservoir and rechlorination structure was constructed in 2000. The tank provides a useable storage volume of 3,734 m³ and includes a circulation pump (rated at 8.2 L/s at 8.2 m TDH) and an overflow conduit. The rechlorination system consists of a 200 L chemical storage tank, two chemical metering pumps (one duty and one standby) each rated at 5.3 L/hr at a backpressure of 500 kPa and a continuously operating free chlorine residual analyzer complete with SCADA output. The Zone 2 Tower is also equipped with a 35 kw standby generator which is tied into the alarm system and SCADA systems at the Cobourg Drinking Water System.

Site (Name): DISTRIBUTION SYSTEM – BOOSTER PUMPING STATION
Type: Other **Sub Type:** Pumphouse

Comments:
A pressure boosting station located at 9 Ewart Street is employed to draw treated water from Zone 1, boost distribution pressure and maintain water levels in the Zone 2 elevated storage tank. The pressure boosting station consists of a below grade flow meter chamber with a 200 mm magnetic flow meter and three split-case horizontal centrifugal pumps that connect to a common 450 mm diameter forcemain. Pump No.1 is rated at 152.0 L/s at 48.8 m TDH and Pumps No. 2 and 3 are rated at 76 L/s at 48.8 m TDH. The pumping station is equipped with a rechlorination system that consists of a 110 L day tank, two chemical metering pumps, and a continuously operating free chlorine residual analyzer complete with SCADA output. The two chemical feed pumps (one duty and one standby) have a rated capacity of 7.6 L/hr at a backpressure of 500 kPa. The pressure boosting station is provided with standby power that is delivered through a 230 kW diesel standby generator and connected to a 4,260 litre fuel tank that is located outside of the pumping station.

INSPECTION SUMMARY:

Introduction

- **The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period. The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management practices.**

This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O.Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.

This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

On August 20, 2019, Provincial Officer Brittney Wielgos began an unannounced detailed inspection of the Cobourg Drinking Water System.

The Cobourg Drinking Water System (the System) is owned by the Corporation of the Town of Cobourg and operated by Lakefront Utility Services Inc. (LUSI). The System consists of a convention water treatment plant; two (2) elevated storage tanks with rechlorination; and a booster pumping station with rechlorination. Raw water is obtained from Lake Ontario via a single 1,050 mm diameter intake pipe located approximately 850 m south of the water treatment plant and at a depth of 8.8 m.

The System delivers treated water through two (2) pressure zones and consists of approximately 126 kilometers of distribution watermain and 6,350 residential and non-residential service connections. The System serves approximately 19,544 people. The System operates under Drinking Water System No. 220000825 and is classified as a Class 3 Water Treatment Subsystem and Class 3 Water Distribution Subsystem.

The inspection included a compliance assessment of applicable Ministry of Environment, Conservation and Parks (MECP) legislation, an inspection of the procedures within the treatment and distribution system, and a review of records.

Records reviewed in conjunction with this inspection include:

- Drinking Water Works Licence No. 137-101 Issue Number 3 (The Licence); and,
- Drinking Water Works Permit No. 137-201 Issue Number 2 (The Permit)
- Permit to Take Water (PTTW) No. 6423-8XHF2

This inspection was conducted pursuant to section 81 of the Safe Drinking Water Act in order to assess compliance with the requirements of Ontario Regulation 170/03. The drinking water inspection included: physical inspections of the equipment and facilities; interviews with operating authority staff; and, a review of relevant documents from the period of July 24, 2018 to August 20, 2019 (hereafter referred to as the "inspection review period").

Source

- **Trends in source water quality were being monitored.**
- **The owner had a harmful algal bloom monitoring plan in place.**

Permit To Take Water

- **The owner was in compliance with all conditions of the PTTW.**

A Permit to Take Water (PTTW), number # 6423-8X8HF2, was issued for the Corporation of the Town of Cobourg. For the purpose of this inspection, the Term and Conditions pertaining to the Cobourg Drinking Water System were assessed. The permit expires on October 28, 2022. The Permit identifies Lake Ontario as the source for water taking.

The permitted maximum flow rate:

Lake Ontario - 31, 177 L/minute and 31, 822 m³/day

Review of records indicate the daily flow limits were met.

Capacity Assessment

- **There was sufficient monitoring of flow as required by the Municipal Drinking Water Licence or Drinking Water Works Permit issued under Part V of the SDWA.**

At the time of the inspection sufficient flow meters were installed to permit the continuous measurement of the flow rates and daily volume of treated water that flows from the treatment subsystem into the distribution system in accordance with Condition 2 of Schedule C of the Licence.

- **The flow measuring devices were calibrated or verified in accordance with the requirements of the MDWL issued under Part V of the SWDA.**

LUSI retained the services of Franklin Empire Inc. in June 2019 to calibrate the flow meters for the System. Calibration records for the flow meters were reviewed for the inspection period.

The flow meters are being calibrated at least every year in accordance with Condition 3.0 of Schedule C of the Licence.

- **The owner was in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the Municipal Drinking Water Licence issued under Part V of the SDWA.**

Condition 1.1 of Schedule C of the Licence requires that the System not be operated to exceed the rated capacity of:

Cobourg Drinking Water System: 36,368 m³/day

The rated capacity was not exceeded during the inspection review period. The maximum treated flow for the inspection review period was 10,452.99 m³/day in July 2019.

- **Appropriate records of flows and any capacity exceedances were made in accordance with the Municipal Drinking Water Licence issued under Part V of the SDWA.**

Treatment Processes

- **The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.**

The Drinking Water Works Permit 137-201 outlines the equipment installed throughout the Cobourg Drinking Water System which includes the drinking water treatment plant, two elevated storage tanks with rechlorination and a booster pumping station.

During the physical inspection, a comparison between the equipment described in the permit and the equipment

Treatment Processes

installed on site was performed. It should be noted that Tower # 2 was not inspected during the inspection as it has been offline since April 2, 2019 for repair of the interior and exterior, identified in the July 2016 Elevated Tank Remote Inspection Report, prepared by Landmark Municipal Services.

- **The owner had evidence that all required Director Notifications under Condition 2.4 of Schedule B of the Drinking Water Works Permit were made during the inspection period.**

During the inspection review period, one (1) Directors Notification form was prepared for the removal of 4260 litre fuel storage tank.

- **The owner/operating authority was in compliance with the requirement to prepare Form 1 documents as required by their Drinking Water Works Permit during the inspection period.**

Several undertakings that required the completion of a Form 1 document were conducted during the inspection review period, these include Cedar Shore Estates redevelopment and Henry Street watermain replacement. A review of records suggest that the documents were prepared in accordance with the Drinking Water Works Permit.

- **The owner/operating authority was in compliance with the requirement to prepare Form 2 documents as required by their Drinking Water Works Permit during the inspection period.**

During the inspection review period, two (2) Form 2 - Record of Minor Modifications or Replacements to the Drinking Water System were prepared, dated November 30, 2018 and March 14, 2019.

One Form 2 document describes the addition of a pre-treatment system using a polymer, FLOPAM AN 934 by SNF Canada. The polymer is stored in the low-lift pump room and an injection line to the clarifier was installed. The Form 2 also describes the addition of a new high lift pump (HLP#5), variable speed, rated at 180 L/s at a TDH of 67 m.

The other Form 2 document prepared describes the replacement of the backflow preventer for the bulk water system in the Pump House.

The Form 2 documents reviewed suggests that the documents were prepared in accordance with the Drinking Water Works Permit.

- **Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a Drinking Water Works Permit and/or Municipal Drinking Water Licence issued under Part V of the SDWA at all times that water was being supplied to consumers.**

The Procedure for Disinfection of Drinking Water in Ontario requires a drinking water system that obtains water from a raw water supply which is surface water, have a treatment process that is capable of producing water of equal or better quality than a combination of well-operated chemically assisted filtration and disinfection process would provide. This treatment must provide and overall performance with a minimum 2-log (99%) removal or inactivation of *Cryptosporidium* oocysts, a 3-log (99.9%) removal or inactivation of *Giardia* cysts and a 4-log (99.99%) removal or inactivation of viruses before water is delivered to the first consumer.

The log removal attributed to specific treatment processes at the Cobourg Drinking Water System are stated in the MDWL 137-101 under Schedule E: conventional filtration and chlorination. Operational requirements are listed for each process in order to meet the log removal/inactivation stipulated.

The conventional filtration component requires: a chemical coagulant to be used at all times when the treatment plant is in operation; effective backwash procedures and continuous monitoring of the filtrate turbidity.

Primary disinfection is achieved using chlorine gas. Chlorine is injected into filtered water as it leaves the backwash well. The contact chamber is comprised of two cells that are designed to provide appropriate baffling. The contact

Treatment Processes

tank outlet chlorine residual is used to calculate contact time.

A review of records, including backwash procedures; review of continuous monitoring data of the filtrate turbidity; logbook entries and maintenance records, suggest that the System was operated in a manner that achieved the design capabilities required under the Procedure for Disinfection of Drinking Water in Ontario and O.Reg.170/03.

- **Records confirmed that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes was operated so that at all times and all locations in the distribution system the chlorine residual was never less than 0.05 mg/l free or 0.25 mg/l combined.**

A review of records confirmed that water treatment equipment that provides chlorination for secondary disinfection purposes was operated in a manner to fulfill the requirements under clause 1-2 (2) 4 of Schedule 1, O. Reg. 170/03.

The chlorine residual is continuously monitored by SCADA at the booster station, water tower #1 and water tower #2. If additional disinfection is necessary, sodium hypochlorite can be added via an on-line pump.

A review of free chlorine residual grab samples taken from the Cobourg distribution system indicate that the free chlorine residual was great than 0.05 mg/L at all times during the inspection review period. The minimum free chlorine residual measured during the inspection review period was 0.13 mg/L in April, 2019

- **Where an activity has occurred that could introduce contamination, all parts of the drinking water system were disinfected in accordance with Schedule B, Condition 2.3 of the Drinking Water Works Permit.**

LUSI utilizes 'QMS-P10-Essential Supplies + Services' procedure to identify how supplies and services essential to the delivery of drinking water will meet and maintain the minimum requirements for quality and safety. The procedure outlines the required minimum quality standards to be met; verification of supplies and services. Furthermore, LUSI has developed a 'Watermain and Appurtenances Policy and Procedure' that is included with all contracts and tenders. The policy and procedure outlines all applicable regulatory requirements that must be met, such as: chemicals and materials requirements and laboratory testing requirements.

A review of 'FR315 Watermain Maintenance & Repair Report' records prepared during the inspection review period and maintenance reports for infrastructure within the System that required repair or replacement, confirms all parts of the drinking water system in accordance with a procedure listed in Schedule B, Condition 2.3 of the DWWP 137-201.

- **The owner had evidence indicating that all chemicals and materials that come in contact with water within the drinking water system met the AWWA and ANSI standards in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.**

LUSI provided manufacture NSF certification for all chemicals used in the treatment process during the inspection review period.

- **Up-to-date plans for the drinking water system were kept in a place, or made available in such a manner, that they could be readily viewed by all persons responsible for all or part of the operation of the drinking water system in accordance with the DWWP and MDWL issued under Part V of the SDWA.**

At the time of the inspection, plans and drawings were last updated August, 2019 and available for review.

Treatment Process Monitoring

- **Primary disinfection chlorine monitoring was conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved.**

Treatment Process Monitoring

Primary disinfection chlorine monitoring is conducted at the end of the chlorine contact chamber via an online chlorine analyser.

- **Operators were aware of the operational criteria necessary to achieve primary disinfection within the drinking water system.**

Interview with operators and review of documents confirm that operators at the Cobourg Water Treatment Plant have been trained and are aware of the necessary operational criteria necessary to achieve and maintain primary disinfection within the drinking water system.

- **Continuous monitoring of each filter effluent line was being performed for turbidity.**

The Cobourg Drinking Water System consists of two dual-media gravity filters. The filters consist of a 600 mm layer of granular activated carbon (GAC), on top of a 150 mm thick layer of silica sand. Filter time and turbidity are monitored by SCADA, filter backwash is initiated based on run time and effluent water turbidity.

During the inspection review period, monthly average turbidity was consistently 0.02 NTU for Filter #1 and 0.01 NTU for Filter #2.

- **The secondary disinfectant residual was measured as required for the distribution system.**

LUSI operators collect an average of seven free chlorine and total chlorine residual samples each week within the distribution system.

Furthermore, secondary disinfection residual is measured using three continuous analysers located at the Ewart Street Booster Pumping Station, Zone 1 and Zone 2 Elevated tanks and recorded and reviewed on SCADA.

- **Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.**

The System is inspected on a daily basis by a licenced operator to monitor the process, perform operational duties, maintenance and respond to customer concerns. The System is equipped with a SCADA system that continuously monitors process parameters. Daily checks include reviewing the previous 24 hour SCADA trending.

The SCADA system is equipped with an auto-dialler that has been programmed to contact the answering service or LUSI personnel whenever conditions deviate from the program setting.

- **All continuous monitoring equipment utilized for sampling and testing required by O. Reg.170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, were equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6.**

At the time of the inspection, the continuous analyser alarms provided were:

Contact Chamber Effluent:
Upper limit - 3.5 mg/L
Lower Limit - 1.0 mg/L

Filter Effluent Turbidity: 0.3 NTU

- **Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format.**

Treatment Process Monitoring

- **All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.**

LUSI staff utilize procedure 'QMS-D08-Instrument Calibration' which contains a list of instruments that are calibrated in-house by LUSI operators and externally by a third-party contractor.

Review of records indicate that turbidity readings from online turbidimeters at the Treatment Plant are verified monthly and online chlorine analysers are verified against portable chlorine analysers on a regular basis.

Calibration and verification of continuous analysers was completed in June 2019 by Nichol Water Services. Calibration and verification of flow meters was completed in June 2019 by Franklin Empire.

Process Wastewater

- **The process wastewater and residual solids/sludges were treated, handled and disposed of in accordance with the design requirements approved under the Drinking Water Works Permit and the Municipal Drinking Water Licence.**

The Cobourg Drinking Water System is equipped with two waste tanks located in the pumphouse. Process wastewater consists of water from the clarifier sludge blowdown and filter backwash water. The level of wastewater in the waste tanks is monitored via SCADA. Only one waste tank operates at a time, once the "duty" tank has reached its maximum operating level, the waste tank inlet valve is closed and the settling process begins. Once settling has been achieved, the supernatant pump starts and directs supernatant to Lake Ontario, turbidity and suspended solids are continuously monitored. Settled sludge is directed to the sewage lift station and pumped to the local sanitary sewer system.

- **The process wastewater discharge monitoring program and discharge quality complied with requirements established in the Municipal Drinking Water Licence Issued under Part V of the SDWA.**

Section 4.2, 4.3 and 4.4 of Schedule C of the MDWL 137-101 prescribes that the collection and analysis of process wastewater discharged to Lake Ontario.

Table 7 of Section 4.4 of Schedule C of the MDWL prescribes monthly composite samples of wastewater and analysis of suspended solids (TSS). Section 1.5 of Schedule C prescribes that the annual average concentration of Total Suspended Solids shall not exceed 25 mg/L.

Records provided for the inspection review period indicate that the System monitors TSS using monthly composite grab samples.

The annual average concentration of TSS in 2018 was 2.25 mg/L.

Distribution System

- **The owner had up-to-date documents describing the distribution components as required.**
- **There is a backflow prevention program, policy and/or bylaw in place.**

The Town of Cobourg By-Law No. 049-2011 'Regulation of Water Supply', section 8 speaks to cross connections and backflow prevention.

During the inspection review period, the Water Systems Supervisor indicated that a By-Law for Northumberland County is in draft form.

Distribution System

- **The owner had a program or maintained a schedule for routine cleanout, inspection and maintenance of reservoirs and elevated storage tanks within the distribution system.**

The Cobourg Drinking Water System consists of two (2) elevated storage tanks; a two-celled reservoir and a high lift clear well.

Section 7 of the Cobourg Water Treatment Plant draft operations manual speaks to maintenance of the reservoir, however it does not specify a frequency. In July 2018, LUSI retained Greatario Services to perform cleaning on the two-celled reservoir. The report indicates cell#1 was cleaned and in good overall condition. Cell #2 was unable to be cleaned remotely due to piping interfering with the access below the access hatch.

A maintenance schedule has not been included in Section 9 of the operations manual for the towers. LUSI retained Landmark Municipal Servicers in November 2016 and June 2018 to inspect Tower #1. In July 2016, Landmark was retained to inspect Tower #2. In April 2019, Tower #2 was drained and taken offline to remove and replace the internal lining.

For all other storage structures, LUSI staff utilize a document titled 'LT Infrastructure Tracking - Cobourg'. The tracking tool is maintained by the Water Compliance Coordinator and includes details pertaining to the routine cleanout of the elevated storage tanks, reservoir and high lift clear well as well as frequency of inspection, contractor recommendations and corrective actions.

- **The owner had implemented a program for the flushing of watermains as per industry standards.**

LUSI has implemented an annual flushing program, last completed in Spring 2018 and utilize SOP-HYD-007 'Annual Flushing'. Areas known to have older mains are directionally flushed to achieve optimal results.

Hydrant flushing records were provided for review Operators identify the hydrant asset number and record the follow: date; location; start/stop time; turbidity; free chlorine; operator performing the flushing and any comments regarding the condition or the accessibility of the hydrant.

Due to repair, Tower #2 was taken offline in April 2019, therefore annual flushing was not performed in Spring 2019.

- **Records confirmed that disinfectant residuals were routinely checked at the extremities and "dead ends" of the distribution system.**

During annual flushing, the distribution system is flushed and disinfectant residuals are monitored and recorded at dead end extremities.

- **A program was in place for inspecting and exercising valves.**
- **There was a program in place for inspecting and operating hydrants.**

Hydrant inspection and maintenance is performed during annual flushing.

- **There was a by-law or policy in place limiting access to hydrants.**

The Town of Cobourg utilizes By-Law 049-2011 to enforce hydrant use and maintenance.

Section 6 of By-Law 049-2011 requires that no person, except for the certified operators of the Operating Authority shall operate a hydrant, except in an emergency when the authorized personnel of the Town of Cobourg Fire Department shall have the right to operate a hydrant.

- **The owner was able to maintain proper pressures in the distribution system and pressure was monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system**

Distribution System

is designed to operate.

The water distribution system consists of approximately 139 kilometers of water main that carry treated water to the consumer. The distribution system is separated into two (2) pressures zones (Zone 1 and Booster Station -Zone 2) to maintain pressure between 50 psi and 90 psi.

Treated water is directed from the treatment plant to Zone 1 distribution system and Tower #1. Zone 2 pressure is provided via the Booster Station and Towner #2. The Booster Station, located at 9 Ewart St., draws water from Zone 1 and boosts the distribution pressure in Zone 2 and maintains the level in Tower #2. A pressure reducing valve (PRV) located at the Booster Pumping Station links the Zone 2 distribution network to the Zone 1 distribution network. Pressure is continuously monitored via SCADA at the high lift pumps, the booster station and at Tower #2. In the event pressure in Zone 1 distribution network falls below 40 PSI, the PRV automatically opens and provides Zone 1 with water from Zone 2.

LUSI utilizes procedure CRP05 -System Pressure to respond to system pressure alarms.

System pressure critical alarms:

Tower 1: Upper Limit - 4.75 m; Lower limit - 2.0 m

Tower 2: Upper Limit - 76.1 psi (525 kPa); Lower limit - 63.8 psi (440 kPa)

Booster Station

-Discharge: Upper Limit - 94.3 psi (650 kPa); Lower limit - 58 psi (400 kPa)

-Suction: Upper Limit - 72.5 psi (500 kPa); Lower limit - 32.6 psi (225 kPa)

- **The donor had an agreement with a receiver system, and the agreement satisfied the requirements prescribed by subsection 5(4) under O. Reg. 170/03.**

The Cobourg Drinking Water System and the Hamilton Township Drinking Water System have a written agreement under O.Reg.170/03 Section 5(4)(b) stating that the Hamilton Township Subsystem will be operated as an extension of the Cobourg Distribution System.

- **The donor had provided an Annual Report to the receiver stand alone distribution system(s) connected to this system.**

Operations Manuals

- **Operators and maintenance personnel had ready access to operations and maintenance manuals.**
- **The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.**
- **The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA.**

Logbooks

- **Logbooks were properly maintained and contained the required information.**

The System is inspected daily by an operator. During each visit the operator inspects all treatment processes, reviews trending, performs daily sampling and ensures all equipment is in proper operation. All site visits are documented on the daily operational log sheets and in the facility logbook and include details such as the operators

Logbooks

first and last name; check for OIC; shift period; time of activity and details of operational activities.

- **Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5.**

Based on the review of records during the inspection review period, it appears that only certified operators performed operational tests.

- **For every required operational test and every required sample, a record was made of the date, time, location, name of the person conducting the test and result of the test.**
- **The operator-in-charge ensured that records were maintained of all adjustments made to the processes within his or her responsibility.**
- **Logs or other record keeping mechanisms were available for at least five (5) years.**

Contingency/Emergency Planning

- **Spill containment was provided for process chemicals and/or standby power generator fuel.**
- **Clean-up equipment and materials were in place for the clean up of spills.**
- **Standby power generators were tested under normal load conditions.**

Security

- **All storage facilities were completely covered and secure.**
- **Air vents and overflows associated with reservoirs and elevated storage structures were equipped with screens.**
- **The owner had provided security measures to protect components of the drinking water system.**

Consumer Relations

- **The owner and/or operating authority undertook efforts to promote water conservation and reduce water losses in their system.**

The Town of Cobourg enforces By-Law 049-2011 to regulate the supply and use of water within the Town.

The By-Law describes no personal discharge or permit the discharge of water upon land between the hours of 5:00 am and 8:00 am and between the hours of 7:00 pm and 10:00 pm for the months of June, July and August. The Bylaw outlines an even numbered address may use water outdoors on even numbered days and an odd numbered address may use water outdoors only on odd numbered days during the months of June, July and August.

Certification and Training

- **The overall responsible operator had been designated for each subsystem.**

Subsection 23(1) of O. Reg. 128/04 "Certification of Drinking-Water System Operators and Water Quality Analysts"

Certification and Training

states that a municipal residential drinking water system must have a designated overall responsible operator (ORO). The ORO shall be an operator who holds a certificate for that type of subsystem (e.g. water distribution subsystem) and that is of the same class or higher than the class of that subsystem.

LUSI established procedure MS-P08- 'Operator Duties' to ensure that the designation of the Overall Responsible Operator (ORO) is clearly defined and documented. LUSI appoints the Manager of Water Systems as the ORO for the Cobourg Drinking Water System. Operators identify the ORO in the logbook each day of the year during daily system checks.

The Cobourg Drinking Water Treatment Plant is classified as a Water Treatment Subsystem Class 3 and Water Distribution Subsystem Class 3. During the inspection review period, Larry Spyrka, Manager of Water Systems possessed a Water Distribution and Supply Subsystem Class 3 certification that expires on May 3, 2020 and a Water Treatment Subsystem Class 3 certificate that expires on October 31, 2020.

During the inspection review period, the ORO and alternates possessed the appropriate operator certificates to serve in this capacity.

- **Operators-in-charge had been designated for all subsystems which comprised the drinking water system.**
LUSI designates all operators with the exception of Operators in Training as Operator in Charge (OIC). The OIC is identified each day in the daily logbook.

- **All operators possessed the required certification.**
- **Only certified operators made adjustments to the treatment equipment.**

- **An adequately licenced operator was designated to act in place of the overall responsible operator when the overall responsible operator was unable to act**

Section 3.1 of QMS-P08-'Operator Duties' states that if the designated ORO is absent or unable to act, an alternate ORO will be appointed. The Supervisor of Water Systems is identified as the alternate ORO for all individual subsystems operated by LUSI.

The Supervisor of Water System, Shawn Bolender, holds a Water Distribution and Supply Subsystem Class 3, valid through January 3, 2021 and a Water Treatment Class 2 valid through July 31, 2020.

Water Quality Monitoring

- **All microbiological water quality monitoring requirements for raw water samples were being met.**

Section 10-4 of Schedule 10 of O.Reg.170/03 requires the owner or operating authority of the drinking water system shall ensure that a water sample is taken at least once every week from the drinking water system's raw water, before any treatment is applied to the water and is tested for E.coli and total coliforms.

Raw water samples are collected weekly.

- **All microbiological water quality monitoring requirements for distribution samples were being met.**

Schedule 10, Section 10-2 of O.Reg.170/03 indicates that at least eight distribution samples plus one additional distribution sample for every 1,000 people served by the system are to be taken each month with at least one sample being taken each week.

The population served, based on service connections, is approximately 19,544, indicating twenty-seven (27) samples are to be taken each month and tested for E.coli and total coliform, with at least 25% of those also being

Water Quality Monitoring

tested for heterotrophic plate count (HPC).

Distribution sample results reviewed for the inspection review period indicated that seven (7) samples were collected each week.

- **All microbiological water quality monitoring requirements for treated samples were being met.**

Section 10-3 of Schedule 10 of O. Reg. 170/03 requires that the Owner of a drinking water system and the Operating Authority for the system ensure that a water sample is taken at least once every week and tested for E. coli, total coliforms and general bacteria population expressed as colony counts on a heterotrophic plate count.

A review of sample records provided during the inspection period indicates that one treated water sample was collected from the System each week.

- **All inorganic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.**

Section 13-2 (1) of Schedule 13 of O. Reg. 170/03 states that the owner of a large municipal drinking water system and the operating authority for the system shall ensure that at least one water sample is taken every 36 months, if the system obtains water from a raw water supply that is ground water. The owner shall ensure that each of the samples taken is tested for every parameter set out in Schedule 23.

Samples for Schedule 23 inorganic parameters were analyzed on January 7, 2019.

- **All organic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.**

Section 13-4 (1) of Schedule 13 of O. Reg. 170/03 states that the owner of a large municipal drinking water system and the operating authority for the system shall ensure that at least one water sample is taken every 36 months, if the system obtains water from a raw water supply that is ground water. The owner shall ensure that each of the samples taken is tested for every parameter set out in Schedule 24.

Samples for Schedule 24 organic parameters were analyzed on January 7, 2019.

- **All haloacetic acid water quality monitoring requirements prescribed by legislation are being conducted within the required frequency and at the required location.**

Schedule 13-11 of O. Reg. 170/03 requires the owner of a drinking water system that provides chlorination or chloramination and the operating authority for the system shall ensure that at least one distribution sample is taken in each calendar quarter, from a point in the drinking water system's distribution system, or plumbing that is connected to the drinking water system, that is likely to have an elevated potential for the formation of haloacetic acids.

Results provided by LUSI indicate that sampling was conducted every three months as required.

- **All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.**

Section 13-6 of Schedule 13 of O. Reg. 170/03 requires that the owner of a drinking water system that provides chlorination and the operating authority for the system ensure that at least one distribution sample is taken every three months, from a point in the drinking water system's distribution system, or plumbing that is connected to the drinking water system, that is likely to have an elevated potential for the formation of trihalomethanes. Each sample shall be tested for trihalomethanes.

Results provided by LUSI indicate that sampling was conducted every three months as required.

Water Quality Monitoring

- **All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency for the DWS.**

Section 13-7 of Schedule 13 of O. Reg. 170/03 requires that the owner of a drinking water system and the operating authority for the system ensure that at least one water sample is taken every three months and tested for nitrate and nitrite.

Results provided by LUSI indicate that sampling was conducted a minimum of every three months.

- **All sodium water quality monitoring requirements prescribed by legislation were conducted within the required frequency.**

Section 13-8 of Schedule 13 of O. Reg. 170/03 requires that the owner of a drinking water system and the operating authority for the system ensure that at least one water sample is taken every 60 months and tested for sodium.

Results provided by LUSI indicate that sampling was last completed January 12, 2015.

- **All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency.**

Section 13-9 of Schedule 13 of O. Reg. 170/03 requires that the owner of a drinking water system and the operating authority for the system ensure that at least one water sample is taken every 60 months and tested for fluoride.

Results provided by the LUSI indicate that sampling was last completed January 12, 2015.

- **The owner ensured that water samples were taken at the prescribed location.**
- **All sampling requirements for lead prescribed by schedule 15.1 of O. Reg. 170/03 were being met.**
Records reviewed indicate that sampling for lead, pH and alkalinity was completed on September 17, 2018. On March 26, 2019, samples were collected and tested for alkalinity and pH.
- **Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.**
- **The owner indicated that the required records are kept and will be kept for the required time period.**

Water Quality Assessment

- **Records showed that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O.Reg. 169/03).**

Reporting & Corrective Actions

- **Corrective actions (as per Schedule 17) had been taken to address adverse conditions, including any other steps that were directed by the Medical Officer of Health.**

On April 1, 2019, an adverse water quality incident (AWQI) was reported due to a Category 2 watermain break. LUSI immediately contacted the Haliburton Kawartha Pine Ridge (HKPR) Health Unit and Spills Action Centre to report the watermain break that occurred in an industrial area. The HKPR Health Unit issued a boil water advisory for the commercial building located within the industrial area. Corrective actions were followed and the watermain break was repaired. The boil water advisory was rescinded on April 15, 2019.

Reporting & Corrective Actions

- All required notifications of adverse water quality incidents were immediately provided as per O. Reg. 170/03 16-6.
- All required written notices of adverse water quality incidents were provided as per O. Reg. 170/03 16-7.
- In instances where written notice of issue resolution was required by regulation, the notice was provided as per O. Reg. 170/03 16-9.
- **Where required continuous monitoring equipment used for the monitoring of chlorine residual and/or turbidity triggered an alarm or an automatic shut-off, a qualified person responded in a timely manner and took appropriate actions.**
A review of continuous monitoring records and logbooks suggest that when an alarm or automatic shut-off devices was triggered that a certified operator responded and took appropriate actions.
- **When the primary disinfection equipment, other than that used for chlorination or chloramination, has failed causing an alarm to sound or an automatic shut-off to occur, a certified operator responded in a timely manner and took appropriate actions.**
- **The Annual Report containing the required information was prepared by February 28th of the following year.**
- **Summary Reports for municipal council were completed on time, included the required content, and were distributed in accordance with the regulatory requirements.**
Schedule 22 of O.Reg.170/03 requires the owner of a drinking water system to ensure that, not later than March 31 of each year, a report is prepared for the preceding calendar year and is given to members of the municipal council.

The Summary Report was delivered to the Town of Cobourg on February 14, 2019.

- **All changes to the system registration information were provided within ten (10) days of the change.**

NON-COMPLIANCE WITH REGULATORY REQUIREMENTS AND ACTIONS REQUIRED

This section provides a summary of all non-compliance with regulatory requirements identified during the inspection period, as well as actions required to address these issues. Further details pertaining to these items can be found in the body of the inspection report.

Not Applicable

SUMMARY OF RECOMMENDATIONS AND BEST PRACTICE ISSUES

This section provides a summary of all recommendations and best practice issues identified during the inspection period. Details pertaining to these items can be found in the body of the inspection report. In the interest of continuous improvement in the interim, it is recommended that owners and operators develop an awareness of the following issues and consider measures to address them.

Not Applicable

SIGNATURES

Inspected By:

Brittney Wielgos

Signature: (Provincial Officer)



Reviewed & Approved By:

David Bradley

Signature: (Supervisor)



Review & Approval Date:

Note: This inspection does not in any way suggest that there is or has been compliance with applicable legislation and regulations as they apply or may apply to this facility. It is, and remains, the responsibility of the owner and/or operating authority to ensure compliance with all applicable legislative and regulatory requirements.



APPENDIX A
STAKEHOLDER APPENDIX

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

Many useful materials are available to help you operate your drinking water system. Below is a list of key materials owners and operators of municipal residential drinking water systems frequently use.

To access these materials online click on their titles in the table below or use your web browser to search for their titles. Contact the Ministry if you need assistance or have questions at 1-866-793-2588 or waterforms@ontario.ca.

For more information on Ontario's drinking water visit www.ontario.ca/drinkingwater



PUBLICATION TITLE	PUBLICATION NUMBER
FORMS: Drinking Water System Profile Information Laboratory Services Notification Adverse Test Result Notification	012-2149E 012-2148E 012-4444E
Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils	Website
Procedure for Disinfection of Drinking Water in Ontario	Website
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids	Website
Filtration Processes Technical Bulletin	Website
Ultraviolet Disinfection Technical Bulletin	Website
Guide for Applying for Drinking Water Works Permit Amendments, & License Amendments	Website
Certification Guide for Operators and Water Quality Analysts	Website
Guide to Drinking Water Operator Training Requirements	9802E
Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption	Website
Drinking Water System Contact List	7128E01
Ontario's Drinking Water Quality Management Standard - Pocket Guide	Website
Watermain Disinfection Procedure	Website
List of Licensed Laboratories	Website

Principaux guides et documents de référence sur les réseaux résidentiels municipaux d'eau potable

De nombreux documents utiles peuvent vous aider à exploiter votre réseau d'eau potable. Vous trouverez ci-après une liste de documents que les propriétaires et exploitants de réseaux résidentiels municipaux d'eau potable utilisent fréquemment. Pour accéder à ces documents en ligne, cliquez sur leur titre dans le tableau ci-dessous ou faites une recherche à l'aide de votre navigateur Web. Communiquez avec le ministère au 1-866-793-2588, ou encore à waterforms@ontario.ca si vous avez des questions ou besoin d'aide.



Pour plus de renseignements sur l'eau potable en Ontario, consultez le site www.ontario.ca/eaupotable

TITRE DE LA PUBLICATION	NUMÉRO DE PUBLICATION
Renseignements sur le profil du réseau d'eau potable	012-2149F
Avis de demande de services de laboratoire	012-2148F
Avis de résultats d'analyse insatisfaisants et de règlement des problèmes	012-4444F
Prendre soin de votre eau potable - Un guide destiné aux membres des conseils municipaux	Site Web
Marche à suivre pour désinfecter l'eau potable en Ontario	Site Web
Stratégies pour minimiser les trihalométhanes et les acides haloacétiques de sous-produits de désinfection	Site Web
Filtration Processes Technical Bulletin (en anglais seulement)	Site Web
Ultraviolet Disinfection Technical Bulletin (en anglais seulement)	Site Web
Guide de présentation d'une demande de modification du permis d'aménagement de station de production d'eau potable	Site Web
Guide sur l'accréditation des exploitants de réseaux d'eau potable et des analystes de la qualité de l'eau de réseaux d'eau potable	Site Web
Guide sur les exigences relatives à la formation des exploitants de réseaux d'eau potable	9802F
Échantillonnage et analyse du plomb dans les collectivités : échantillonnage normalisé ou réduit et admissibilité à l'exemption	Site Web
Liste des personnes-ressources du réseau d'eau potable	Site Web
L'eau potable en Ontario - Norme de gestion de la qualité - Guide de poche	Site Web
Procédure de désinfection des conduites principales	Site Web
Laboratoires autorisés	Site Web



APPENDIX B
INSPECTION RATING RECORD

Ministry of the Environment - Inspection Summary Rating Record (Reporting Year - 2019-2020)

DWS Name:	COBOURG DRINKING WATER SYSTEM
DWS Number:	220000825
DWS Owner:	Cobourg, The Corporation Of The Town Of
Municipal Location:	Cobourg

Regulation: O.REG 170/03
Category: Large Municipal Residential System
Type Of Inspection: Detailed
Inspection Date: August 20, 2019
Ministry Office: Peterborough District

Maximum Question Rating: 682

Inspection Module	Non-Compliance Rating
Permit To Take Water	0 / 12
Capacity Assessment	0 / 42
Treatment Processes	0 / 101
Process Wastewater	0 / 20
Distribution System	0 / 8
Operations Manuals	0 / 42
Logbooks	0 / 30
Certification and Training	0 / 49
Water Quality Monitoring	0 / 136
Reporting & Corrective Actions	0 / 109
Treatment Process Monitoring	0 / 133
TOTAL	0 / 682

Inspection Risk Rating	0.00%
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FINAL INSPECTION RATING:	100.00%
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Ministry of the Environment - Detailed Inspection Rating Record (Reporting Year - 2019-2020)

DWS Name: COBOURG DRINKING WATER SYSTEM
DWS Number: 220000825
DWS Owner: Cobourg, The Corporation Of The Town Of
Municipal Location: Cobourg

Regulation: O.REG 170/03
Category: Large Municipal Residential System
Type Of Inspection: Detailed
Inspection Date: August 20, 2019
Ministry Office: Peterborough District

Maximum Question Rating: 682

Inspection Risk Rating | 0.00%

FINAL INSPECTION RATING: | 100.00%