AMABEL-SAUBLE DRINKING WATER SYSTEM
628 D LINE, SOUTH BRUCE PENINSULA, ON, N0H 2G0

INSPECTION REPORT

System Number:	220007917
Entity:	ONTARIO CLEAN WATER AGENCY THE CORPORATION OF THE TOWN OF SOUTH BRUCE PENINSULA
Inspection Start Date:	November 17, 2023
Inspection End Date:	December 07, 2023
Inspected By:	Robert Graham
Badge #:	1667

_____
(signature)

NON-COMPLIANCE

This should not be construed as a confirmation of full compliance with all potential applicable legal requirements. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

RECOMMENDATIONS

This should not be construed as a confirmation of full conformance with all potential applicable BMPs. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

INSPECTION DETAILS

This section includes all questions that were assessed during the inspection.

Ministry Program: DRINKING WATER | **Regulated Activity:** DW Municipal Residential

Question ID	DWMR1001000	**Question Type**	Information

Legislative Requirement(s):
Not Applicable

Question:
What was the scope of this inspection?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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 November 17, 2023, Ministry of the Environment, Conservation and Parks (MECP) Provincial Officer Bob Graham conducted an unannounced focused inspection of the Amabel-Sauble Drinking Water System (DWS). The Amabel-Sauble DWS is a Large Municipal Residential DWS (serves a major residential development and serves more than 100 private residences) owned by the Town of South Bruce Peninsula (Owner) and operated by the Ontario Clean Water Agency (OCWA - Operating Authority - OA). Assistance with the inspection was provided by Leo-Paul Frigault, OCWA Senior Operations Manager, James Learn, OCWA Overall Responsible Operator (ORO) and Karla Young, OCWA Process & Compliance Technician. During the inspection review period, from December 9, 2022, the day following the previous inspection, to the date of inspection on November 17, 2023, there was one (1) Adverse Water Quality Incidents (AWQIs) reported to the MECP Spills Action Centre (SAC).

The Amabel-Sauble DWS consists of three (3) drilled wells (Wells PW1, PW2 and the Winburk well) which have steel well casings sealed with locked vermin proof well caps. Well casings are extended at least 40 cm above ground and surface drainage does not collect or pond in the vicinity of the wells due to mounding around the well casings. All three wells supplying the Amabel-Sauble DWS are considered ground water under the direct influence of surface water

(GUDI). Wells PW1 and PW2 are the primary water sources for the DWS. The Winburk well is used as a standby source for the DWS.

The current Municipal Drinking Water Licence (MDWL) No. 094-101, Issue No. 4 and Drinking Water Works Permit (DWWP) No. 094-201, Issue No. 5 were issued on March 6, 2020 for the Amabel-Sauble DWS.

Question ID	DWMR1000000	**Question Type**	Information

Legislative Requirement(s):
Not Applicable

Question:
Does this drinking water system provide primary disinfection?

Compliance Response(s)/Corrective Action(s)/Observation(s):
This drinking water system provides for both primary and secondary disinfection and distribution of water.

Question ID	DWMR1007000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (1);

Question:
Is the owner maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner was maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials.

Well inspection and maintenance procedures for the entire well structure including all above and below grade components are required by MDWL Schedule B (Section 16.2.8, 16.2.9 and 16.2.10) for the Amabel-Sauble DWS. Well inspection and maintenance procedures are included in Appendix F of the Operations and Maintenance Manual.

Question ID	DWMR1009000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Are measures in place to protect the groundwater and/or GUDI source in accordance with any MDWL and DWWP issued under Part V of the SDWA?

Compliance Response(s)/Corrective Action(s)/Observation(s):

Measures were in place to protect the groundwater and/or GUDI source in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.

Question ID	DWMR1014000	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Is there sufficient monitoring of flow as required by the MDWL or DWWP issued under Part V of the SDWA?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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.

Question ID	DWMR1016000	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Is the owner in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the MDWL issued under Part V of the SDWA?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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.

MDWL Schedule C, Table 1 identifies that the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system of the Amabel-Sauble DWS is 687 cubic meters/day. Permit To Take Water Number 8444-AKMQCN (PTTW) was issued to the Owner on May 5, 2017. Table A of the PTTW identifies that the holder of the PTTW shall only take water as follows:
* Well PW1: 477 L/min and 687,000 L/day;
*Well PW2: 477 L/min and 687,000 L/day;
*Well Winburk : 364 L/min and 262,080 L/day max hours of taking 12 hours per day.
Note PTTW Section 3.3 identifies that:
Notwithstanding Table A, the maximum total taking from any combination of Well PW1 and/or Well PW2 shall not exceed 687,000 litres per day. This maximum rate of withdrawal shall not occur on more than 120 days per year. On all other days of the year, the maximum total taking from any combination of Well PW1 and/or Well PW2 shall not exceed 535,680 litres per day. Based upon the records provided, during the inspection review time period, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system was

not exceeded.

Question ID	DWMR1018000	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Has the owner ensured that all equipment is installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.

The equipment installed at the Amabel-Sauble DWS plant compares favourably to the equipment listed in the DWWP issued for the Amable-Sauble DWS. The process flow diagram included in Schedule D of the Permit also appears to be accurate. All equipment described in the DWWP appeared to be installed and operating on the date of this inspection.

Question ID	DWMR1023000	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Do records indicate that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a DWWP and/or MDWL issued under Part V of the SDWA at all times that water was being supplied to consumers?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under O. Reg. 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.

Treatment for a GUDI water source is required to achieve 2-log removal or inactivation of Cryptosporidium oocysts, a 3-log removal or inactivation of Giardia cysts and a 4-log removal or inactivation of viruses. These requirements are reportedly met by UV disinfection followed by chlorination using sodium hypochlorite for both primary and secondary disinfection purposes. According to Schedule E of the MDWL, the UV disinfection process is credited with 3 log Giardia cyst removal, 2 log Cryptosporidium oocyst removal and 2 log virus removal credits, with the UV disinfection process being fully operational and the applicable log removal/inactivation credit assignment criteria being met. The Chlorination disinfection process is credited with 2+ Virus log removal/inactivation credits, if the chlorination process meets MDWL Schedule E chlorination treatment criteria. Records reviewed indicate that the Amabel-Sauble Water

Treatment Plant was operated to achieve the necessary CT requirements and performance criteria for primary disinfection purposes during the inspection time period.

Question ID	DWMR1026000	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-6 | (1);

Question:
If primary disinfection equipment that does not use chlorination or chloramination is provided, is the equipment equipped with alarms or shut-off mechanisms that satisfy the standards described in Section 1-6 (1) of Schedule 1 of Ontario Regulation 170/03?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The primary disinfection equipment was equipped with alarms or shut-off mechanisms that satisfied the standards described in Section 1-6 (1) of Schedule 1 of O. Reg. 170/03.

Schedule E of the MDWL identifies that the UV disinfection system is credited with primary disinfection pathogen log removal/inactivation credits of 2 for Cryptosporidium Oocysts, 3 for Giardia Cysts and 2 for Viruses, provided that the treatment process is fully operational and log removal/inactivation credit assignment criteria is being met. Schedule C of the MDWL further identifies that the UV disinfection equipment at the Amabel-Sauble WTP shall maintain a minimum continuous pass-through UV dose of 40 mJ/cm2. To ensure that the above-referenced Schedule requirements are met, and that the UV disinfection system satisfies the standards described in Section 1-6 (1) of Schedule 1 of Ontario Regulation 170/03, SCADA alarm set points of Low 23.5 W/m2 and Low-Low 23.4 W/m2 are in place. The Trojan UV Swift B08 units installed at the Amabel Sauble WTP are capable of providing a 40 mJ/cm2 UV dosage at UV intensity of 19 W/m2 up to a maximum flow rate of 40 m3/hour or 11.1 L/s. The UV system alarm was set by the manufacturer to automatically call for the water treatment process to shut down if the UV intensity reaches 23.4 W/m2.

Question ID	DWMR1024000	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Do records confirm that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes was operated as required?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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.

Following completion of the intended chlorine contact time for primary disinfection purposes,

free available chlorine residual is maintained out and into the distribution system for secondary disinfection purposes to reduce the potential for microbial re-growth within the distribution system, and in accordance with section 1-2 of Schedule 1, O.Reg.170/03. During the inspection review time period, the free chlorine residual sample test results obtained/recorded by the OA in the distribution system exceeded the minimum distribution system chlorine residual regulatory limit of 0.05 mg/L.

Question ID	DWMR1033000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-2 | (3); SDWA | O. Reg. 170/03 | 7-2 | (4);

Question:
Is the secondary disinfectant residual measured as required for the large municipal residential distribution system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The secondary disinfectant residual was measured as required for the large municipal residential distribution system.

Subsections 7-2 (3) of Schedule 7, O.Reg.170/03 requires the Owner and OA of a large municipal residential system that provides secondary disinfection to ensure that at least seven distribution system samples are taken each week and tested immediately for free chlorine residual. Where secondary disinfection monitoring is not being done on a daily basis, Subsection 7-2(4) of Schedule 7. Reg.170/03 requires that at least four of the seven required tests be taken on one day of the week at least 48 hours after the last samples were taken the week previous; while the remaining three tests are required to be collected within the same week and at least 48 hours after the initial four. Records provided by OCWA and reviewed during the inspection indicate that the owner complied with these requirements by taking four tests taken on one day of the week, at least 48 hours after the last samples were taken the week previous, and an additional four tests collected within the same week and at least 48 hours after the initial four.

Question ID	DWMR1030000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-2 | (1); SDWA | O. Reg. 170/03 | 7-2 | (2);

Question:
Is primary disinfection chlorine monitoring being conducted at a location approved by MDWL and/or DWWP issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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.

Question ID	DWMR1032000	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-3 | (2);

Question:
If the drinking water system obtains water from a surface water source and provides filtration, is continuous monitoring of each filter effluent line being performed for turbidity?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Continuous monitoring of each filter effluent line was being performed for turbidity.

Question ID	DWMR1035000	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)1-4; SDWA | O. Reg. 170/03 | 6-5 | (1)5-10;

Question:
Are operators examining continuous monitoring test results and are they examining the results within 72 hours of the test?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.

Operators print off a daily report for review and confirm report reviews by signing and dating the reports. All daily report reviews are available in a binder maintained on site. Additionally, Operators record the daily review in the facility logbook confirming that they have reviewed the DWS data.

Question ID	DWMR1038000	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)1-4;

Question:
Is continuous monitoring equipment that is being utilized to fulfill O. Reg. 170/03 requirements 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?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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.

Question ID	DWMR1037000	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)1-4; SDWA | O. Reg. 170/03 | 6-5 | (1)5-10; SDWA | O. Reg. 170/03 | 6-5 | (1.1);

Question:
Are all continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or MDWL or DWWP or order, equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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.

The water treatment plant is equipped with continuous analyzers and alarms for free chlorine and turbidity. The SCADA system low alarm set point for the treated water chlorine analyzer is set at 0.60 mg\L, which, if triggered, activates the trim chlorination system to increase the chlorine concentration. If the chlorine residual lowers to 0.20 mg/L the SCADA system low low alarm is activated, notifies the operator, and locks out the DWS ensuring the system meets CT requirements. The SCADA system turbidity analyzer high alarm set point downstream of the filters is set at 0.30 NTU, which, if triggered, notifies the operator. The SCADA system turbidity analyzer high high alarm set point is set at 0.60 NTU, which, if triggered, notifies the operator and locks out the well pumps ceasing water production and prevents any adverse conditions.

Question ID	DWMR1040000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)1-4; SDWA | O. Reg. 170/03 | 6-5 | (1)5-10;

Question:
Are all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.

Routine analyzer maintenance, accuracy verification checks and calibrations are conducted by the operator(s) which are recorded in facility log books and monthly process and compliance status reports. Annual analyzer accuracy verification checks and calibrations were performed by SPD Sales Ltd. on May 26, 2023. Annual flow meters accuracy verification checks and calibrations were performed by IndusControl Incorporated on May 30, 2023.

Question ID	DWMR1108000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-5 | (1)1-4; SDWA | O. Reg. 170/03 | 6-5 | (1)5-10; SDWA | O. Reg. 170/03 | 6-5 | (1.1);

Question:
Where continuous monitoring equipment used for the monitoring of free chlorine residual, total chlorine residual, combined chlorine residual or turbidity, required by O. Reg. 170/03, an Order, MDWL, or DWWP issued under Part V, SDWA, has triggered an alarm or an automatic shut-off, did a qualified person respond in a timely manner and take appropriate actions?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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.

Question ID	DWMR1039000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-6 | (3);

Question:
If primary disinfection equipment that does not use chlorination or chloramination is provided, has the owner and operating authority ensured that the equipment has a recording device that continuously records the performance of the disinfection equipment?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner and operating authority ensured that the primary disinfection equipment had a recording device that continuously recorded the performance of the disinfection equipment.

Question ID	DWMR1109000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-6 | (1);

Question:
If the system uses equipment for primary disinfection other than chlorination or chloramination and the equipment has malfunctioned, lost power or ceased to provide the appropriate level of disinfection, causing an alarm or an automatic shut-off, did a qualified person respond in a timely manner and take appropriate actions?

Compliance Response(s)/Corrective Action(s)/Observation(s):
When failure(s) of primary disinfection equipment, other than that used for chlorination or chloramination, caused an alarm to sound or an automatic shut-off to occur, a certified operator responded in a timely manner and took appropriate actions.

Question ID	DWMR1042000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
If UV disinfection is used were duty sensors and reference UV sensors checked and calibrated as per the requirements of Schedule E of the MDWL or at a frequency as otherwise recommended by the UV equipment manufacturer?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All UV sensors were checked and calibrated as required.

Records provided by OCWA identify that duty UV sensors were checked monthly against a reference UV sensor, with the calibration ratio (intensity measured with the duty sensor/intensity measured with the reference UV sensor) documented to be less than or equal to 1.2, in compliance with Schedule E of the MDWL. Reference UV sensors shall be checked against a Master Reference Assembly at a minimum frequency of once every three years or on a more frequent basis depending upon the recommendations of the equipment manufacturer.

Question ID	DWMR1099000	**Question Type**	Information

Legislative Requirement(s):
Not Applicable

Question:
Do records show 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)?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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).

Question ID	DWMR1081000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 10-2 | (1); SDWA | O. Reg. 170/03 | 10-2 | (2); SDWA | O. Reg. 170/03 | 10-2 | (3);

Question:
For LMR systems, are all microbiological water quality monitoring requirements for distribution samples being met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All microbiological water quality monitoring requirements prescribed by legislation for distribution samples in a large municipal residential system were being met.

Section 10-2 of Schedule 10, O. Reg. 170/03, requires the Owner of a drinking-water system and the operating authority for the system shall ensure that, if the system serves 100,000 people or less, at least eight distribution samples, plus one additional distribution sample for every 1,000 people served by the system, are taken every month, with at least one of the samples being taken in each week and tested for Escherichia coli and total coliforms, with at least 25 per cent of the samples required to be taken are tested for general bacteria population expressed as colony counts on a heterotrophic plate count (HPC). This requirement has been met.

Question ID	DWMR1083000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 10-3;

Question:
For LMR systems, are all microbiological water quality monitoring requirements for treated samples being met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All microbiological water quality monitoring requirements prescribed by legislation for treated samples were being met.

Section 10-3 of Schedule 10, O.Reg.170/03 requires the Owner and the Operating Authority ensure samples are collected at least once every week from the system's treated water at the point of entry into the distribution system. The samples collected are required to be tested for E. Coli and total coliform,and general bacteria populations expressed as colony counts on a heterotrophic plate count. This requirement has been met.

Question ID	DWMR1096000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-3 | (1);

Question:
Do records confirm that chlorine residual tests are being conducted at the same time and at the same location that microbiological samples are obtained?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.

Question ID	DWMR1084000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-2;

Question:
Are all inorganic water quality monitoring requirements prescribed by legislation conducted

within the required frequency?

Compliance Response(s)/Corrective Action(s)/Observation(s):

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

Sampling and testing for inorganic parameters has been conducted for the drinking water system in accordance with Schedule 13-2 of Ontario Regulation 170/03. The regulation requires that samples are to be collected every 12 months and tested for each parameter listed in Schedule 23; this requirement has been met. The most recent samples were collected on January 3, 2023 and there were no concerns identified from the results.

Question ID	DWMR1085000	**Question Type**	Legislative

Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 13-4 | (1); SDWA | O. Reg. 170/03 | 13-4 | (2); SDWA | O. Reg. 170/03 | 13-4 | (3);

Question:

Are all organic water quality monitoring requirements prescribed by legislation conducted within the required frequency?

Compliance Response(s)/Corrective Action(s)/Observation(s):

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

Sampling and testing for organic parameters has been conducted for the drinking water system in accordance with Schedule 13-4 of Ontario Regulation 170/03. The regulation requires that samples are to be collected every 12 months and tested for each parameter listed in Schedule 24; this requirement has been met. The most recent samples were collected on January 3, 2023 and there were no concerns identified from the results.

Question ID	DWMR1086000	**Question Type**	Legislative

Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 13-6.1 | (1); SDWA | O. Reg. 170/03 | 13-6.1 | (2); SDWA | O. Reg. 170/03 | 13-6.1 | (3); SDWA | O. Reg. 170/03 | 13-6.1 | (4); SDWA | O. Reg. 170/03 | 13-6.1 | (5); SDWA | O. Reg. 170/03 | 13-6.1 | (6);

Question:

Are all haloacetic acid water quality monitoring requirements prescribed by legislation conducted within the required frequency and at the required location?

Compliance Response(s)/Corrective Action(s)/Observation(s):

All haloacetic acid water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location.

Section 13-6.1 (1)of Schedule 13, O.Reg.170/03 requires the Owner and the Operating Authority to ensure that at least one distribution sample is taken every 3 months from a point in the drinking water system's distribution system that is connected to the drinking water system, that is likely to have an elevated potential for the formation of Haloacetic Acids (HAAs), and tested for HAAs. Section 6-1.1 of Schedule 6, O.Reg.170/03 requires that these samples be taken at least 60 days, and not more than 120 days, after a sample was taken for that purpose in the previous three month period. The standard for HAAs is expressed as a Running Annual Average (RAA), where the RAA is defined as the average for quarterly HAAs results for a DWS. HAAs will generally form at the beginning of the distribution system. Sampling for the inspection period occurred on January 9 (8.1 ug/L), April 3 (6.9 ug/L) and July 4 (6.3 ug/L) and October 3, 2023 (<5.3 ug/L). The inspection review period RAA concentration for HAAs in the Amabel-Sauble DWS is 6.65 ug/L. The Ontario Drinking Water Quality Standard is a RAA concentration of 80 ug/L.

Question ID	DWMR1087000	**Question Type**	Legislative

Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 13-6 | (1); SDWA | O. Reg. 170/03 | 13-6 | (2); SDWA | O. Reg. 170/03 | 13-6 | (3); SDWA | O. Reg. 170/03 | 13-6 | (4); SDWA | O. Reg. 170/03 | 13-6 | (5); SDWA | O. Reg. 170/03 | 13-6 | (6);

Question:

Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?

Compliance Response(s)/Corrective Action(s)/Observation(s):

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, O.Reg.170/03 requires the Owner and the Operating Authority to ensure that at least one distribution sample is taken every 3 months from a point in the DWS distribution system, or in plumbing that is connected to the DWS, that is likely to have an elevated potential for the formation of Trihalomethanes (THMs), and tested for THMs. Section 6-1.1 of Schedule 6, O.Reg.170/03 requires that these samples be taken at least 60 days, and not more than 120 days, after a sample was taken for that purpose in the previous three month period. Sampling for the inspection period occurred on January 9 (35 ug/L), April 3 (38 ug/L), July 4 (22 ug/L) and October 3, 2023 (39 ug/L). The inspection review period RAA concentration for THMs in the Amabel-Sauble DWS is 33.5 ug/L. The Ontario Drinking Water Quality Standard is a RAA concentration of 100 ug/L.

Question ID	DWMR1088000	**Question Type**	Legislative

Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 13-7;

Question:

Are all nitrate/nitrite water quality monitoring requirements prescribed by legislation conducted

within the required frequency for the DWS?

Compliance Response(s)/Corrective Action(s)/Observation(s):

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

Section 13-7 of Schedule 13, O.Reg.170/03 requires the Owner and Operating authority to ensure that at least one water sample is taken every three months and tested for nitrates and nitrites. Section 6-1.1 of Schedule 6, O.Reg.170/03 requires that these samples be taken at least 60 days, and not more than 120 days, after a sample was taken for that purpose in the previous three month period. The Owner complied with these requirements when they conducted the required monitoring on January 9, April 3, July 4 and October 3, 2023. There were no concerns identified from the results.

Question ID	DWMR1089000	**Question Type**	Legislative

Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 13-8;

Question:

Are all sodium water quality monitoring requirements prescribed by legislation conducted within the required frequency?

Compliance Response(s)/Corrective Action(s)/Observation(s):

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

Section 13-8 of Schedule 13, O.Reg.170/03 requires that the Owner and the Operating Authority ensure that a treated water sample is taken every 60 months and is tested for sodium. The last sodium sample occurred on January 6, 2020 with a result of 14.3 mg\L. The next sodium sample is due in January 2025.

Question ID	DWMR1090000	**Question Type**	Legislative

Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 13-9;

Question:

Where fluoridation is not practiced, are all fluoride water quality monitoring requirements prescribed by legislation conducted within the required frequency?

Compliance Response(s)/Corrective Action(s)/Observation(s):

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

Section 13-9 of Schedule 13, O.Reg.170/03 requires the Owner and the Operating Authority to ensure that at least one water sample is taken every 60 months and tested for Fluoride. The last

Fluoride sample occurred on January 6, 2020 with a result of 1.35 mg/L. The next Fluoride sample is due in January 2025.

Question ID	DWMR1094000	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Are all water quality monitoring requirements imposed by the MDWL and DWWP being met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All water quality monitoring requirements imposed by the MDWL or DWWP issued under Part V of the SDWA were being met.

Wastewater from the backwash process for the iron and manganese filter system is discharged to a wastewater holding tank where suspended solids are permitted to settle. MDWL Schedule C, Table 3 identifies that the annual average concentration of Backwash Wastewater Facility Suspended Solids discharged from the holding tank shall not exceed 25 mg/L and the annual average concentration of total chlorine residual shall not exceed 0.02 mg/L. Table 7 identifies that Backwash Wastewater Suspended Solids and total chlorine residual parameters shall be comprised of manual composite samples taken monthly at the point of discharge from the filter backwash tank. During the inspection review period this requirement has been met. The reported annual average concentration of Backwash Wastewater Suspended Solids during the inspection time period did not exceed 25 mg/L and the annual average concentration of total chlorine residual did not exceed 0.02 mg/L.

Question ID	DWMR1101000	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 17-1; SDWA | O. Reg. 170/03 | 17-10 | (1); SDWA | O. Reg. 170/03 | 17-11; SDWA | O. Reg. 170/03 | 17-12; SDWA | O. Reg. 170/03 | 17-13; SDWA | O. Reg. 170/03 | 17-14; SDWA | O. Reg. 170/03 | 17-2; SDWA | O. Reg. 170/03 | 17-3; SDWA | O. Reg. 170/03 | 17-4; SDWA | O. Reg. 170/03 | 17-5; SDWA | O. Reg. 170/03 | 17-6; SDWA | O. Reg. 170/03 | 17-9;

Question:
For LMR Systems, have corrective actions (as per Schedule 17 of O. Reg. 170/03) been taken to address adverse conditions, including any other steps as directed by the Medical Officer of Health?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Corrective actions (as per Schedule 17), including any other steps that were directed by the Medical Officer of Health, had been taken to address adverse conditions.

On April 4, 2023, OCWA reported AWQI No. 161668 to the MECP SAC and the Grey Bruce

Health Unit concerning an adverse distribution system lead exceedance test result (10.1 mg/L, exceeding the Ontario Regulation 169/03: Ontario Drinking Water Standards Maximum Allowable Concentration of 10 mg/L). Ontario Regulation 170/03, Schedule 17, Corrective Actions in respect of a chemical parameter set out in Schedule 2 or 3 to the Ontario Drinking Water Quality Standards identifies that the owner of the drinking water system and the operating authority for the system shall ensure that the following corrective action is taken:
1. Subject to subsection (2), resample and test as soon as reasonably possible.
2. If a concentration that exceeds the standard prescribed for the parameter by Schedule 2 or 3 to the Ontario Drinking Water Quality Standards is detected under paragraph 1, take such other steps as are directed by the medical officer of health.

The results of a lead resample taken by OCWA was made available on April 14, 2023, and tested 0.09 mg/L, satisfying the regulatory Corrective Actions requirements. No other steps as are directed by the medical officer of health concerning the above AWQI were identified.

Question ID	DWMR1103000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 15.1-10;

Question:
Have corrective actions as directed by the Medical Officer of Health been taken by the owner and operating authority to address exceedances of the lead standard in plumbing?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Corrective actions as directed by the Medical Officer of Health had been taken by the owner and operating authority to address exceedances of the lead standard.

On April 4, 2023, OCWA reported AWQI No. 161668 to the MECP SAC and the Grey Bruce Health Unit concerning an adverse distribution system lead exceedance test result (10.1 mg/L, exceeding the Ontario Regulation 169/03: Ontario Drinking Water Standards Maximum Allowable Concentration of 10 mg/L). Ontario Regulation 170/03, Schedule 17, Corrective Actions were undertaken as described previously. No other steps as are directed by the medical officer of health concerning the above AWQI were identified.

Question ID	DWMR1104000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 16-6 | (1); SDWA | O. Reg. 170/03 | 16-6 | (2); SDWA | O. Reg. 170/03 | 16-6 | (3); SDWA | O. Reg. 170/03 | 16-6 | (3.1); SDWA | O. Reg. 170/03 | 16-6 | (3.2); SDWA | O. Reg. 170/03 | 16-6 | (4); SDWA | O. Reg. 170/03 | 16-6 | (5); SDWA | O. Reg. 170/03 | 16-6 | (6);

Question:
Were all required verbal notifications of adverse water quality incidents immediately provided as per O. Reg. 170/03 16-6?

Compliance Response(s)/Corrective Action(s)/Observation(s):

All required notifications of adverse water quality incidents were immediately provided as per O. Reg. 170/03 16-6.

Question ID	DWMR1059000	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 28;

Question:
Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.

Question ID	DWMR1060000	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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.

Question ID	DWMR1061000	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 27 | (1); SDWA | O. Reg. 128/04 | 27 | (2); SDWA | O. Reg. 128/04 | 27 | (3); SDWA | O. Reg. 128/04 | 27 | (4); SDWA | O. Reg. 128/04 | 27 | (5); SDWA | O. Reg. 128/04 | 27 | (6); SDWA | O. Reg. 128/04 | 27 | (7);

Question:
Are logbooks properly maintained and contain the required information?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Logbooks were properly maintained and contained the required information.

Question ID	DWMR1062000	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-5;

Question:
Do records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment is being done by a certified operator, water quality analyst, or person who meets the requirements of O. Reg. 170/03 7-5?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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.

Question ID	DWMR1071000	**Question Type**	BMP

Legislative Requirement(s):
Not Applicable

Question:
Has the owner provided security measures to protect components of the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner had provided security measures to protect components of the drinking water system.

Perimeter fencing with a lockable access gate surrounds the pump house and treatment facility which has lockable doors and is equipped with an intruder alarm and signage restricting access to the site. Wells PW1 and PW2 are locked and have perimeter fencing and lockable access gates restricting access to the wells. The Winburk well, although not fenced, is locked. At the time of inspection there was no reported unauthorized access, vandalism and/or cyber security issues impacting the DWS.

Question ID	DWMR1073000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 23 | (1);

Question:
Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The overall responsible operator had been designated for each subsystem.

The ORO for the Amabel-Sauble DWS is James Learn, with back-up being provided by Billy Shearer.

Question ID	DWMR1074000	**Question Type**	Legislative

Legislative Requirement(s):

SDWA | O. Reg. 128/04 | 25 | (1);

Question:
Have operators-in-charge been designated for all subsystems which comprise the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Operators-in-charge had been designated for all subsystems which comprise the drinking water system.

Question ID	DWMR1075000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 22;

Question:
Do all operators possess the required certification?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All operators possessed the required certification.

Operator certification is posted at the water treatment plant where the drinking water subsystems are managed. Operator certification was verified, and all operators were in possession of valid certificates.

Question ID	DWMR1076000	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Do only certified operators make adjustments to the treatment equipment?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Only certified operators made adjustments to the treatment equipment.