

**Ministry of Environment,
Conservation and Parks**
*Drinking Water and Environmental
Compliance Division*

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**Ministère de l'Environnement,
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December 30, 2024

Attention: Josh Kavanagh Township of Ramara

Re: 2024 Drinking Water Inspection Report Davy Drive

Please find enclosed the Ministry of the Environment, Conservation and Parks Inspection Report Davy Drive (Drinking Water System # : 220007141) inspection. The compliance assessment took place on August 28, 2024.

The primary focus of this inspection was to confirm compliance with Ministry of the Environment, Conservation and Parks legislation and control documents, as well as conformance with Ministry drinking water related policies for the inspection period. The Ministry is implementing a rigorous and comprehensive approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as water system management practices.

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 Councils" found under "Resources" on the Drinking Water Ontario website at www.ontario.ca/drinkingwater.

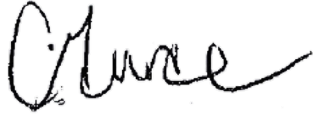
In order to measure individual inspection results, the Ministry has established an inspection compliance risk framework based on the principles of the Inspection, Investigation & Enforcement (II&E) Secretariat and advice of internal and risk experts.

The Inspection Summary Rating Record (IRR), included as Appendix A of the inspection report, provides the Ministry, the system owner and the associated Public Health Units with a summarized quantitative measure of the drinking water system's annual inspection and regulated water quality testing performance. IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water Inspector's Annual Report.

If you have any questions or concerns regarding the rating, please contact Aaron Mattson, Drinking Water Program Supervisor, at 1 (705) 791-6359.

If you have any questions or concerns regarding this inspection report, please contact the undersigned.

Carly Munce

A handwritten signature in black ink, appearing to read "Carly Munce". The signature is written in a cursive style with a large initial "C" and a long horizontal stroke at the end.



DAVY DRIVE SUBDIVISION DRINKING WATER SYSTEM

Physical Address: 7230 DAVY DR, , RAMARA, ON
L0K 2B0

INSPECTION REPORT

System Number: 220007141
Entity: CORPORATION OF THE
TOWNSHIP OF RAMARA
Inspection Start Date: August 28, 2024
Site Inspection Date: August 28, 2024
Inspection End Date: December 23, 2024
Inspected By: Carly Munce
Badge #: 1945

Carly Munce
(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	DWMR1007001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (1)1;			
Question: Was 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. Subsection 1-2. (1) 1. of Schedule 1 of Ontario Regulation 170/03 requires that the owner of a drinking water system shall ensure that any well that serves as an entry point of raw water supply is constructed and maintained to prevent surface water and other foreign materials from entering the well. There are four supply wells for Davy Drive Subdivision Drinking Water System. Each of the wells has a secure cap and screened vent. Well 1 is located in the pumphouse and the other three wells are located outside on the pumphouse property. Notices are posted that the area is a well head protection zone. The Operating Authority performs monthly inspections of the wells and more extensive maintenance and inspections are regularly scheduled. Raw water samples were collected from each well monthly during the inspection review period. Ground is sloped away from wells so no pooling or ponding.			

Question ID	DWMR1009001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were measures in place to protect the groundwater and/or GUDI source in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Measures were in place to protect the groundwater and/or GUDI source. Condition 16.2.8 of Schedule B of Municipal Drinking Water Licence 147-106 Issue Number 5 requires an inspection schedule for all wells associated with the drinking water system, including all production wells, standby wells, test wells and monitoring wells. Condition 16.2.9 of Schedule B of Municipal Drinking Water Licence 147-106 Issue Number			

5 requires well inspection and maintenance procedures for the entire well structure of each well including all above and below grade well components. Condition 16.2.10 of Schedule B of Municipal Drinking Water Licence 147-106 Issue Number 5 requires remedial action plans for situations where an inspection indicates noncompliance with respect to regulatory requirements and/or risk to raw well water quality. The Operating Authority has developed a Well Inspection, Maintenance and Monitoring Plan. The Plan outlines the steps for performing monthly well inspections, monthly water level monitoring and inspections of unexposed well structure. The indicators of the well casing being potentially compromised and infiltration of surface contamination are outlined. Monthly well inspections were documented in the Davy Drive logbook during the inspection review period.

Question ID	DWMR1014001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Was flow monitoring performed as required by the Municipal Drinking Water Licence or Drinking Water Works Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Flow monitoring was performed as required. Condition 2.1 of Schedule C of Municipal Drinking Water Licence 147-106 Issue Number 5 requires that for each treatment subsystem, continuous flow measurement and recording shall be undertaken for the flow rate and daily volume of treated water that flows from the treatment subsystem to the distribution system, and the flow rate and daily volume of water that flow into the treatment subsystem. There is a magnetic flow meter installed on each of the four raw water lines, as well as on the combined raw water header, and a magnetic flow meter installed on the distribution header. Each of the flow meters provides a 4-20 mA signal. Raw and treated water flows are continuously recorded on the SCADA system.			

Question ID	DWMR1016001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Was the owner in compliance with the conditions associated with maximum flow rate or the rated/operational capacity in the Municipal Drinking Water Licence?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner was in compliance with the conditions associated with maximum flow rate and/or the rated/operational capacity conditions. Table 1 of Schedule C of Municipal Drinking Water Licence 147-106 Issue Number 5 states that the rated capacity for Davy Drive Water Works is 75.69 m3/day. This			

value was not exceeded during the inspection review period. There is no maximum flow rate identified in Table 2 of Schedule C of the Licence.

Question ID	DWMR1018001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Did the owner ensure that equipment was 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 ensured that equipment was installed as required. Table 1 of Schedule C of Municipal Drinking Water Licence 147-106 Issue Number 5 states that the rated capacity for Davy Drive Water Works is 75.69 m3/day. This value was not exceeded during the inspection review period. There is no maximum flow rate identified in Table 2 of Schedule C of the Licence.			

Question ID	DWMR1021001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were Form 2 documents prepared as required?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Form 2 documents were prepared as required. The replacement of one high lift pump with like-for-like specifications. The alterations met the requirements of the conditions listed in Schedule B Condition 4.4 of DWWP 147-206.			

Question ID	DWMR1025001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were all parts of the drinking water system that came in contact with drinking water disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All parts of the drinking water system were disinfected as required. Section 2.3 of Schedule B of Drinking Water Works Permit 147-206 Issue Number 5 states that all parts of the drinking water system in contact with drinking water that are added,			

modified, replaced, extended shall be disinfected in accordance with a procedure approved by the Director or in accordance with the applicable provisions of the following documents:

- a) Until August 3, 2022 the ministry's Watermain Disinfection Procedure, dated November 2015. As of August 4, 2022 the ministry's Watermain Disinfection Procedure, dated August 1, 2020.
- b) Subject to condition 2.3.2, any updated version of the ministry's Watermain Disinfection Procedure;
- c) AWWA C652 – Standard for Disinfection of Water-Storage Facilities;
- d) AWWA C653 – Standard for Disinfection of Water Treatment Plants; and
- e) AWWA C654 – Standard for Disinfection of Wells.

The Operating authority has developed a Standard Operating Procedure (SOP) for disinfection of drinking water system components. The SOP states that the required standards are to be followed as per the Drinking Water Works Permit.

Question ID	DWMR1023001	Question Type	Legislative
<p>Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (2);</p>			
<p>Question: Did records indicate that the treatment equipment was operated in a manner that achieved the design capabilities prescribed by O. Reg. 170/03, Drinking Water Works Permit and/or Municipal Drinking Water Licence at all times that water was being supplied to consumers?</p>			
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities prescribed.</p> <p>Primary disinfection for the Davy Drive Subdivision Drinking Water System is achieved by UV inactivation and sodium hypochlorite injection. Sodium hypochlorite is also used for secondary disinfection. In efforts to ensure minimum treatment is provided at all times, a series of fail safes have been incorporated into the SCADA system. Internal alarms based on the UV sensors will close the solenoid valve associated with each of the two UV units if the required dosage is not being provided. Dosage is calculated based on the measured UV transmittance (UVT) and UV intensity which is calculated based on the measured voltage. The UV transmittance and UV intensity will cause alarms if either value is below the setpoint. For UVT the alarm setpoint is 75%. The manufacturer indicated that there is an accuracy of +/- 5% for the UVT sensor. The units NSF certification is based on a level of 70% UVT so a threshold of 75% was chosen to account for the accuracy range. The intensity alarm setpoint is 70% for an audible alarm and notifies Operators that the lamp is nearing the end of life. At 60% UV intensity the Operator would be called out and the solenoid valve would close. The chlorine residual alarm set point is at a level intended to afford an operator time to respond prior to disinfection being compromised. Schedule E of Municipal Drinking Water Licence 147-106 Issue Number 5 indicates that UV disinfection accounts for 2 log inactivation of Cryptosporidium Oocysts, 3 log inactivation of</p>			

Giardia Cysts and 2 log inactivation of viruses. Chlorination is accredited with 2+ log removal of viruses. The one micron absolute cartridge filters are not accredited with any removal credits in the Licence.

The Procedure for Disinfection of Drinking Water in Ontario indicates that in order for Cartridge filters to claim the 2.0 log cryptosporidium oocyst removal credit, the cartridge bag filters should normally meet the performance criterion for filtered water turbidity to be continuously monitored for less than 1 NTU. of the measurements each month. This criteria was met for each of the filter trains during the inspection review period.

In order to determine if primary disinfection was achieved at the Davy Drive Subdivision Drinking Water System during the inspection review period, flow rates, free chlorine residuals, turbidity values, UV dosage values, UV intensity values, UV transmittance values, sample results and the logsheets were reviewed. These records indicate that during the inspection review period the treatment equipment was operated as required to achieve the disinfection requirements.

Question ID	DWMR1026001	Question Type	Legislative
<p>Legislative Requirement(s): SDWA O. Reg. 170/03 1-6 (2);</p>			
<p>Question: If primary disinfection equipment did not use chlorination or chloramination, was the equipment equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 1-6 of O. Reg. 170/03?</p>			
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): Primary disinfection equipment was equipped with alarms or shutoff mechanisms that satisfied the standards.</p> <p>Subsection 1-6. (1) of Schedule 1 of Ontario Regulation 170/03 requires that if primary disinfection equipment that does not use chlorination or chloramination is provided by a drinking water system, the owner of the system and the operating authority for the system shall ensure that the disinfection equipment is designed and operated in accordance with the standards described in subsection (2), or that,</p> <p>(a) the disinfection equipment has a feature that ensures that no water is directed to users of water treated by the equipment in the event that the equipment malfunctions, loses power or ceases to provide the appropriate level of disinfection; and</p> <p>(b) if the disinfection equipment malfunctions, loses power or ceases to provide the appropriate level of disinfection, a certified operator takes appropriate action at the location where the equipment is installed before water is again directed to users of water treated by the equipment.</p> <p>The two NSF certified Hallet 30 UV units that provide primary disinfection for the Davy Drive Subdivision Drinking Water System are each equipped with a solenoid valve that will shut down the supply of water in the event that the UV dosage drops below that required for primary disinfection. There is a lamp UV sensor and a water UV sensor in each of the UV units. In the event that the UV transmittance or intensity drops below the minimum set point, the wiper blade is initiated to try and rectify the issue. If after the wiper blade passes</p>			

over the quartz sleeve the readings are not above the minimum set points, an alarm is sent to the on-call Operator who is able to check the system remotely with his or her phone, and the solenoid valve closes. While the wiper blade is cleaning, the lowest UV transmittance value is held by the sensor and recorded. Operators attend the site in the event of an alarm. The standpipe provides approximately 1.5 days of storage, so that supply to consumers is not interrupted in the event that the solenoid valves associated with a UV units close. The function of the solenoid valves is tested every month. As the operators found the scheduled 3 months suggested by the manufacture was causing issues by 2 months .

Question ID	DWMR1024001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (2);			
Question: Did records confirm that the water treatment equipment which provides chlorination or chloramination for secondary disinfection 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 was operated as required. 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. Lowest free residual during inspection was was 0.38mg/L.			

Question ID	DWMR1034001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-2 (5); SDWA O. Reg. 170/03 7-2 (6);			
Question: Was secondary disinfectant residual tested as required for the small municipal residential distribution system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Secondary disinfectant residual was tested as required. Subsection 7-2 (5) of Schedule 7 of Ontario Regulation 170/03 requires that the owner of a small municipal residential system that provides secondary disinfection and the operating authority for the system shall ensure that at least two distribution samples are taken each week in accordance with subsection (6) and are tested immediately for free chlorine residual, if the system provides chlorination and does not provide chloramination.			

Question ID	DWMR1030001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-2 (1); SDWA O. Reg. 170/03 7-2 (2);			
Question: Was primary disinfection chlorine monitoring being conducted at a location approved by Municipal Drinking Water Licence and/or Drinking Water Works Permit or at/near a location where the intended CT had just been achieved?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Primary disinfection chlorine monitoring was conducted as required. Schedule E of Municipal Drinking Water Licence 147-106 Issue Number 5 indicates that 2+ log removal/inactivation credits are achieved by chlorination in the standpipe. A continuous chlorine analyser is fed sample water after the standpipe, prior to entering the distribution system. The chlorine analyser is equipped with alarm capabilities for high and low levels, as indicated in the Instrument and Control section of Schedule A of Drinking Water Works Permit 147-206 issue Number 5.			

Question ID	DWMR1032001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-3 (2);			
Question: If the drinking water system obtained water from a surface water source and provided filtration, was continuous monitoring of each filter effluent line performed for turbidity?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Continuous monitoring of each filter effluent line was performed for turbidity. One well is a GUDI well and the three others are ground water. Therefore turbidity was monitored on each filter effluent line.			

Question ID	DWMR1035001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4;			
Question: Were operators examining continuous monitoring test results and did they examine the results within 72 hours of the test?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators were examining continuous monitoring test results as required. Subsection 6-5. (1) 3. of Schedule 6 of Ontario Regulation 170/03 requires that test results recorded under paragraph 1 or 2 must be			

examined, within 72 hours after the tests are conducted by a certified operator, in the case of, a small municipal residential system, such as Davy Drive Subdivision Drinking Water System.

During the inspection review period records indicate that trending data was reviewed within 72 hours of the test being conducted. Operators are able to log on remotely to view the continuous analyser data. The Operating Authority has developed a Standard Operating Procedure for how Operators are to complete the review of continuous monitoring data.

Question ID	DWMR1038001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4;			
Question: Was continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements performing tests for the parameters with at least the minimum frequency 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 and recording data with the prescribed format.			

Question ID	DWMR1037001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)5-10; SDWA O. Reg. 170/03 6-5 (1.1);			
Question: Were 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, equipped with alarms or shut-off mechanisms that satisfied the standards described in Schedule 6?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All required continuous monitoring equipment utilized for sampling and testing were equipped with alarms or shut-off mechanisms that satisfied the standards In the event that the continuous chlorine or turbidity analysers record a value below or above the set points an alarm is sent to an Operator. The setpoints exceed the requirements of the Table in Schedule 6 of Ontario Regulation 170/03. The low chlorine alarm setpoint is at a level high enough to try and afford an operator enough time to respond before primary disinfection is compromised. Operators regularly test the chlorine and turbidity alarms to ensure they are functioning properly.			

Question ID	DWMR1040001	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: Were 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 as required. Annually a third party performs calibrations on the continuous analysers. Operators change probes and electrolyte as required. Operators make comparisons of the continuous analysers with handheld units regularly and make adjustments when the difference is more than approximately 0.2mg/L.			

Question ID	DWMR1108001	Question Type	Legislative
Legislative Requirement(s): 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, Municipal Drinking Water Licence, Drinking Water Works Permit, or order triggered an alarm or an automatic shut-off, did a qualified person respond as required and take appropriate actions?			
Compliance Response(s)/Corrective Action(s)/Observation(s): A qualified person responded as required and took appropriate actions.			

Question ID	DWMR1039001	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 was used, did the owner and operating authority ensure the equipment had a recording device that continuously recorded 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. The two UV units installed for primary disinfection at Davy Drive Subdivision Drinking Water System continuously record intensity and transmittance which are calculated based on the voltage. The UV dosage is also recorded, calculated with the real time intensity and			

transmittance values.

Question ID	DWMR1109001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-6 (1); SDWA O. Reg. 170/03 1-6 (2);			
Question: If the system used equipment for primary disinfection other than chlorination or chloramination and the equipment malfunctioned, lost power, or ceased to provide the appropriate level of disinfection, causing an alarm or an automatic shut-off, did a certified operator respond as required and take appropriate actions?			
Compliance Response(s)/Corrective Action(s)/Observation(s): A certified operator responded as required and took appropriate actions. 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. Primary disinfection is achieved for the Davy Drive Subdivision Drinking Water System through ultraviolet inactivation following cartridge filtration, and chlorination. During the inspection period there were alarms and Operators took appropriate action in a timely manner.			

Question ID	DWMR1042001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: If UV disinfection was used, were duty sensors and reference UV sensors checked and calibrated as per the requirements of Schedule E of the Municipal Drinking Water Licence 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. Schedule E of Municipal Drinking Water Licence 147-106 Issue Number 5 states that in order for UV disinfection to be able to claim the log removal credits outlined in the Schedule E table the following criteria must be met for the duty sensor checks and calibration: 1. Duty UV sensors shall be checked on at least once every 720 hours of run time against a reference UV sensor or at a frequency as otherwise recommended by the UV equipment manufacturer; 2. When comparing a duty UV sensor to a reference UV sensor, the calibration ratio (intensity measured with the duty UV sensor/intensity measured with the reference UV sensor) shall be less than or equal to 1:2; 3. If the calibration ratio is greater than 1:2, the duty UV sensor shall be replaced with a			

calibrated UV sensor or a UV sensor correction factor shall be applied while the problem with the UV sensor is being resolved; 4. 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.

The manufacturer of the UV units installed at Davy Drive Subdivision Drinking Water System recommends that the UV sensors be calibrated once per year. It should be noted that in the event of a drift from the factory calibration the sensor would only drift downwards, resulting in premature alarms rather than a risk to disinfection requirements not being met without alarms being initiated.

The Operating Authority has the UV sensors calibrated annually by the equipment manufacturer. During the inspection review period the sensors for both UV units were replaced by ones calibrated by the manufacturer in July 2022.

Question ID	DWMR1099001	Question Type	Information
Legislative Requirement(s): Not Applicable			
Question: Do records show that water provided by the drinking water system met the Ontario Drinking Water Quality Standards?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Records showed that all water sample results met the Ontario Drinking Water Quality Standards.			

Question ID	DWMR1082001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 11-2 (1); SDWA O. Reg. 170/03 11-2 (2); SDWA O. Reg. 170/03 11-2 (6);			
Question: Were distribution microbiological sampling requirements prescribed by Schedule 11-2 of O. Reg. 170/03 for small municipal residential systems met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Distribution microbiological sampling requirements were met.			
Section 11-2 of Schedule 11 of Ontario Regulation 170/03 requires that the owner of a drinking water system and the operating authority for the system ensure that at least one distribution sample is taken every two weeks, if the system provides treatment equipment in accordance with Schedule 1 or 2 and the equipment is operated in accordance with that Schedule, and ensure that each of the samples taken is tested for Escherichia coli, total coliforms and general bacteria population expressed as colony counts on a heterotrophic			

plate count (HPC) if secondary disinfection is provided.
A distribution sample was collected every two weeks during the inspection review period and tested for the required parameters.

Question ID	DWMR1096001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-3 (1);			
Question: Did records confirm that chlorine residual tests were conducted at the same time and location as microbiological samples?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Records confirmed that chlorine residual tests were conducted as required.			

Question ID	DWMR1084001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-2;			
Question: Were inorganic parameter sampling requirements prescribed by Schedule 13-2 of O. Reg. 170/03 met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Inorganic parameter sampling requirements were met. Subsection 13-2 (3) of Schedule 13 of Ontario Regulation 170/03 requires that the owner of a small municipal residential system and the operating authority for the system shall ensure that, at least one water sample is taken every 60 months and tested for every parameter set out in Schedule 23. During the inspection review period treated water samples were tested for all Schedule 23 parameters on August 7, 2024. Prior to that treated water samples were tested for all Schedule 23 parameters on August 19, 2019.			

Question ID	DWMR1085001	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: Were organic parameter sampling requirements prescribed by Schedule 13-4 of O. Reg. 170/03 met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Organic parameter sampling requirements were met.			

Subsection 13-4 (3) of Schedule 13 of Ontario Regulation 170/03 requires that the owner of a small municipal residential system and the operating authority for the system shall ensure that, at least one water sample is taken every 60 months and tested for every parameter set out in Schedule 24.

During the inspection review period treated water samples were tested for all Schedule 24 parameters on August 7, 2024. Prior to that treated water samples were tested for all Schedule 24 parameters on August 21, 2019.

Question ID	DWMR1086001	Question Type	Legislative
<p>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);</p>			
<p>Question: Were haloacetic acid sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?</p>			
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): Haloacetic acid sampling requirements were met.</p> <p>Section 13-6.1 of Schedule 13 of Ontario Regulation 170/03 requires that 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 (HAA), and have the samples tested for haloacetic acids.</p> <p>The standard of 0.80 mg/L for HAA as a reportable limit came into effect on January 1, 2020. During the inspection review period sample were collected from the Davy Drive Subdivision distribution system on a monthly frequency requested in 2023 inspection report due to the exceedance and the trending high individual sample results until they had 2 or more RAA below the 80ug/L. The two most recent RAA was 58.5 ug/L for Q2 2024 and 54.5 ug/L for Q3 2024 which is below the 80ug/L limit. Therefore Davy Drive DWs can go back to quarterly sampling.</p>			

Question ID	DWMR1087001	Question Type	Legislative
<p>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);</p>			
<p>Question: Were trihalomethane sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?</p>			

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

Trihalomethane sampling requirements were met.

Section 13-6 of Schedule 13 of Ontario Regulation 170/03 requires that 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 trihalomethanes (THMs). The samples are to be tested for THMs.

During the inspection review period samples were collected and tested for THMs from the Davy Drive Subdivision distribution system in November 6, 2023 , and February 5, May 6, and August 7, of 2024 as required.

Question ID	DWMR1088001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-7;			
Question: Were nitrate/nitrite sampling requirements prescribed by Schedule 13-7 of O. Reg. 170/03 met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Nitrate/nitrite sampling requirements were met.			
Section 13-7 of Schedule 13 of Ontario Regulation 170/03 requires that the owner of a drinking water system and the operating authority for the system shall ensure that at least one water sample is taken every three months and tested for nitrate and nitrite.			
During the inspection review period samples tested for nitrate and nitrite were collected from the treated water point of entry for Davy Drive Subdivision Drinking Water System as required November 6, 2023 , and February 5, May 6, and August 7, of 2024 as required.			

Question ID	DWMR1089001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-8;			
Question: Were sodium sampling requirements prescribed by Schedule 13-8 of O. Reg. 170/03 met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Sodium sampling requirements were met.			
Section 13-8 of Schedule 13 of Ontario Regulation 170/03 requires that the owner of a drinking water system and the operating authority for the system shall ensure that at least one water sample is taken every 60 months and tested for sodium. Section 6-1.1 (7) of Schedule 6 of Ontario Regulation 170/03 states that if this Regulation requires at least one water sample			

to be taken every 60 months and tested for a parameter, the owner of the drinking water system and the operating authority for the system shall ensure that at least one sample that is taken during a 60-month period and for the purpose of being tested for that parameter is taken not more than 90 days before or after the fifth anniversary of the day a sample was taken for that purpose in the previous 60-month period.

The most recent treated water sample tested for sodium was collected on August 12, 2020 from the Davy Drive Subdivision Drinking Water System with a result of 25.2 mg/L. A resample was collected to be tested for sodium on August 24, 2020 with a result of 23.4mg/L. Sodium results greater than 20 mg/L are an ongoing occurrence for the Davy Drive Subdivision Drinking Water System.

Question ID	DWMR1090001	Question Type	Legislative
<p>Legislative Requirement(s): SDWA O. Reg. 170/03 13-9;</p>			
<p>Question: Where fluoridation is not practiced, were fluoride sampling requirements prescribed by Schedule 13-9 of O. Reg. 170/03 met?</p>			
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): Fluoride sampling requirements were met.</p> <p>Section 13-9 of Schedule 13 of Ontario Regulation 170/03 requires that if a drinking water system does not provide fluoridation, the owner of the system and the operating authority for the system shall ensure that a water sample is taken at least once every 60 months and tested for fluoride. Section 6-1.1 (7) of Schedule 6 of Ontario Regulation 170/03 states that if this Regulation requires at least one water sample to be taken every 60 months and tested for a parameter, the owner of the drinking water system and the operating authority for the system shall ensure that at least one sample that is taken during a 60-month period and for the purpose of being tested for that parameter is taken not more than 90 days before or after the fifth anniversary of the day a sample was taken for that purpose in the previous 60-month period.</p> <p>A treated water sample was collected on August 3, 2022 and tested for fluoride. Prior to that a sample was collected on August 15, 2017, from the treated water sample point at Davy Drive Subdivision Drinking Water System and tested for fluoride.</p>			

Question ID	DWMR1104001	Question Type	Legislative
<p>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);</p>			

<p>Question: Were immediate verbal notification requirements for adverse water quality incidents met?</p>
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): Immediate verbal notification requirements for adverse water quality incidents were met.</p>

Question ID	DWMR1113001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 10.1 (3);			
Question: Were changes to the system registration information provided to the ministry within ten (10) days of the change?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Changes to the system registration information were provided as required.			

Question ID	DWMR1060001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Did the operations and maintenance manual(s) meet the requirements of the Municipal Drinking Water Licence?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The operations and maintenance manual(s) met the requirements of the Municipal Drinking Water Licence. Section 16.2 of Schedule B of Municipal Drinking Water Licence 147-106 Issue Number 5 requires that the operations and maintenance manual or manuals, shall include at a minimum: 16.2.1 The requirements of this licence and associated procedures; 16.2.2 The requirements of the drinking water works permit for the drinking water system; 16.2.3 A description of the processes used to achieve primary and secondary disinfection within the drinking water system, including where applicable: a) A copy of the CT calculations that were used as the basis for primary disinfection under worst case operating conditions and other operating conditions, if applicable; and b) The validated operating conditions for UV disinfection equipment, including a copy of the validation certificate; 16.2.4 Procedures for monitoring and recording the in-process parameters necessary for the control of any treatment subsystem and for assessing the performance of the drinking water system;			

16.2.5 Procedures for the operation and maintenance of monitoring equipment;
 16.2.6 Contingency plans and procedures for the provision of adequate equipment and material to deal with emergencies, upset conditions and equipment breakdown;
 16.2.7 Procedures for dealing with complaints related to the drinking water system, including the recording of the nature of the complaint and any investigation and corrective action taken in respect of the complaint;
 16.2.8 An inspection schedule for all wells associated with the drinking water system, including all production wells, standby wells, test wells and monitoring wells;
 16.2.9 Well inspection and maintenance procedures for the entire well structure of each well including all above and below grade well components; and
 16.2.10 Remedial action plans for situations where an inspection indicates non-compliance with respect to regulatory requirements and/or risk to raw well water quality.
 The Davy Drive Water Works Operations and Maintenance Manual and Contingency and Emergency Plan meet the requirements of the Municipal Drinking Water Licence.

Question ID	DWMR1062001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-5;			
Question: Did records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment was done by a certified operator, water quality analyst, or person who met the requirements of Schedule 7-5 of O. Reg. 170/03?			
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 done by a certified operator, water quality analyst, or person who met the requirements of Schedule 7-5 of O. Reg. 170/03.			

Question ID	DWMR1071001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Did the owner provide security measures to protect components of the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner provided security measures to protect components of the drinking water system. The pumphouse which houses the treatment equipment for the Davy Drive Subdivision Drinking Water System is locked and alarmed for forced entry. The pumphouse property is fenced. The four wells and the sample stations are kept locked. There are no other storage structures within the distribution system. The Operating Authority has developed a standard operating procedure to be followed in the event of a			

security breach.

Question ID	DWMR1073001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 23 (1);			
Question: Was an overall responsible operator designated for all subsystems which comprise the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): An overall responsible operator was designated for all subsystem. The Davy Drive Subdivision Drinking Water System is comprised of a Water Distribution Class 1 and Water Treatment Class 2 subsystem. The Overall Responsible Operator is designated for both of the subsystems. The Operator acting as the ORO is indicated in the electronic logbook on each day that entries are made.			

Question ID	DWMR1074001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 25 (1);			
Question: Were operators-in-charge designated for all subsystems which comprise the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators-in-charge were designated for all subsystems. The Davy Drive Subdivision Drinking Water System is comprised of a Water Distribution Class 1 and Water Treatment Class 2 subsystem. The Operators In Charge (OIC) are designated for both of the subsystems. The Operator acting as the OIC is indicated in the electronic logbook on each day that entries are made.			

Question ID	DWMR1075001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 22;			
Question: Were all operators certified as required?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All operators were certified as required.			

Question ID	DWMR1076001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (2);			
Question: Were adjustments to the treatment equipment only made by certified operators?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Adjustments to the treatment equipment were only made by certified operators.			

Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2024-25)

DWS Name:	DAVY DRIVE SUBDIVISION DRINKING WATER SYSTEM
DWS Number:	220007141
DWS Owner:	CORPORATION OF THE TOWNSHIP OF RAMARA
Municipal Location:	RAMARA
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Focused
Compliance Assessment Start Date:	Aug-28-2024
Ministry Office:	Barrie District Office

Maximum Risk Rating: 525

Inspection Module	Non Compliance Risk (X out of Y)
Capacity Assessment	0/30
Certification and Training	0/42
Logbooks	0/14
Operations Manuals	0/14
Reporting & Corrective Actions	0/67
Source	0/14
Treatment Processes	0/253
Water Quality Monitoring	0/91
Overall - Calculated	0/525

Inspection Risk Rating:	0.00%
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Final Inspection Rating:	100.00%
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Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2024-25)

DWS Name:	DAVY DRIVE SUBDIVISION DRINKING WATER SYSTEM
DWS Number:	220007141
DWS Owner Name:	CORPORATION OF THE TOWNSHIP OF RAMARA
Municipal Location:	RAMARA
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Focused
Compliance Assessment Start Date:	Aug-28-2024
Ministry Office:	Barrie District Office

All legislative requirements were met. No detailed rating scores.

Maximum Question Rating: 525

Inspection Risk Rating:	0.00%
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FINAL INSPECTION RATING:	100.00%
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