

Ministry of the Environment,
Conservation & Parks

Ministère de l'Environnement, de la Protection de
la nature et des Parcs

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October 18, 2024

Sent by Email: cao@kincardine.ca

The Municipality of Kincardine
1475 Concession 5
Kincardine ON
N2Z 2X6

Jillene Bellchamber-Glazier CAO
Re: Armow Drinking Water System 2024/2025 Inspection
Drinking Water Licence #088-105
Drinking Water Works Permit #088-205

Please find enclosed the Drinking Water System Inspection Report for the Armow Drinking Water System (DWS# 220008792). This year's announced inspection was conducted on July 25, 2024.

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

The report includes an Inspection Summary Rating Record as an appendix. This record forms part of the ministry's comprehensive, risk-based inspection process. The rating provides a quantitative measure of the inspection results for this specific drinking water system for the reporting year. An inspection rating that is less than 100 per cent does not mean that the drinking water from the system is unsafe. The primary goals of this assessment are to encourage ongoing improvement of drinking water systems and to measure this progress

from year to year.

Should you have any questions regarding the content of the enclosed report, please do not hesitate to contact me.

Yours truly,



Shayne Finlay
Water Compliance Inspector
Phone: 519-270-8955
e-mail: shayne.finlay@ontario.ca

Enclosure

ec:

Dr. Ian Arra, Medical Officer of Health, Grey-Bruce Health Unit
Marc Bechard, Drinking Water Inspections Program Supervisor
Carl Seider, Project Manager, Source Water Protection Program
Lisa Crimmings, Compliance Officer, Municipality of Kincardine
Jerry Jez, Overall Responsible Operator, Municipality of Kincardine
Adam Weishar, Director of Infrastructure and Development, Municipality of Kincardine
File SI-BR-KB-C7-540 (2024)



ARMOW DRINKING WATER SYSTEM
Physical Address: 806 CONCESSION 7, ,
KINCARDINE, ON N2Z 2X6

INSPECTION REPORT

System Number: 220008792
Entity: CORPORATION OF THE
MUNICIPALITY OF KINCARDINE
Inspection Start Date: July 25, 2024
Inspection End Date: October 11, 2024
Inspected By: Shayne Finlay
Badge #: 1285
Inspected By: Marc Bechard
Badge #: 918

Ministry of the Environment,
Conservation and Parks

Ministère de l'Environnement, de la
Protection de la nature et des Parcs



Shayne Finlay

(signature)

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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. Armow Well Supply is a 62.5 m deep drilled well with a 6 inch casing consisting of a well pump rated at 0.95 L/s. This well has been determined to be a true groundwater source drilled in September 2005. The well is located approximately 50 m west of the Public Works building. The well casing is sealed with a proper vermin-proof cap and a pitless adapter. The well casing is extended at least 40 cm above ground and surface drainage does not collect or pond in the vicinity of the well due to mounding around well casings. The well is located in a residential area with septic systems. Failing septic systems could pose a risk to the groundwater quality.			

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. The Armow well was inspected by W.D. Hopper & Sons LTD. in November 2016. The findings and recommendations were that the well was in below average condition for its age and has a lot of mineral and other loose material floating. The well should be air lifted or scrubbed at the next scheduled pump maintenance. The next scheduled down hole inspection is in 2026. The owner performs annual pump testing to monitor flow rates and recovery times.			

Question ID	DWMR1010001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Were trends in source water quality monitored?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Trends in source water quality were monitored.			

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.			

Question ID	DWMR1015001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were flow measuring devices calibrated or verified in accordance with the requirements of the Municipal Drinking Water Licence?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Flow measuring devices were calibrated or verified as required.			

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.

The drinking water system was issued a Municipal Licence # 088-105 with a licence renewal date of November 9, 2025. The rated capacity is established at 82 m³/day. It's noted flow rate through this drinking water system shall not exceed 50 m³/day unless the owner has a valid Permit to Take Water. Records provided show the rated capacity was not exceeded during the inspection period.

Question ID	DWMR1017001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were appropriate records of flows and any capacity exceedances made in accordance with the Municipal Drinking Water Licence?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Appropriate records of flows and any capacity exceedances were made as required.			

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.			

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.			

Question ID	DWMR1019001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were Director Notifications prepared and submitted as required?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Director Notifications were prepared and submitted as required.			

Question ID	DWMR1028001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were up-to-date plans for the drinking water system made available in such a manner that they could be readily viewed by all persons responsible for all or part of the operation of the drinking water system, in accordance with the Drinking Water Works Permit and Municipal Drinking Water Licence?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Plans for the drinking water system were kept up-to-date and made available as required.			

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.			

Question ID	DWMR1023001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (2);			

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?

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.

The Armow system achieves this by cartridge filtration and UV disinfection. The licence requires the UV equipment to be able to allow a minimum continuous pass-through UV dose of 40 mJ/cm². The Permit and Licence also require the UV equipment to have a recording device to continuously record the UV intensity. Both UV units are equipped with a flow restrictor that only allows a flow of 0.63 L/s through each unit and a Com Centre. The Com Centre measures and continuously records the dosage readings for each unit. The Com Centre does not communicate with the Endress-Hauser data managing unit. It's noted the owner configured Endress-Hauser (E-H) unit to record UV dosage. The dosage is calculated using the maximum flow rate of 10 gpm (worst case scenario) as the unit is unable to calculate dosage based on the actual flow rate. The E-H data is transmitted to the municipal office. E-H data will be used as a back-up providing proof that the owner has met primary disinfection at all times and especially if there is a loss of data from the original data logger unit. Records reviewed show primary disinfection was met.

Question ID	DWMR1026001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-6 (2);			
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?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Primary disinfection equipment was equipped with alarms or shutoff mechanisms that satisfied the standards.			

Question ID	DWMR1027001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Did the owner have evidence indicating that chemicals and materials that came in contact with water within the drinking water system met all applicable AWWA and ANSI standards in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit?			

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

The owner had evidence indicating that chemicals and materials that came in contact with water within the drinking water system met the applicable standards.

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.			

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. Records provided by the owner and reviewed during the inspection indicate that the owner complied with these requirements, testing free chlorine residual for secondary disinfection monitoring purposes at least 2 days each week and at least 48 hours apart. The owner is monitoring secondary disinfection 5 days per week (Monday- Friday).			

Question ID	DWMR1049001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Did records confirm that disinfectant residuals were routinely checked at the extremities and dead ends of the distribution system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Records confirmed that disinfectant residuals were routinely checked at the extremities and dead ends of the distribution system.			

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Question ID	DWMR1036001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-7 (1);			
Question: Where continuous monitoring equipment was not used for chlorine residual analysis, were samples tested using an acceptable portable device?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Samples for chlorine residual analysis were tested using an acceptable portable device.			

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. The operators review data from the data logger and Comm Center at least every 72 hours. The operator performing normal site visits reviews the data logger and documents the information in the logbook. Armow UV data, which is stored on a SD card located in the comm center, is exchanged and operators review the UV data at the office and sign the review sign off sheet.			

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 The water system has 2 UV reactors equipped with a Com Center which meets the requirements for primary disinfection for wells that are deemed a true ground water source. The Com Centre monitors the UV dose and will stop the flow to units by closing a solenoid valve if the dosage drops below 40 mJ/cm ² . If both UV units are inoperable, the well pump also locks out. Flow and chlorine residual data are recorded using a data logger. All alarms are transmitted using a Sensaphone auto-dialer. The auto-dialer is programmed to call the on-call cell phone in the event of an alarm condition.			

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.			

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.

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.			

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.			

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	DWMMR1080001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 11-3 (1); SDWA O. Reg. 170/03 11-3 (3);			
Question: Were raw water microbiological sampling requirements prescribed by Schedule 11-3 of O. Reg. 170/03 for small municipal residential systems met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Raw water microbiological sampling requirements were met.			

Question ID	DWMMR1082001	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. For SMR DWS, distribution bacteriological samples shall be taken: 1) once every 2 weeks provided that the system is in compliance with Schedule 1 of O. Reg. 170/03, or 2) one sample every week if the system does not meet the requirements of Schedule 1 of O. Reg. 170/03. Each sample must be tested for EC + TC and, if secondary disinfection is provided, must also be tested for HPC; the owner samples weekly therefore this requirement has been met.			

Question ID	DWMMR1096001	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. The regulation requires that samples are to be collected every 60 months and tested for each parameter listed in Schedule 23; this requirement has been met. The most recent samples were collected on October 13, 2020 and there were no concerns identified from the results.			

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. The regulation requires that samples are to be collected every 60 months and tested for each parameter listed in Schedule 24; this requirement has been met. The most recent samples were collected on October 13, 2020 and there were no concerns identified from the results.			

Question ID	DWMR1086001	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: Were haloacetic acid sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Haloacetic acid sampling requirements were met. The DWS has qualified for 2 years of reduced sampling and will commence sampling HAA's quarterly in 2026.			

Question ID	DWMR1087001	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: Were trihalomethane sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Trihalomethane sampling requirements were met. Section 13-6 of Schedule 13, O.Reg.170/03 requires the Owner and the Operating Authority ensure that at least one distribution sample is taken every 3 months from a point in the drinking water system's distribution system, or in plumbing that is connected to the drinking water system, 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 January 15 , 2024 (25 mg\L), April 8, 2024 (32 mg\L) and July 8, 2024 (58 mg\L).			

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 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 July 10 ,2023. October 17, 2024, January 15, 2024, and April 8, 2024, and July 8, 2024.			

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, 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. Records provided by the Owner and reviewed during the inspection, indicate that the Owner conducted sampling for sodium on October 13, 2020.

Question ID	DWMR1090001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-9;			
Question: Where fluoridation is not practiced, were fluoride sampling requirements prescribed by Schedule 13-9 of O. Reg. 170/03 met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Fluoride sampling requirements were met. 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 Owner last conducted Fluoride sampling on October 13, 2020.			

Question ID	DWMR1092001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-2;			
Question: Were water samples taken at the prescribed location?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Water samples were taken at the prescribed location.			

Question ID	DWMR1094001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were water quality sampling requirements imposed by the Municipal Drinking Water Licence and Drinking Water Works Permit met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Water quality sampling requirements were met. The owner is required to sample arsenic monthly as per MDWL. The owner sampled monthly.			

Question ID	DWMR1095001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 15.1-10; SDWA O. Reg. 170/03 15.1-4 (1); SDWA O. Reg. 170/03 15.1-5 (1); SDWA O. Reg. 170/03 15.1-5 (10); SDWA O. Reg. 170/03 15.1-5 (11); SDWA O. Reg. 170/03 15.1-5 (2); SDWA O. Reg. 170/03 15.1-5 (3); SDWA O. Reg. 170/03 15.1-5 (4); SDWA O. Reg. 170/03 15.1-5 (5); SDWA O. Reg. 170/03 15.1-5 (6); SDWA O. Reg. 170/03 15.1-5 (7); SDWA O. Reg. 170/03 15.1-5 (8); SDWA O. Reg. 170/03 15.1-5 (9); SDWA O. Reg. 170/03 15.1-7 (1); SDWA O. Reg. 170/03 15.1-7 (2); SDWA O. Reg. 170/03 15.1-7 (3); SDWA O. Reg. 170/03 15.1-7 (4); SDWA O. Reg. 170/03 15.1-9 (1); SDWA O. Reg. 170/03 15.1-9 (2); SDWA O. Reg. 170/03 15.1-9 (3); SDWA O. Reg. 170/03 15.1-9 (4); SDWA O. Reg. 170/03 15.1-9 (5); SDWA O. Reg. 170/03 15.1-9 (6); SDWA O. Reg. 170/03 15.1-9 (7); SDWA O. Reg. 170/03 15.1-9 (8); SDWA O. Reg. 170/03 15.1-9 (9);			
Question: Were lead sampling requirements prescribed by Schedule 15.1 of O. Reg. 170/03 met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Lead sampling requirements were met.			

Question ID	DWMR1097001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-3 (1.1);			
Question: If the drinking water system obtained water from a ground water source, was turbidity tested at least once every month from each well that supplied water to the system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Turbidity was tested as required.			

Question ID	DWMR1107001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 15.1-9 (1); SDWA O. Reg. 170/03 15.1-9 (2); SDWA O. Reg. 170/03 15.1-9 (3); SDWA O. Reg. 170/03 15.1-9 (4); SDWA O. Reg. 170/03 15.1-9 (5); SDWA O. Reg. 170/03 15.1-9 (6); SDWA O. Reg. 170/03 15.1-9 (7); SDWA O. Reg. 170/03 15.1-9 (8); SDWA O. Reg. 170/03 15.1-9 (9);			
Question: Were reporting requirements for lead samples taken from plumbing met?			

Compliance Response(s)/Corrective Action(s)/Observation(s):
Reporting requirements for lead samples taken from plumbing were met.

Question ID	DWMR1110001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 11 (6);			
Question: Was the annual report prepared by February 28th of the following year and did it contain the required information?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The annual report requirements were met.			

Question ID	DWMR1111001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 22-2 (1); SDWA O. Reg. 170/03 22-2 (2); SDWA O. Reg. 170/03 22-2 (3); SDWA O. Reg. 170/03 22-2 (4);			
Question: Did the summary report contain the required information and was it completed and distributed as required?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The summary report requirements were met.			

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	DWMR1098001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13 (1); SDWA O. Reg. 170/03 13 (2); SDWA O. Reg. 170/03 13 (3);			
Question: Were the required records kept for the periods prescribed by section 13 of O. Reg. 170/03?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The required records were kept for the prescribed periods.			

Question ID	DWMR1043001	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were the process wastewater and residual solids/sludges treated, handled, and disposed of in accordance with the design requirements approved under the Drinking Water Works Permit and the Municipal Drinking Water Licence?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The process wastewater and residual solids/sludges were treated, handled, and disposed of as required.			

Question ID	DWMR1053001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Was the owner able to maintain proper pressures in the distribution system and was pressure monitored to alert the operator of conditions of loss of pressure below the value under which the system was designed to operate?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner was able to maintain proper pressures in the distribution system and pressure was monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate.			

Question ID	DWMR1048001	Question Type	BMP
Legislative Requirement(s): Not Applicable			

<p>Question: Had the owner implemented a program for the flushing of watermains as per industry standards?</p>
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had implemented a program for the flushing of watermains.</p>

Question ID	DWMR1050001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Was there a program in place for inspecting and exercising valves?			
Compliance Response(s)/Corrective Action(s)/Observation(s): There was a program in place for inspecting and exercising valves.			

Question ID	DWMR1058001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 28;			
Question: Did operators and maintenance personnel have ready access to operations and maintenance manuals?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators and maintenance personnel had ready access to operations and maintenance manuals.			

Question ID	DWMR1059001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 28;			
Question: Did 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	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. Condition 16, Schedule B of the Licence # 088-105 prescribes that an up-to-date operations and maintenance manual or manuals is maintained, and applicable parts of the manual or manuals are made available for reference by all persons responsible for all or part of the operation or maintenance of the drinking water system; this requirement has been met.			

Question ID	DWMR1064001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 26 (2);			
Question: Did an operator-in-charge ensure that records were maintained of all adjustments to the processes within their responsibility?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The operator-in-charge ensured that records were maintained of all adjustments to the processes within their responsibility.			

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	DWMR1063001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-10 (1);			
Question: For every required operational test and sample, was a record made of the date, time, location, results, and name of the person conducting the test?			
Compliance Response(s)/Corrective Action(s)/Observation(s): For every required operational test and sample, a record was made as required.			

Question ID	DWMR1061001	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: Were logbooks properly maintained and did they contain the required information?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Logbooks were properly maintained and contained the required information.			

Question ID	DWMR1065001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 27 (6);			
Question: Were logs and other record keeping mechanisms available for at least five (5) years?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Logs or other record keeping mechanisms were available for at least five (5) years.			

Question ID	DWMR1066001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Was spill containment provided for process chemicals and standby power generator fuel?			

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

Spill containment was provided for process chemicals and/or standby power generator fuel.

Question ID	DWMR1067001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Were equipment and materials in place for the clean up of spills?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Equipment and materials were in place for the clean up of spills.			

Question ID	DWMR1068001	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: If available, were standby power generators tested under normal load conditions?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Standby power generators were tested under normal load conditions.			

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.			

Question ID	DWMR1072001	Question Type	BMP
Legislative Requirement(s): Not Applicable			

<p>Question: Had the owner and/or operating authority undertaken efforts to promote water conservation and reduce water losses in the drinking water system?</p>
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): The owner and/or operating authority undertook efforts to promote water conservation and reduce water losses in their system.</p>

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 designated overall responsible operator is Jerry Jez.			

Question ID	DWMR1078001	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 23 (1); SDWA O. Reg. 128/04 23 (2); SDWA O. Reg. 128/04 23 (4); SDWA O. Reg. 128/04 23 (6); SDWA O. Reg. 128/04 23 (7);			
Question: When the overall responsible operator was unable to act, was a properly certified operator designated to act in their place?			
Compliance Response(s)/Corrective Action(s)/Observation(s): A properly certified operator was designated to act in place of the overall responsible operator.			

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.			

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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.			



Ontario

**Ministry of the Environment and Climate Change
Drinking Water Inspection Report**

APPENDIX A

INSPECTION SUMMARY RATING RECORD

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

DWS Name:	ARMOW DRINKING WATER SYSTEM
DWS Number:	220008792
DWS Owner:	CORPORATION OF THE MUNICIPALITY OF KINCARDINE
Municipal Location:	KINCARDINE
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Detailed
Compliance Assessment Start Date:	Jul-25-2024
Ministry Office:	Owen Sound District Office

Maximum Risk Rating: 586

Inspection Module	Non Compliance Risk (X out of Y)
Capacity Assessment	0/42
Certification and Training	0/49
Effluent Quality and Quantity	0/10
Logbooks	0/30
Operations Manuals	0/42
Reporting & Corrective Actions	0/41
Source	0/14
Treatment Processes	0/235
Water Quality Monitoring	0/123
Overall - Calculated	0/586

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:	ARMOW DRINKING WATER SYSTEM
DWS Number:	220008792
DWS Owner Name:	CORPORATION OF THE MUNICIPALITY OF KINCARDINE
Municipal Location:	KINCARDINE
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Detailed
Compliance Assessment Start Date:	Jul-25-2024
Ministry Office:	Owen Sound District Office

All legislative requirements were met. No detailed rating scores.

Maximum Question Rating: 586

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
Drinking Water Inspection Report**

APPENDIX B

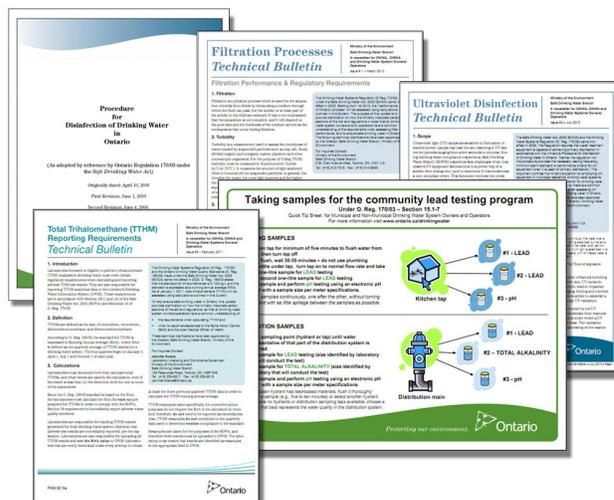
REFERENCE GUIDE FOR STAKEHOLDERS

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

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

To access these materials online click on their titles in the table below or use your web browser to search for their titles. Contact the Public Information Centre if you need assistance or have questions at 1-800-565-4923/416-325-4000 or picemail.moe@ontario.ca.

For more information on Ontario's drinking water visit www.ontario.ca/drinkingwater and email drinking.water@ontario.ca to subscribe to drinking water news.



PUBLICATION TITLE	PUBLICATION NUMBER
Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils	7889e01
FORMS: Drinking Water System Profile Information, Laboratory Services Notification, Adverse Test Result Notification Form	7419e, 5387e, 4444e
Procedure for Disinfection of Drinking Water in Ontario	4448e01
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids	7152e
Total Trihalomethane (TTHM) Reporting Requirements Technical Bulletin (February 2011)	8215e
Filtration Processes Technical Bulletin	7467
Ultraviolet Disinfection Technical Bulletin	7685
Guide for Applying for Drinking Water Works Permit Amendments, Licence Amendments, Licence Renewals and New System Applications	7014e01
Certification Guide for Operators and Water Quality Analysts	
Guide to Drinking Water Operator Training Requirements	9802e
Taking Samples for the Community Lead Testing Program	6560e01
Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption	7423e
Guide: Requesting Regulatory Relief from Lead Sampling Requirements	6610
Drinking Water System Contact List	7128e
Technical Support Document for Ontario Drinking Water Quality Standards	4449e01

ontario.ca/drinkingwater

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

De nombreux documents utiles peuvent vous aider à exploiter votre réseau d'eau potable. Vous trouverez ci-après une liste de documents que les propriétaires et exploitants de réseaux résidentiels municipaux d'eau potable utilisent fréquemment.

Pour accéder à ces documents en ligne, cliquez sur leur titre dans le tableau ci-dessous ou faites une recherche à l'aide de votre navigateur Web. Communiquez avec le Centre d'information au public au 1 800 565-4923 ou au 416 325-4000, ou encore à picemail.moe@ontario.ca si vous avez des questions ou besoin d'aide.



Pour plus de renseignements sur l'eau potable en Ontario, consultez le site www.ontario.ca/eaupotable ou envoyez un courriel à drinking.water@ontario.ca pour suivre l'information sur l'eau potable.

TITRE DE LA PUBLICATION	NUMÉRO DE PUBLICATION
Prendre soin de votre eau potable – Un guide destiné aux membres des conseils municipaux	7889f01
Renseignements sur le profil du réseau d'eau potable, Avis de demande de services de laboratoire, Formulaire de communication de résultats d'analyse insatisfaisants et du règlement des problèmes	7419f, 5387f, 4444f
Marche à suivre pour désinfecter l'eau potable en Ontario	4448f01
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids (en anglais seulement)	7152e
Total Trihalomethane (TTHM) Reporting Requirements: Technical Bulletin (février 2011) (en anglais seulement)	8215e
Filtration Processes Technical Bulletin (en anglais seulement)	7467
Ultraviolet Disinfection Technical Bulletin (en anglais seulement)	7685
Guide de présentation d'une demande de modification du permis d'aménagement de station de production d'eau potable, de modification du permis de réseau municipal d'eau potable, de renouvellement du permis de réseau municipal d'eau potable et de permis pour un nouveau réseau	7014f01
Guide sur l'accréditation des exploitants de réseaux d'eau potable et des analystes de la qualité de l'eau de réseaux d'eau potable	
Guide sur les exigences relatives à la formation des exploitants de réseaux d'eau potable	9802f
Prélèvement d'échantillons dans le cadre du programme d'analyse de la teneur en plomb de l'eau dans les collectivités	6560f01
Échantillonnage et analyse du plomb dans les collectivités : échantillonnage normalisé ou réduit et admissibilité à l'exemption	7423f
Guide: Requesting Regulatory Relief from Lead Sampling Requirements (en anglais seulement)	6610
Liste des personnes-ressources du réseau d'eau potable	7128f
Document d'aide technique pour les normes, directives et objectifs associés à la qualité de l'eau potable en Ontario	4449f01

ontario.ca/eaupotable