Ministry of the Environment, Conservation and Parks Drinking Water and Environmental Compliance Division West Central Region Guelph District Office

1 Stone Road West 4th Floor Guelph, Ontario N1G 4Y2 Tel.: 519 826-4255 Fax: 519 826-4286 Ministère de l'Environnement de la Protection de la nature et des Parcs Division de la conformité en d'eau potable et d'environnement Direction régionale du Centre-Ouest Bureau de district de Guelph

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March 9, 2023

Sent via email

Township of Mulmur 758070 2nd Line East Terra Nova, Ontario LOM 1M0

Attention: Mr. John Willmetts Director of Public Works

Re: Mansfield Drinking Water System Inspection Report Waterworks #260063661, Our File: SI DU MU AI 540

On January 23, 2023, the Mansfield Drinking Water System was inspected by the Ministry of the Environment, Conservation and Parks. The inspection followed the detailed inspection protocol to assess compliance with the Safe Drinking Water Act legislation. The report is based on conditions encountered at the time of inspection, and subsequent follow-up. Please find attached a copy of the Inspection Report #1-106839529.

Any items under the heading "Non-Compliance with Regulatory Requirements and Actions Required" are linked to incidents of non-compliance with regulatory requirements contained within the Act, a regulation, or site-specific approvals, licenses, permits, orders or instructions.

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/external risk experts. The Inspection Summary Rating Record (IRR), included as part of the inspection report, provides the Ministry, the system owner and the local 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 Inspectors' Annual Report. If you have any questions or concerns regarding the rating, please contact Lisa Williamson, Water Compliance Supervisor, at 226-979-8468.

Please note that due to a change in IT systems, the IRR cannot be generated at the same time as the inspection report. The IRR will be sent separately and prior to any release (typically within 1-2 months of the completion of the inspection).

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 councilors, 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 Ministry of the Environment, Conservation and Parks website at <u>www.ontario.ca</u>.

If you wish to discuss the results of the inspection in more detail, please feel free to contact me at (519) 837-7457.

Yours truly,



Carola Serwotka Provincial Officer Drinking Water and Environmental Compliance Division Guelph District Office West Central Region

c.c.

Joe Miedema, Dufferin Water Co. Ltd. (email) Phil Wong, Manager, Health Protection Division, Wellington, Dufferin, Guelph Health Unit (email) Ryan Post, Nottawasaga Valley Conservation Authority (email) Guelph District Office File: SI DU MU AI 540, Mansfield DWS Electronic Binder





MANSFIELD DRINKING WATER SYSTEM 936541 AIRPORT RD, MULMUR, ON, LOM 1M0 Inspection Report

System Number: 260063661 Entity: DUFFERIN WATER CO LTD TOWNSHIP OF MULMUR Inspection Start Date: 01/23/2023 Inspected By: 03/09/2023 Inspected By: Carola Serwotka Badge #: 808

Signature: (Provincial)Officer)



We want to hear from you. How was my service? You can provide feedback at 1-888-745-8888 or <u>Ontario.ca/inspectionfeedback</u>



NON-COMPLIANCE/NON-CONFORMANCE ITEMS

This should not be construed as a confirmation of full compliance with all potential applicable legal requirement and 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:

Question ID	MRDW1001001	Question Type	Information
Question:			
What was the scope of this in	spection?		
Legislative Requirement	Not Applicable		
Observation			
The primary focus of this insp Environment, Conservation an conformance with ministry drin period. The ministry utilizes a water systems that focuses on as management practices.	nd Parks (MECP) legis nking water policies an a comprehensive, multi	lation as well as ev nd guidelines durin -barrier approach i	valuating g the inspection n the inspection of
This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O. Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.			
This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements. The Mansfield Drinking Water System (DWS #260063661) is a large drinking water system with approximately 153 service connections. It is owned by the Township of Mulmur in Dufferin Township and operated by Dufferin Water Co. Ltd.			
The Mansfield Drinking Water Subsystem (WDSS) with certi located 90km north-east of Gr Municipal Drinking Water Lice Works Permit Number 248-20 Permit To Take Water (PTTW expiry of May 31, 2024.	ficate #2885, and was uelph, Ontario. ence Number 248- 101 01 (Issue Number 5) we	issued on July 12, (Issue Number 5) ere both issued on	2006. Mansfield is and Drinking Water November 27, 2020.
The announced, focussed ins attendance of the ORO. The January 23, 2023.			



Question ID	MRDW1000001	Question Type	Information
Question:			
Does this drinking water syste	em provide primary disi	nfection?	
Legislative Requirement	Not Applicable		
Observation			
This Drinking Water System provides for both primary and secondary disinfection and distribution of water.			

Question ID	MRDW1018001	Question Type	Legislative
Question:			
Has the owner ensured that a Schedule C of the Drinking W		d in accordance wi	th Schedule A and
Legislative Requirement	SDWA 31 (1);		
Observation			
The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.			

Question ID	MRDW1114001	Question Type	Legislative
Question:			
Does the owner have evidend DWS were notified of the requ	· · · · · · · · · · · · · · · · · · ·		sociated with the
Legislative Requirement	SDWA 31 (1);		
Observation			
The owner had evidence that Drinking Water System had b			associated with the
Question ID	MPDW/1025001	Question Type	

Question IDMRDW1025001Question TypeLegislativeQuestion:Were all parts of the drinking water system that came in contact with drinking water (added,
modified, replaced or extended) disinfected in accordance with a procedure listed in
Schedule B of the Drinking Water Works Permit?Legislative RequirementSDWA | 31 | (1);



All parts of the drinking water system were disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit.

Question ID	MRDW1024001	Question Type	Legislative
Question:			
Do records confirm that the w chloramination for secondary			
Legislative Requirement	SDWA O. Reg. 170/	03 1-2 (2);	
Observation			
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.			

Question ID	MRDW1038001	Question Type	Legislative
Question:			
Is continuous monitoring equipment that is being utilized to fulfill O. Reg. 170/03 requirements performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format?			
Legislative Requirement	SDWA O. Reg. 170/	03 6-5 (1)1-4;	
Observation			
Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule 6 of O. Reg. 170/03 and recording data with the prescribed format. Continuous data provided during the inspection was every 4 minutes.			
Question ID	MRDW1035001	Question Type	Legislative
Question:			
Are operators examining continuous monitoring test results and are they examining the			v examining the

results within 72 hours of the test?

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



Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test. Every other day, the continuous data is downloaded from the on-site computer and verified for any unusual events.

Question IDMRDW1037001Question TypeLegislative
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Question:

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

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

Observation

All continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, were equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6. During the inspection, the low chlorine alarm was tested and the drinking water system shut-down as required.

Question ID	MRDW1040000	Question Type	Legislative
Question:			
Are all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation?			
Legislative Requirement SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10;			
Observation			
All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation. Continuous analyzers are checked daily and calibrated to the hand held portable analyzers as required.			

Question ID	MRDW1108001	Question Type	Legislative
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Question:

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



actions?	
Legislative Requirement	SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10; SDWA O. Reg. 170/03 6-5 (1.1);
Observation	

Where required continuous monitoring equipment used for the monitoring of chlorine residual and/or turbidity triggered an alarm or an automatic shut-off, a qualified person responded in a timely manner and took appropriate actions.

Question IDMRDW1033001Question TypeLegislative						
Question:	Question:					
Is the secondary disinfectant residual measured as required for the large municipal residential distribution system?						
Legislative Requirement SDWA O. Reg. 170/03 7-2 (3); SDWA O. Reg. 170/03 7-2 (4);						
Observation						
The secondary disinfectant residual was measured as required for the large municipal residential distribution system. Distribution free chlorine is measured continually in the Municipal Office and checked daily with a handheld portable chlorine analyzer.						

Question IDMRDW1099001Question TypeInformation					
Question:					
Do records show that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards					

(O. Reg. 169/03)?

Legislative Requirement	Not Applicable
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Observation

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

Question ID	MRDW1081001	Question Type	Legislative
Question:			
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For LMR systems, are all microbiological water quality monitoring requirements for distribution samples being met?



•	SDWA O. Reg. 170/03 10-2 (1); SDWA O. Reg. 170/03 10-2 (2); SDWA O. Reg. 170/03 10-2 (3);
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Observation

All microbiological water quality monitoring requirements prescribed by legislation for distribution samples in a large municipal residential system were being met. Distribution samples are taken 2 to 3 times weekly as required.

	Question ID	MRDW1096001	Question Type	Legislative
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Question:

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

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

Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.

	Question ID	MRDW1086001	Question Type	Legislative
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Question:

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

Legislative Requirement	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);

Observation

All haloacetic acid water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location. HAA sampling and testing occurred quarterly as required.

Question ID	MRDW1087001	Question Type	Legislative
Question:			
Have all trihalomethane water quality monitoring requirements prescribed by legislation been conducted within the required frequency and at the required location?			
Legislative Requirement SDWA O. Reg. 170/03 13-6 (1); SDWA O. Reg. 170/0 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);

All trihalomethane water quality monitoring requirements prescribed by legislation were conducted within the required frequency and at the required location. THM sampling and testing occurred quarterly as required.

Question ID	MRDW1094001	Question Type	Legislative

Question:

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

Legislative Requirement	SDWA 31 (1);
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Observation

All water quality monitoring requirements imposed by the MDWL or DWWP issued under Part V of the SDWA were being met.

Question ID	MRDW1113000	Question Type	Legislative	
Question:				
Have all changes to the syste ten (10) days of the change?	Have all changes to the system registration information been provided to the Ministry within ten (10) days of the change?			
Legislative Requirement	SDWA O. Reg. 170/03 10.1 (3);			
Observation				
All changes to the system registration information were provided within ten (10) days of the change.				

Question ID	MRDW1059000	Question Type	Legislative	
Question:				
Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system?				
Legislative Requirement SDWA O. Reg. 128/04 28;				
Observation				
The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.				



Question ID	MRDW1060000	Question Type	Legislative	
Question:				
Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?				
Legislative Requirement	SDWA 31 (1);			
Observation				
The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA.				

Question ID	MRDW1061001	Question Type	Legislative
Question:			
Are logbooks properly mainta	ined and contain the re	equired information	?
Legislative Requirement 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);			
Observation			
Logbooks were properly maintained and contained the required information. Logsheets have daily entries for each month of the year.			

Question ID	MRDW1062001	Question Type	Legislative
Question:			
Do records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment is being done by a certified operator, water quality analyst, or person who meets the requirements of O. Reg. 170/03 7-5?			
Legislative Requirement	SDWA O. Reg. 170/03 7-5;		
Observation			
Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5.			

Question IDMRDW1071000	Question Type BMP
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Question:

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

Legislative Requirement	Not Applicable
Observation	

The owner had provided security measures to protect components of the drinking water system. The water treatment plant is locked and secure and is surrounded by a fence.

Question ID	MRDW1073001	Question Type	Legislative
Question:			
Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?			
Legislative Requirement	SDWA O. Reg. 128/04 23 (1);		
Observation			
The overall responsible operator had been designated for each subsystem.			

Question ID	MRDW1074001	Question Type	Legislative	
Question:				
Have operators-in-charge bee drinking water system?	en designated for all su	bsystems for which	n comprise the	
Legislative Requirement	SDWA O. Reg. 128/	04 25 (1);		
Observation				
Operators-in-charge had been designated for all subsystems which comprise the drinking water system.				
Question ID	MRDW1075001	Question Type	Legislative	
Question:				
Do all operators possess the required certification?				
Legislative Requirement	Legislative Requirement SDWA O. Reg. 128/04 22;			
Observation				

All operators possessed the required certification.



Question ID	MRDW1076001	Question Type	Legislative	
Question:				
Do only certified operators ma	Do only certified operators make adjustments to the treatment equipment?			
Legislative Requirement	SDWA O. Reg. 170/03 1-2 (2);			
Observation				
Only certified operators made adjustments to the treatment equipment.				

Question ID	MRDW1007001	Question Type	Legislative
Question:			
Is the owner maintaining the production well(s) in a manner sufficient to prevent entry into the well of surface water and other foreign materials?			
Legislative Requirement	t SDWA O. Reg. 170/03 1-2 (1);		
Observation			
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.			

Question ID	MRDW1009001	Question Type	Legislative		
Question:	Question:				
Are measures in place to protect the groundwater and/or GUDI source in accordance with any MDWL and DWWP issued under Part V of the SDWA?					
Legislative Requirement	SDWA 31 (1);				
Observation					
Measures were in place to protect the groundwater and/or GUDI source in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA. The wells are inspected twice a year to ensure the wells are secure.					

	Question ID	MRDW1014001	Question Type	Legislative
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Question:

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



Legislative Re	quirement	SDWA 31 (1);		
Observation				
		ng of flow as required mit issued under Part		inking Water Licence
Question ID		MRDW1016001	Question Type	Legislative
rated capacity c	onditions in th	ith the conditions asso ne MDWL issued unde		
Legislative Re	quirement	SDWA 31 (1);		
Observation				
rated capacity c	conditions in the annual avera	e with the conditions ane Municipal Drinking age vs maximum flow follows:	Water Licence issue	ed under Part V of
Well 1 Well 2 Well 3 To Distribution	2021 23%/64% 9%/25% 0 10% /28%	2022 25%/76% 2.7%/13% 0 9.7%/28%		
Question ID		MRDW1023001	Question Type	Legislative
Question:				
the design capa	bilities require	reatment equipment v ed under Ontario Reg f the SDWA at all time	ulation 170/03 or a [DWWP and/or

MDWL issued under Part V of the SDWA at all times that water was being supplied to consumers?

Legislative RequirementSDWA O. Reg. 170/03 1-2 (2);

Observation

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



Question ID	MRDW1030000	Question Type	Legislative
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Question:

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

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

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

Question ID	MRDW1083001	Question Type	Legislative		
Question:	Question:				
For LMR systems, are all mic samples being met?	For LMR systems, are all microbiological water quality monitoring requirements for treated samples being met?				
egislative Requirement SDWA O. Reg. 170/03 10-3;					
Observation					
All microbiological water quality monitoring requirements prescribed by legislation for treated samples were being met. Treated microbiological samples are tested weekly at the water treatment plant.					

Question ID	MRDW1084001	Question Type	Legislative
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Question:

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

Legislative Requirement	SDWA O. Reg. 170/03 13-2;
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Observation

All inorganic water quality monitoring requirements prescribed by legislation were conducted within the required frequency. The last set of inorganic samples were tested on June 29, 2021.

Question ID	MRDW1088000	Question Type	Legislative
Question:			



 Are all nitrate/nitrite water quality monitoring requirements prescribed by legislation conducted within the required frequency for the DWS?

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

 Observation

 All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency for the DWS. Nitrate/nitrite samples are taken and tested quarterly.

 Question ID
 MRDW1089000
 Question Type
 Legislative

Question:

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

Legislative Requirement	SDWA O. Reg. 170/03 13-8;	
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Observation

All sodium water quality monitoring requirements prescribed by legislation were conducted within the required frequency. Sodium sampling and testing occurs every 60 months with the last sample taken on June 29, 2021.

Question ID	MRDW1090000	Question Type		
Question ID		Question Type	Legislative	
Question:				
Where fluoridation is not practiced, are all fluoride water quality monitoring requirements prescribed by legislation conducted within the required frequency?				
Legislative Requirement	SDWA O. Reg. 170/03 13-9;			
Observation				
All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency. Fluoride sampling and testing occurs every 60 months with the last sample taken on May 23, 2018.				

Question ID	MRDW1085001	Question Type	Legislative
Question:			
Are all organic water quality monitoring requirements prescribed by legislation conducted within the required frequency?			
Legislative Requirement	SDWA O. Reg. 170/03 13-4 (1); SDWA O. Reg. 170/03 13-4 (2); SDWA O. Reg. 170/03 13-4 (3);		



All organic water quality monitoring requirements prescribed by legislation were conducted within the required frequency. The last set of organic samples were tested on June 29, 2021.