

## Ministry of the Environment, Conservation Ministère de l'Environnement, de la Protection de and Parks la nature et des Parcs

Drinking Water and Environmental Compliance Division, Northern Region Timmins District, North Bay Office 191 Booth Road, unit 16-17 North Bay ON P1A 4K3

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191, rue Booth, Unité 16-17

December 4th, 2025

by Email

Don McArthur
Clerk Administrator
The Corporation of the Village of South River
63 Marie St.
South River, ON P0A 1X0

RE: Inspection of South River Drinking Water System (No. 220013562) at 28 Howard St., South River, ON on October 8<sup>th</sup>, 2025 | Planned Event No. 1-1416271373

Attached to this letter is the report for the announced inspection completed at the South River Drinking Water System at 28 Howard St., South River, ON on October 8<sup>th</sup>, 2025 and the corresponding Incident Rating Report (IRR) and Risk Methodology document. This report provides an assessment of compliance and conformance based on observations and information available during the inspection review period only.

Instances of non-compliance and/or non-conformance were not identified during the inspection. There are no further actions required on your part and the inspection can be considered closed.

The IRR is a summarized quantitative measure of the drinking water system's annual inspections and is published in the Ministry's Chief Drinking Water Inspector's Annual Report. The Risk Methodology document describes the risk rating methodology which has been applied to the findings of the Ministry's municipal residential drinking water system inspection results.

Thank you for your co-operation. If you have any questions about the inspection process, including this information request, please contact me at (705) 358-1316 or by email at <a href="mailto:erin.spires@ontario.ca">erin.spires@ontario.ca</a>.

Sincerely,

Erin Spires

Erin Spires
Provincial Officer Badge #1540 and Water Inspector
Drinking Water and Environmental Compliance Division
Ministry of the Environment, Conservation and Parks' North Bay Area Office

**Attachments** 

- D. Aljoe, Operator with Overall Responsibility, Ontario Clean Water Agency (OCWA)
- M. Malette, Process and Compliance Technician, OCWA
- P. Dyrda, Senior Operations Manager, OCWA
- B. Allen, Program Manager (A) North Bay Parry Sound District Health Unit
- R. A-Muhong, Manager North Bay Parry Sound District Health Unit L. Duquette, Supervisor (A) MECP DWECD Timmins/North Bay Office
- M. Lockhart, District Manager, Ministry of Natural Resources and Forestry North Bay Office





SOUTH RIVER DRINKING WATER SYSTEM
Physical Address: 28 HOWARD ST, SOUTH
RIVER, ON P0A 1X0

## **INSPECTION REPORT**

System Number: 220013562

Entity: CORPORATION OF THE

VILLAGE OF SOUTH RIVER

Inspection Start Date: October 08, 2025 Site Inspection Date: October 08, 2025 Inspection End Date: November 24, 2025

Inspected By: Erin Spires

Badge #: 1540

(signature)



#### INTRODUCTION

## **Purpose**

This unannounced, focused inspection was conducted to confirm compliance with Ministry of the Environment, Conservation and Parks' (MECP) legislation and conformance with Ministry drinking water policies and guidelines.

#### Scope

The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management and the operation of the system.

The inspection of the drinking water system included both the physical inspection of the component parts of the system listed in the report and the review of data and documents associated with the operation of the drinking water system during the review period.

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.

#### **Facility Contacts and Dates**

The drinking water system is owned by The Corporation of the Village of South River and operated by the Ontario Clean Water Agency.

The system serves an estimated population of 1 100 and is categorized as a Large Municipal Residential System.

Information reviewed for this inspection covered the time period of June 26th, 2024 to October 8th, 2025.

Water Compliance Officers Erin Spires and Gursharan Kaur met with Darren Aljoe (Operator with Overall Responsibility, OCWA) as part of the inspection process and received data for the inspection from Monique Malette (Process and Compliance Technician, OCWA).

## Systems/Components

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All locations associated with primary disinfection were visited as part of this inspection. The following sites were visited as part of the inspection of the drinking water system:

#### Forest Lake, South River:

- The intake facilities consist of a 300 mm diameter intake pipe extending 232 m into Forest Lake, with a flared elbow in a wooden and concrete crib located at a depth of 4.5 m. An isolation valve is located in the low lift pumping station (LLPS). Two plastic, 15 mm lines (unused) reportedly run from the LLPS to the intake, one for pre-chlorination for zebra muscle control (with diffuser) and the second for raw water sampling.
- The LLPS is located approximately 170 m south of the eastern end of Howard Street, at the south end of Tom Thomson Lane. The locked, entry alarmed building contains a 4.2 m deep raw water well, dual manual screens which separate the low lift intake well and the low lift pump well. There are continuous level monitors trended to the Sensory Control and Data Acquisition (SCADA) system at the water treatment plant (WTP) on either side of the screens. There are three submersible electric-driven low lift pumps (LLPs), each rated at 10 L/s, which typically operate automatically (manual control is possible) and sequentially in response to clearwell level sensors. Each LLP discharge is equipped with backflow prevention and manual valves. A low lift pressure control valve will return water to the intake pipe if there is too much pressure in the raw water main to the WTP. The LLPs will lock-out on a low level alarm from the low lift pump well level switch.
- The raw watermain to the WTP is 200 mm diameter stainless steel with an isolation valve at the LLPS discharge point. It runs approximately 400 m subsurface to the WTP. At the WTP inlet, there is a continuously monitored magnetic flow meter, a mechanical control valve, a raw water sample tap, and a supply line feeding the raw water turbidity analyzer and pH meter, both continuously monitored through SCADA.

#### Chemical Addition Systems:

- Coagulant System

Polyaluminum chloride (coagulant) is fed into the raw water header prior to the in-line mixer. There are two metering pumps (one duty and one standby) each rated at approximately 30 L/hr. There is an 11 500 L polyethylene bulk storage tank which is filled from the exterior of the plant by tanker and which is vented to the exterior of the WTP. Coagulant is fed continuously while the SCADA system registers raw water flows. A failure of this system will shut-down water production at the WTP.

- pH and Alkalinity Adjustment System

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Soda ash is fed into the raw water header prior to the in-line mixer and the HLPW discharge. There is a 1350 L storage tank. The pre-pH chemical pump is rated at 30 L/hr and triggered by raw water flows. The post-pH chemical pump is rated at 60 L/hr and is triggered by treated water flows.

- Iron and Manganese Control System:

Currently feeding potassium permanganate into the raw water header prior to the in-line mixer with a pre-oxidation chemical pump rated at 30 L/hr. The 1 350 L storage tank has an in-tank mixer. Chemical is fed continuously while the SCADA system registers raw water flows. The filter backwash greensand regeneration pump is rated at 120 L/hr.

- Sodium Hypochlorite Feed System - Primary and Secondary Disinfection

Each package plant has a dedicated sodium hypochlorite pump rated at 30 L/hr. Chemical is fed continuously to the filter effluent line while the SCADA system registers raw water flows. A failure of both pumps will lock-out the LLPs and stop water production.

South River Water Treatment Plant:

- Treatment consists of chemical addition, coagulation, flocculation, sedimentation, filtration and disinfection by chlorination with contact time. The WTP has a rated capacity of 1 680 m3/day. All of the processes are completed within the enclosed WTP building located at 28 Howard Street, the Village of South River, District of Parry Sound, Ontario.
- Raw water passes the raw water analyzers and is injected with potassium permanganate (iron and manganese control by oxidation/precipitation), sodium carbonate (soda ash for elevation of pH) and polyaluminum chloride (coagulant). These chemical feeds are triggered by raw water flows and are flow paced. After chemical injection and prior to entering the package plants the water passes through an in-line mixer.
- A coagulant feed failure will lock-out the LLPs and effectively stop treatment.
- Water is directed equally into two Napier Reid package treatment plants via individual headers and automated valves (plants can operate individually).
- Within each plant, water flows into flocculation tanks, each equipped with a flash mixer, vertical flocculator and a floc recirculator. The flocculation tanks provide 30 minutes detention time.
- Continuous pH monitoring is completed within the mixing/flocculation chamber. An unused pH analyzer is also located at each package plant inlet.

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- Following flocculation, the water flows into two semi-circular settling/clarification chambers. Each chamber has level monitoring, inclined tube settlers, 150 mm inlet piping and 150 mm sludge collection and recirculation headers. Each tank is designed for an overflow rate of 2.4 m/hour. Settled sludge is drawn down via an automated valve to the backwash clarification tank.
- The clarified water overflows from the tube settlers in the clarifiers into gravity fed, individual multi-media filters consisting of garnet, silica sand, greensand and granulated activated carbon (GAC) with gravel underlayers. There is continuous level monitoring on the surface of each filter. Continuous turbidity monitoring is completed on each filter effluent line with programmable LLP lock-outs on high/high alarm set point for the affected plant(s) to stop water production. Continuous flow monitoring is also completed on each filter effluent line.
- Filter backwashes are triggered on programmed pass-through volume (typical), time, filtered water turbidity and/or head-loss pressure monitoring. Backwashes are completed using chlorinated water from the clearwells via two submersible, 15 HP pumps. Each backwash line has continuous flow monitoring, automated valving and backflow prevention.
- Filter-to-waste is completed during filter ripening. Backwash water is directed to the backwash effluent handling system (backwash clarification tank).
- Filtered water is directed into a common header and injected with a 6% sodium hypochlorite solution for primary and secondary disinfection. There is a pre-chlorine analyzer used for continuous monitoring. The header splits and chlorinated water is directed equally (typical, but manual valving exists to isolate individual cells) into a two celled (each with a capacity of 573 m3), baffled, clearwells. Each cell is equipped with continuous level monitoring (controls LLPs), low level lock-outs for emergency low levels and valved lines feeding the high lift pump well by gravity and high lift pump (HLP) draw down. Overflows are directed to the roadside ditch.
- The high lift pump well has an estimated capacity of 140 m3. Six (6) vertical turbine HLPs (two rated at 7 L/s at 45 m total dynamic head (TDH) with 5.6 kW motors; two rated at 14 L/s at 45 m TDH with 11.2 kW motors; and two fire pumps rated at 56 L/s at 38 m TDH with 22 kW motors) are situated above and draw from this tank (sequential starts on system pressure monitoring set points). These pumps direct treated water to the common discharge header which is equipped with a post-contact sodium hypochlorite injection point, a sodium carbonate injection point (post treatment pH adjustment), a continuously monitored treated water turbidity analyzer, a treated water/distributed water continuously monitored magnetic flow meter, continuous distribution system /treated water discharge pressure monitoring, continuous treated water pH monitoring, a plant supply line with flow monitoring and backflow prevention, and, a continuously monitored treated water free chlorine residual analyzer.
- The SCADA system continuously collects and monitors information from instruments and sensor throughout the works and automatically controls plant processes and generates alarms.

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- There is an on-site septic system

#### South River Distribution System:

The South River distribution system supplies approximately 1100 consumers. It is classified as a Class I Water Distribution Subsystem (#1497). As of December 2021, there were 508 total service connections: 454 residential and multiresidential services; 38 commercial connections (mix of commercial, industrial and institutional); and 16 separate residential services in Machar Township fed from a watermain in South River Village.

- There are 30 customers who do not receive water, but who are billed for fire protection.
- The distribution system infrastructure consists of a mixture of cast iron, ductile iron, asbestos cement and PVC piping ranging in diameter from 300 mm down to 50 mm.
- There are approximately 15 km of distribution watermains, 16 dead-end locations, approximately 81 main valves, and 78 hydrants.

#### Stand-by Power Generator:

- Emergency backup power is provided by a 135 kW radiator cooled diesel generator housed in a separate building. The fuel is contained in a double walled external storage tank. The generator is programmed for automatic starts and stops on power interruptions and restoration. It is monitored and alarmed for operational parameters.

#### Wastewater Treatment System:

The South River Water Treatment Plant Process generates wastewater through filter backwashing and clarifier blowdown to remove sludge.

- Filter backwash water is directed to the clarification tank. The supernatant from the clarification tank is decanted and discharged to a storm sewer which discharges to the lake. The settled solids from the clarification tank are pumped to the sludge holding tank.
- Clarifier blow-down is directed to the wastewater surge tank. Supernatant from the wastewater surge tank is directed to the clarification tank, while the settled solids are directed to the sludge holding tank.
- The sludge holding tank receives settled solids from both the clarification tank and the waste surge tank. Supernatant from the sludge holding tank is directed to the clarification tank. The settled solids from the sludge holding tank are pumped to the sludge bagging system 3-5 times/week for disposal at Machar Township Landfill.

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The Village of South River also uses a contractor to extract the highly concentrated sludge from the thickening tank.

- There are two process wastewater polymer systems; one system consists of a storage tank, mechanical mixer, and a single metering pump that injects polymer into the package plant waste effluent line (common pipe for both clarifier blowdown and filter backwash water). The second system forms part of the twelve (12) bag sludge dewatering system.

#### **Permissions/Approvals**

This drinking water system was subject to specific conditions contained within the following permissions and/or approvals (please note this list is not exhaustive) at the time of the inspection in addition to the requirements of the SDWA and its regulations:

- Drinking Water Works Permit No. 200-201, Issue No. 4, dated January 15th, 2021 (Permit),
- Municipal Drinking Water Licence No. 200-101, Issue No. 4, dated January 15th, 2021 (Licence),
- Permit to Take Water No. 4340-BA6RUQ dated March 14th, 2019, and;
- Previous ministry inspection reports dated June 25, 2024 and January 18th, 2024.

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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.

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#### 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.

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#### **INSPECTION DETAILS**

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

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

Question ID	DWMR1012001	Question Type	Legislative
Legislative R SDWA   31   (	equirement(s): 1);		

#### Question:

Did the owner have a harmful algal bloom monitoring plan in place that met the requirements of the Municipal Drinking Water Licence?

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

The owner had a harmful algal bloom monitoring plan in place which met the requirements.

Condition 6 of Schedule C of the Licence requires that the owner shall develop and keep up to date a Harmful Algal Bloom (HAB) monitoring, reporting, and sampling plan to be implemented when a potential harmful algal bloom is suspected or present.

The Standard Operating Procedure: Responding to a Blue-Green Algae Bloom (issued on March 29th, 2023) outlines the monitoring, reporting, and sampling plan used if a potential harmful algal bloom is suspected or present.

A review of the logbook entries for the inspection period indicates that a weekly visual check of the raw water intake was conducted from June to November 2024 and June to October 2025.

A review of the certificates of analysis for the inspection period indicates that raw water samples were taken weekly as required from June to November 2024 and June to October 2025.

Question ID	DWMR1014001	Question Type	Legislative
Legislative Ro	equirement(s): 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.

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Question ID	DWMR1016001	Question Type	Legislative
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## 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.

Condition 1.1 of Schedule C of the Licence specifies the rated capacity as 1 680 m3/day of treated water that flows from the treatment subsystem to the distribution system.

A review of the daily summary data provided for the inspection period indicates that the maximum daily treated water volume was 724.51 m3 on October 1st, 2025.

Question IDDWMR1018001Question TypeLegislative

## 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 IDDWMR1025001Question TypeLegislative

## 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.

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Question ID	DWMR1023001	Question Type	Legislative
Legislative Requirement(s):			

SDWA | O. Reg. 170/03 | 1-2 | (2):

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#### 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 Procedure for Disinfection of Drinking Water in Ontario requires the treatment process of surface water to consist of chemically assisted filtration and disinfection and achieve an overall performance that provides (at a minimum) 2-log (99%) removal or inactivation of Cryptosporidium oocysts, a 3-log (99.9%) removal or inactivation of Giardia cysts, and a 4-log (99.99%) removal or inactivation of viruses prior to the first consumer. In addition, at least 0.5-log removal or inactivation of Giardia cysts and a 2-log removal or inactivation of viruses must be provided through disinfection.

#### Conventional Filtration

Conventional filtration provides 2 log inactivation credit for Cryptosporidium oocyts, 2.5 log inactivation credits for Giardia cysts, and 2 log removal credit for viruses when:

- 1. A chemical coagulant is used at all times when the treatment plant is in operation.
- 2. Chemical dosages are monitored and adjusted in response to variations in raw water quality.
- 3. Effective backwash procedures, including the filter-to-waste, to ensure that the effluent turbidity requirements are met at all times.
- 4. Filtrate turbidity is continuously monitored from each filter, and;
- 5. Performance Criterion for filtered water turbidity of less than or equal to 0.3 NTU in 95% of the measurements each month shall be met for each filter.

#### Chlorination

Chlorination is required to provide the remaining 0.5 log inactivation credit for Giardia Cysts and 2 log inactivation credits for viruses.

The Standard Operating Procedure (SOP) for CT (Chlorine Concentration x Time) at the South River Drinking Water System, dated December 2nd, 2022, indicates that a CT of 61.51 mg/L\*min would be achieved under the following worst-case conditions:

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- Free chlorine residual below: 1.25 mg/L
- Clearwell level of 1.75 m
- pH above 8

A review of the continuous trends, Wonderware Summary Sheets, and elogbooks for the inspection period indicate that primary disinfection was achieved through filtration and chlorination.

Question ID	DWMR1024001	Question Type	Legislative
1			

#### 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.

A review of the South River Distribution System sheets for the inspection period indicate that the lowest free chlorine residual in the distribution system occurred on September 22nd, 2025 at 0.2 mg/L.

## Question IDDWMR1033001Question TypeLegislative

#### **Legislative Requirement(s):**

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

#### Question:

Was secondary disinfectant residual tested as required for the large municipal residential distribution system?

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

Secondary disinfectant residual was tested as required.

Question ID	DWMR1030001	Question Type	Legislative
Question ib	DVVIVII (1000001	Question Type	Logislativo

#### **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?

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

Primary disinfection chlorine monitoring was conducted as required.

The POE chlorine analyzer is located at the high lift header at the point of entry of treated water into the distribution system and is used to confirm that the intended CT has been achieved.

Question ID	DWMR1032001	<b>Question Type</b>	Legislative
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#### **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.

Question ID	DWMR1035001	Question Type	Legislative
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#### 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.

Question ID	DWMR1038001	<b>Question Type</b>	Legislative
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#### 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.

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Question ID DWMR1037001 Q	Question Type	Legislative
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#### 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

Section 5-1(1.1)1 of Schedule 6 of O. Reg. 170/03 requires that continuous monitoring equipment must cause an alarm to signal immediately at a location where the equipment conducts tests and at a location where a person is present, if the equipment malfunctions, loses power, or a test result for a free chlorine residual is below the minimum alarm standard.

Section 6-5(1)5 of Schedule 6 of O. Reg. 170/03 requires that continuous monitoring equipment must be designed and operated so that no water is directed to users in the event that the equipment malfunctions, loses power, or if the filter effluent turbidity exceeds 1 NTU, and a qualified person takes appropriate action before water is directed to users.

The South River WTP Alarm Setpoints sheet and discussions with the operator indicate that there is a filter effluent turbidity alarm set at least 0.4 NTU, with a 30 second delay, that will trigger a callout and automatic backwash. There is also an alarm set at 1 NTU that will trigger a callout alarm and plant shutdown.

There is a treated water chlorine analyzer alarm is set at least 1.5 mg/L that will trigger an alarm without delay.

There is an operational alarm at the Clearwell No. 1's chlorine analyzer set at least at 1.5 mg/L that will trigger a call-out alarm.

 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?

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

All continuous analysers were calibrated, maintained, and operated as required.

A review of the elogbooks, workorder summary, and discussion with the Operator with Overall Responsibility indicates that the POE Free chlorine analyzer is verified weekly and calibrated as needed.

Filter Effluent Turbidity Analyzers No. 1 and 2 were calibrated on August 20th, 2024, November 28th, 2024, February 25th, 2025, May 29th, 2025, and August 28th, 2025.

<b>Question ID</b>	DWMR1108001	Question Type	Legislative
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#### **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	DWMR1083001	<b>Question Type</b>	Legislative
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#### Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 10-3;

#### Question:

Were treated microbiological sampling requirements prescribed by Schedule 10-3 of O. Reg. 170/03 for large municipal residential systems met?

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

Treated microbiological sampling requirements were met.

Section 10-3 of Schedule 10 of O. Reg. 170/03 requires the owner and operating authority of the drinking water system must ensure that a treated water sample is taken at least once every week and tested for E.coli, total coliforms, and HPC.

A review of the certificates of analysis for the inspection period indicates that a treated water sample was taken each week and tested for E.coli, total coliforms and HPC.

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#### **Legislative Requirement(s):**

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

#### Question:

Were distribution microbiological sampling requirements prescribed by Schedule 10-2 of O. Reg. 170/03 for large municipal residential systems met?

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

Distribution microbiological sampling requirements were met.

Section 10-2 of Schedule 10 of O. Reg. 170/03 requires that the owner and operating authority for the drinking water system must ensure that at least eight distribution samples are taken every month, with at least one of the samples being taken each week. The owner and operating authority must ensure that each of the samples are tested for E.coli, total coliforms, and that at least 25% of the samples are tested for general bacteria population expressed as colony counts on a heterotropic plate count (HPC).

A review of the certificates of analysis for the inspection period indicates that at least twelve distribution system samples were taken and tested for E.coli and total coliforms each month. At least 1/3 of these samples were also tested for HPC.

Question ID	DWMR1096001	<b>Question Type</b>	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	<b>Question Type</b>	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.

Section 13-2 of Schedule 13 of O. Reg. 170/03 requires that the owner and operating

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authority for the system must ensure that at least one treated water sample is taken every 12 months, if the system obtains water from a raw water supply that is surface water, and tested for every parameter set out in Schedule 23 (Inorganics).

A review of the certificates of analysis for the inspection period indicates that a treated water sample was taken on January 13th, 2025 and tested for every parameter under Schedule 23 (Inorganics).

Question ID	DWMR1085001	Question Type	Legislative
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#### 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.

Section 13-4 of Schedule 13 of O. Reg. 170/03 requires that the owner and operating authority for the system must ensure that at least one treated water sample is taken every 12 months, if the system obtains water from a raw water supply that is surface water, and tested for every parameter set out in Schedule 24 (Organics).

A review of the certificates of analysis for the inspection period indicates that a treated water sample was taken on January 13th, 2025 at tested for every parameter in Schedule 24 (Organics).

## Question IDDWMR1086001Question TypeLegislative

#### **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.

Section 13-6.1 of Schedule 13 of O. Reg. 170/03 requires the owner and operating authority of the drinking water system that provides chlorination must ensure that at least one distribution sample is taken in each calendar quarter, from a point in the distribution system that is likely to have an elevated potential for the formation of haloacetic acids and tested for haloacetic acids (HAAs).

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O. Reg. 170/03 defines "calendar quarter" as the three-month period that begins on January 1, April 1, July 1, or October 1.

Effective January 1, 2020, the standard for HAAs of 0.08 mg/L (80 μg/L) was introduced and is expressed as a running annual average (RAA) of quarterly results.

A review of the certificates of analysis for the inspection period and, the previous ministry inspection report, indicates that a sample was taken and tested for HAAs on July 15, 2024 (80.4  $\mu$ g/L), October 15, 2024 (29.1  $\mu$ g/L), January 13, 2025 (30.8  $\mu$ g/L), April 14, 2025 (27.3  $\mu$ g/L), and July 14, 2025 (115  $\mu$ g/L).

The running annual average for HAAs at the time of the inspection is 50.6 µg/L.

Question ID	DWMR1087001	Question Type	Legislative		
Legislative Requirement(s):					
SDWA   O. Re	eg. 170/03   13-6   (1); SDWA   O. F	Reg. 170/03   13-6	(2); SDWA   O. Reg.		

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 of O. Reg. 170/03 requires the owner and operating authority of drinking water system that provides chlorination must ensure that at least one distribution sample is taken in each calendar quarter from a point in the distribution system that is likely to have an elevated potential for the formation of trihalomethanes and tested for trihalomethanes (THMs).

As of January 1st, 2016, the Ontario standard for THMs is 0.1 mg/L (100  $\mu$ g/L) and is expressed as a running annual average (RAA) of quarterly results.

A review of the certificates of analysis for the inspection period, and previous ministry inspection report, indicates that a sample was taken and tested for THMs on July 15th, 2024 (126  $\mu$ g/L), October 15th, 2024 (57  $\mu$ g/L), January 13th, 2025 (59  $\mu$ g/L), April 14th, 2025 (31  $\mu$ g/L), and July 14th, 2025 (93  $\mu$ g/L).

The running annual average for THMs at the time of the inspection is 60  $\mu g/L$ .

Question ID	DWMR1088001	<b>Question Type</b>	Legislative
	Legislative Requirement(s): SDWA   O. Reg. 170/03   13-7;		

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

A review of the certificates of analysis for the inspection period indicates that a treated water sample was taken and tested for nitrate and nitrites on July 15th, 2024, October 15th, 2024, January 13th, 2025, April 14th, 2025 and July 14th, 2025.

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 O. Reg. 170/03 requires that the owner and operating authority for the drinking water system must ensure that at least one treated water sample is taken every 60 months and tested for sodium.

The most recent sample was collected and tested for sodium on January 30th, 2023 at 62.4 mg/L.

The North Bay Parry Sound District Health Unit requires notices of the elevated sodium levels to be posted in public locations since the first sodium exceedance in 2013.

Question ID	DWMR1090001	<b>Question Type</b>	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 of O. Reg. 170/03 requires the owner and operating authority for

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the drinking water system must ensure that at least one treated water sample is taken every 60 months and tested for fluoride.

The most recent sample was collected and tested for fluoride on January 18th, 2021.

The next sample is required by January 18, 2026 (+\- 90 days).

Question ID	DWMR1094001	<b>Question Type</b>	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.

Condition 5.4 of Schedule C of the Licence requires the owner and operating authority of the drinking water system to take monthly composite samples of the backwash wastewater facility's point of discharge and test for suspended solids.

Condition 1.5 of Schedule C of the Licence states that the annual average concentration of suspended solids shall not exceed 25 mg/L.

A review of the certificates of analysis for the inspection period indicates that the annual average concentration of suspended solids from January to October 2025 was 18.9 mg/L.

#### Legislative Requirement(s):

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

#### Question:

Were immediate verbal notification requirements for adverse water quality incidents met?

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

Immediate verbal notification requirements for adverse water quality incidents were met.

Question ID	DWMR1101001	Question Type	Legislative		
Legislative Requirement(s):					
SDWA   O. Reg. 170/03   17-1; SDWA   O. Reg. 170/03   17-10   (1); SDWA   O. Reg. 170/03					

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| 17-11; SDWA | O. Reg. 170/03 | 17-12; SDWA | O. Reg. 170/03 | 17-13; SDWA | O. Reg. 170/03 | 17-14; SDWA | O. Reg. 170/03 | 17-2; SDWA | O. Reg. 170/03 | 17-3; SDWA | O. Reg. 170/03 | 17-4; SDWA | O. Reg. 170/03 | 17-5; SDWA | O. Reg. 170/03 | 17-6; SDWA | O. Reg. 170/03 | 17-9;

#### Question:

Question:

For large municipal residential systems, were corrective actions, including any steps directed by the Medical Officer of Health, taken to address adverse conditions?

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

Corrective actions were taken to address adverse conditions.

Question ID	DWMR1113001	Question Type	Legislative	
Legislative Requirement(s):				
SDWA LO Reg 170/03 L10 1 L(3):				

## SDWA | O. Reg. 170/03 | 10.1 | (3);

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 R	equirement(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.

Question ID	DWMR1062001	<b>Question Type</b>	Legislative
	equirement(s): eg. 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

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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
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## **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 low lift pump house is kept locked, there's an intruder alarm, security cameras, and lightning.

The water treatment plant is kept locked and is equipped with a security system. There are locks on the outside boxes where water treatment chemicals are received and isolation valves.

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.

Dan Finnigan and Darren Aljoe alternate as Operators with Overall Responsibility for the South River Drinking Water System and Distribution System.

Question ID	DWMR1074001	Qu	uestion Type	Legislative
Legislative Requirement(s):				
SDWA   O. Re				

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#### 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.

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.

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#### Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2025-26)

**DWS Name:** SOUTH RIVER DRINKING WATER SYSTEM

**DWS Number:** 220013562

**DWS Owner:** CORPORATION OF THE VILLAGE OF SOUTH RIVER

**Municipal Location:** SOUTH RIVER

Regulation: O.REG. 170/03

**DWS Category:** DW Municipal Residential

Type of Inspection: Focused

Compliance Assessment Start Date: Oct-8-2025

Ministry Office: North Bay Area Office

**Maximum Risk Rating:** 492

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	0/70
Source	0/0
Treatment Processes	0/210
Water Quality Monitoring	0/112
Overall - Calculated	0/492

Inspection Risk Rating: 0.00%

Final Inspection Rating: 100.00%

#### Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2025-26)

**DWS Name:** SOUTH RIVER DRINKING WATER SYSTEM

**DWS Number:** 220013562

**DWS Owner Name:** CORPORATION OF THE VILLAGE OF SOUTH RIVER

**Municipal Location:** SOUTH RIVER

Regulation: O.REG. 170/03

**DWS Category:** DW Municipal Residential

Type of Inspection: Focused

**Compliance Assessment Start Date:** Oct-8-2025

Ministry Office: North Bay Area Office

All legislative requirements were met. No detailed rating scores.

**Maximum Question Rating: 492** 

Inspection Risk Rating: 0.00%

FINAL INSPECTION RATING: 100.00%

# APPLICATION OF THE RISK METHODOLOGY

# USED FOR MEASURING MUNICIPAL RESIDENTIAL DRINKING WATER SYSTEM INSPECTION RESULTS



The Ministry of the Environment (MOE) has a rigorous and comprehensive inspection program for municipal residential drinking water systems (MRDWS). Its objective is to determine the compliance of MRDWS with requirements under the Safe Drinking Water Act and associated regulations. It is the responsibility of the municipal residential drinking water system owner to ensure their drinking water systems are in compliance with all applicable legal requirements.

This document describes the risk rating methodology, which has been applied to the findings of the Ministry's MRDWS inspection results since fiscal year 2008-09. The primary goals of this assessment

are to encourage ongoing improvement of these systems and to establish a way to measure this progress.

MOE reviews the risk rating methodology every three years to account for legislative and societal changes that affect acceptable risk levels. As a result of the most recent review, the methodology has been modified to present an improved metric for the evaluation of the risk/safety of MRDWS operations.

The Ministry's Municipal Residential Drinking Water Inspection Protocol contains up to 14 inspection modules and consists of approximately 120 regulatory questions. Those protocol questions are also linked to definitive guidance that

ontario.ca/drinkingwater



ministry inspectors use when conducting MRDWS inspections. The questions address a wide range of regulatory issues, from administrative procedures to drinking water quality monitoring. Additionally, the inspection protocol contains a number of non-regulatory questions.

A team of drinking water specialists in the ministry have assessed each of the inspection protocol regulatory questions to determine the risk (not complying with the regulation) to the delivery of safe drinking water. This assessment was based on established provincial risk assessment principles, with each question receiving a risk rating referred to as the Question Risk Rating. Based on the number of areas where a system is deemed to be non-compliant during the inspection, and the significance of these areas to administrative, environmental, and health consequences, a risk-based inspection rating is calculated by the ministry for each drinking water system.

It is important to be aware that an inspection rating that is less than 100 per cent does not mean that the drinking water from the system is unsafe. It shows areas where a system's operation can improve. To that end, the ministry works with owners and operators of systems to make sure they know what they need to do to achieve full compliance.

The inspection rating reflects the inspection results of the specific drinking water system for the reporting year. Since the methodology is applied consistently over a period of years, it serves as a comparative measure both provincially and in relation to the individual system. Both the drinking water system and the public are able to track the performance over time, which encourages continuous improvement and allows systems to identify specific areas requiring attention.

The ministry's annual inspection program is an important aspect of our drinking water safety net. The ministry and its partners share a common commitment to excellence and we continue to work toward the goal of 100 per cent regulatory compliance.

## **Determining Potential to Compromise the Delivery of Safe Water**

The risk management approach used for MRDWS is aligned with the Government of Ontario's Risk Management Framework. Risk management is a systematic approach to identifying potential hazards; understanding the likelihood and consequences of the hazards; and taking steps to reduce their risk if necessary and as appropriate.

The Risk Management Framework provides a formula to be used in the determination of risk:

## RISK = LIKELIHOOD × CONSEQUENCE (of the consequence)

Every regulatory question in the inspection protocol possesses a likelihood value (L) for an assigned consequence value (C) as described in **Table 1** and **Table 2**.

TABLE 1:	
Likelihood of Consequence Occurring	Likelihood Value
0% - 0.99% (Possible but Highly Unlikely)	L = 0
1 – 10% (Unlikely)	L = 1
11 – 49% (Possible)	L = 2
50 – 89% (Likely)	L = 3
90 – 100% (Almost Certain)	L = 4

TABLE 2:	
Consequence	Consequence Value
Medium Administrative Consequence	C = 1
Major Administrative Consequence	C = 2
Minor Environmental Consequence	C = 3
Minor Health Consequence	C = 4
Medium Environmental Consequence	C = 5
Major Environmental Consequence	C = 6
Medium Health Consequence	C = 7
Major Health Consequence	C = 8

The consequence values (0 through 8) are selected to align with other risk-based programs and projects currently under development or in use within the ministry as outlined in **Table 2**.

The Question Risk Rating for each regulatory inspection question is derived from an evaluation of every identified consequence and its corresponding likelihood of occurrence:

- All levels of consequence are evaluated for their potential to occur
- Greatest of all the combinations is selected.

The Question Risk Rating quantifies the risk of non-compliance of each question relative to the others. Questions with higher values are those with a potentially more significant impact on drinking water safety and a higher likelihood of occurrence. The highest possible value would be  $32 (4 \times 8)$  and the lowest would be  $0 (0 \times 1)$ .

**Table 3** presents a sample question showing the risk rating determination process.

TABLE 3:							
Does the Operator in Charge ensure that the equipment and processes are monitored, inspected and evaluated?							
		I	Risk = Likelihoo	d × Consequence	)		
C=1	C=2	C=3	C=4	C=5	C=6	C=7	C=8
Medium Administrative Consequence	<b>Major</b> Administrative Consequence	Minor Environmental Consequence	Minor Health Consequence	Medium Environmental Consequence	<b>Major</b> Environmental Consequence	<b>Medium</b> Health Consequence	<b>Major</b> Health Consequence
L=4 (Almost Certain)	L=1 (Unlikely	L=2 (Possible)	L=3 (Likely)	L=3 (Likely)	L=1 (Unlikely	L=3 (Likely)	L=2 (Possible)
R=4	R=2	R=6	R=12	R=15	R=6	R=21	R=16

## **Application of the Methodology to Inspection Results**

Based on the results of a MRDWS inspection, an overall inspection risk rating is calculated. During an inspection, inspectors answer the questions that relate to regulatory compliance and input their responses as "yes", "no" or "not applicable" into the Ministry's Laboratory and Waterworks Inspection System (LWIS) database. A "no" response indicates non-compliance. The maximum number of regulatory questions asked by an inspector varies by: system (i.e., distribution, stand-alone), type of inspection (i.e., focused, detailed), and source type (i.e., groundwater, surface water).

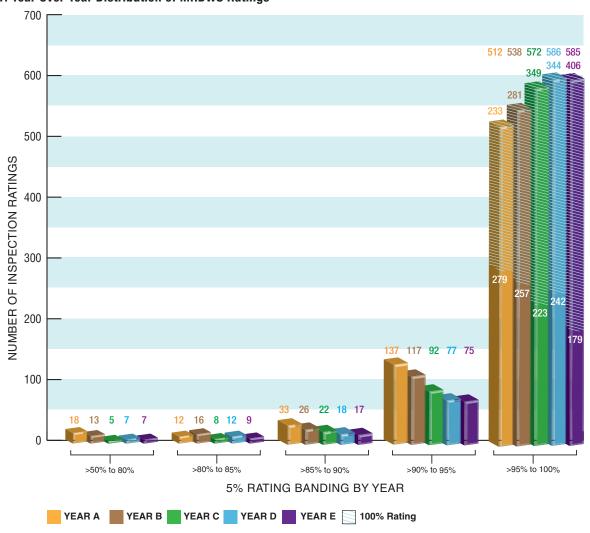
The risk ratings of all non-compliant answers are summed and divided by the sum of the risk ratings of all questions asked (maximum question rating). The resulting inspection risk rating (as a percentage) is subtracted from 100 per cent to arrive at the final inspection rating.

## **Application of the Methodology for Public Reporting**

The individual MRDWS Total Inspection Ratings are published with the ministry's Chief Drinking Water Inspector's Annual Report.

**Figure 1** presents the distribution of MRDWS ratings for a sample of annual inspections. Individual drinking water systems can compare against all the other inspected facilities over a period of inspection years.

Figure 1: Year Over Year Distribution of MRDWS Ratings



## **Reporting Results to MRDWS Owners/Operators**

A summary of inspection findings for each system is generated in the form of an Inspection Rating Record (IRR). The findings are grouped into the 14 possible modules of the inspection protocol,

which would provide the system owner/operator with information on the areas where they need to improve. The 14 modules are:

1. Source

- 5. Process Wastewater
- 2. Permit to Take Water
- 6. Distribution System
- 3. Capacity Assessment
- 7. Operations Manuals
- 4. Treatment Processes 8. Logbooks

- 9. Contingency and Emergency Planning
- 10. Consumer Relations
- 11. Certification and Training
- 12. Water Quality Monitoring
- 13. Reporting, Notification and Corrective Actions
- 14. Other Inspection Findings

For further information, please visit www.ontario.ca/drinkingwater

# **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 below or use your web browser to search for their titles. Contact the Ministry if you need assistance or have questions at 1-866-793-2588 or waterforms@ontario.ca.

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



## Click on the publication below to access it

- Drinking Water System Profile Information Form 012-2149E
- Laboratory Services Notification Form 012-2148E
- Adverse Test Result Notification Form 012-4444E
- <u>Taking Care of Your Drinking Water: A Guide for Members of Municipal</u>
  <u>Councils</u>
- Procedure for Disinfection of Drinking Water in Ontario
- Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids
- Filtration Processes Technical Bulletin
- Ultraviolet Disinfection Technical Bulletin
- Guide for Applying for Drinking Water Works Permit Amendments, & License Amendments
- Certification Guide for Operators and Water Quality Analysts
- Training Requirements for Drinking Water Operator
- Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption
- Drinking Water System Contact List 7128E01
- Ontario's Drinking Water Quality Management Standard Pocket Guide
- 2020 Watermain Disinfection Procedure
- List of Licensed Laboratories

