



Sustainable Development

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March 5, 2019

PWS: 252.00

Ms. Moira L. Geer CPA. CA.
Director, Water and Waste Department
City of Winnipeg
101-1199 Pacific Ave
Winnipeg, MB R3E 3S8

2018 Annual Compliance Audit

Dear Ms. Geer:

Please find enclosed the 2018 Annual Compliance Audit for the Winnipeg public water system (PWS). The report compares water system compliance to *The Drinking Water Safety Act* and its supporting regulations, and the terms and conditions of the water system's current operating licence (PWS-09-412-01).

Where non-compliance items are identified, the issues do not necessarily translate into increased public health risk. The Office of Drinking Water uses processes, including boil water advisories, to notify water users of a public health risk.

Please review the following terms and conditions of your operating licence to ensure ongoing compliance:

- Water quality sampling frequencies identified in *Table 2*.
- Water System Assessment (due date: March 1, 2022)
- 2018 Public Water System Annual Report (due date: March 31, 2019)
- Advisory Notification Plan (due date: May 1, 2019)

Identified Non-Compliance and Corrective Actions

Disinfection requirements - The City of Winnipeg identified three locations where disinfectant residual did not meet the regulatory minimum of 0.1 mg/L in 2018. None of these locations were captured as part of routine monitoring and all were identified though enhanced efforts put forth by the City of Winnipeg.

Two locations NW-02 and the Qualico Centre, Assiniboine park were identified as a result of enhanced monitoring within distribution at sites which have been previously been identified as having the potential to exhibit low chlorine levels. Low chlorine levels in these locations were quickly resolved with line flushing. The City continues to proactively monitor these locations using real-time chlorine analyzers.

A third seasonal location, Kildonan Park, was identified through a request for a water quality investigation from City of Winnipeg Parks. Low chlorine issues continued in this area sporadically through the summer and resulted in several non-compliant taps within the park being closed to the public. Additional monitoring in this area is warranted in 2019.

Bacteriological Requirements – Bacteria detection greater than 10 MPNU per 100 mL sample were not identified in routine sampling in 2019. However, the water system did detect TC greater than 10 associated with two water main repairs and one instance of line flushing.

Corrective actions with respect to the water main repairs included isolation of the local area, notification of residents, provision of an alternate potable water supply, additional line flushing and confirmation that chlorine, turbidity and bacteria met regulatory requirements.

Corrective actions associated with the water main flushing positive included additional water main flushing, and an expanded monitoring effort in the area for chlorine, turbidity, and bacteria.

In all instances corrective actions were successful in quickly returning the water system to regulatory compliance with respect to bacteriological requirements.

Turbidity Requirements – The City of Winnipeg reported two instances of turbidimeters exceeding the must report level of 1.0 NTU in 2018. Both instances are related to turbidimeter cleaning and are not thought to be representative of water quality moving through the filters at the time of measurement. Office of Drinking Water and the City of Winnipeg will work to resolve these issues through the approval of standard operating procedures in 2019.

Operational Guidelines to assist operators in meeting regulatory obligations for monitoring and reporting under The Drinking Water Safety Act, including Seasonal System and Emergency Reporting requirements, can be found on our website at: www.gov.mb.ca/drinkingwater.

Additional Information

Beginning in 2019, the requirement to submit a compliance plan will be removed from operating licences as they are renewed or amended. Section 8 of the Drinking Water Quality Standard Regulation states that the director may require water systems to submit a plan if they are not in compliance with a drinking water standard that details when and how the water supply will come into compliance with the standard. Water systems will be notified in writing if a plan is requested.

Health Canada has completed their review on National Guidelines, including algae (total microcystin toxins) manganese and lead. The new guidelines are expected to be finalized and posted with minor changes following the public consultation stage. Owners and operators are encouraged to review Health Canada's guidelines and related chemistry results to determine what impact they may have on your water supply. You will receive notification of any changes to Health Canada's Guidelines for Canadian Drinking Water Quality and Manitoba Standards should they affect your water supply.

Beginning April 1, 2019, the Office of Drinking Water will begin posting PWS Operating Licences and a copy of the most recent chemistry analysis on our public website.

The 2018 Annual Compliance Audit is based on information submitted to this office. If you have questions regarding non-compliance items identified in this audit, please review your records

prior to contacting this office. If your records conflict with the audit information, please call me at (204) 642-6134.

Sincerely,

Original Signed by Derek Clarke

Signed Original provided upon your request.

Derek Clarke
Senior Regional Drinking Water Officer
Enclosures

2018 Annual Compliance Audit

Water System: WINNIPEG - PWS

Code: 252.00

Water System Owner: City of Winnipeg

Water System Operating Licence: PWS-09-412-01

Expiry Date: November 30, 2020

- 1) This report documents the Winnipeg Public Water System compliance for the period from January 1 to December 31, 2018.
- 2) Addendum A to this report provides specific information on the non-compliance incidents identified in the summary below.
- 3) Other than the information provided in attached Addendum A, the water supplier has complied with *The Drinking Water Safety Act*, its supporting regulations, and the terms and conditions of the water system's current operating licence
- 4) This report is based on information submitted by the water supplier, agents of the water supplier, and / or the Province of Manitoba.

Summary of Non-Compliance Incidents:

• Failure to Meet Disinfection Requirements
• Failure to Meet Bacteriological Requirements
• Failure to Meet Turbidity Requirements

Addendum A: Record of Non-Compliance

Water System: WINNIPEG - PWS

Report period: January 1, 2018 to December 31, 2018.

Enforcement Action Taken

Date	Incident	Outcome
	None reported	

Disinfection Requirements

Date	Incident	Outcome
June	Failure to maintain a free chlorine residual of at least 0.1 mg/L at all times at any point in the water distribution system	Non-compliant
September	Failure to maintain a free chlorine residual of at least 0.1 mg/L at all times at any point in the water distribution system	Non-compliant
September	Failure to maintain a free chlorine residual of at least 0.1 mg/L at all times at any point in the water distribution system	Non-compliant

Bacteriological Requirements

Date	Incident	Outcome
2018/08/05	Failure to meet Bacteriological Standard: E. coli (EC) detected	Non-compliant
2018/07/09	Failure to meet Bacteriological Standard: Total Coliform (TC) detected	Non-compliant
2018/07/11	Failure to meet Bacteriological Standard: Total Coliform (TC) detected	Non-compliant
2018/08/05	Failure to meet Bacteriological Standard: Total Coliform (TC) detected	Non-compliant
2018/12/10	Failure to meet Bacteriological Standard: Total Coliform (TC) detected	Non-compliant

Microbial Requirements

Date	Incident	Outcome
	None reported	

***Turbidity Requirements***

Date	Incident	Outcome
November	Failure to maintain below 1.0 NTU in accordance with the operating licence	Non-compliant
November	Failure to maintain below 1.0 NTU in accordance with the operating licence	Non-compliant

Chemical Requirements

Date	Incident	Outcome
	None reported	

Operational Requirements

Date	Incident	Outcome
	None reported	