

January 31, 2014

Mayor and Council  
City of Portage la Prairie  
97 Saskatchewan Ave. E.  
Portage la Prairie MB R1N 0L8

**City of Portage la Prairie - PWS  
2013 Annual Audit Report**

---

Dear Mayor Porter & Council:

Please find enclosed the 2013 Audit Report for the City of Portage la Prairie Public Water System (PWS). The Audit shows compliance with the terms and conditions of your Operating Licence PWS-08-147-01. There was a very slight exceedance of the trihalomethane standard.

The requirement to do a general chemistry analysis of the raw and treated water once every six months each year is in Table 2 of your licence and was met in 2013 by the submission of two sets of samples by the City of Portage la Prairie. As mentioned in previous audits, this sample had been collected in past years by the Drinking Water Officer and was used to fulfill your licence requirement on your behalf. In 2013 the Office of Drinking Water (ODW) stopped collecting these samples for water systems serving over 1000 population. The ODW may continue to scale back the PWS general chemistry sampling program and will notify water systems of any changes.

Please be reminded that you must notify the Office of Drinking Water immediately of any conditions that may affect the ability of the water system to produce or deliver safe drinking water such as:

- treatment upsets or by-pass conditions
- operation outside of your licence conditions
- contamination of the source or treated water
- disinfection, filtration, or distribution system failure

The audit report is based on information submitted to this office. If your records conflict with the audit information, or if you have any questions concerning this report, or any other drinking water related issues, please call me at (204) 239-3186.

Sincerely,

---

John Cronk, B.Sc.  
Drinking Water Officer

Enclosures

copy: Mr. Mike Sandney, WTP Manager  
Mr. Kelly Braden, Director of Operations

e-copy: Mr. Jean-Marc Nadeau, City Manager



Office of Drinking Water

**Public Water System  
Annual Audit Report**

Reporting  
Period:

2013

Date:

Jan. 31, 2014

Water System:

PORTAGE LA PRAIRIE - PWS

Code:

171.00

Owner:

City of Portage la Prairie

Operator in Charge:

Mike Sandney

Address:

97 Saskatchewan Avenue East  
Portage la Prairie MB R1N 0L8

Phone:

204-239-8373

Owner Representative:

Jean-Marc Nadeau

Operating Licence Number:

PWS-08-147-01

## Water Quality Standards

Percent  
Compliance

Corrective  
Action Forms

### *Bacterial*

<i>E. coli</i>	Less than one <i>E. coli</i> bacteria detectable per 100 mL in all treated water	100%	n/a
Total coliform	Less than one total coliform bacteria detectable per 100 mL in all treated water	100%	n/a
<i>E. coli</i>	Less than one <i>E. coli</i> bacteria detectable per 100 mL in all distributed water	100%	n/a
Total coliform	Less than one total coliform bacteria detectable per 100 mL in all distributed water	*99.4%	100%
<b>Comments:</b>	The bacterial water quality standard was met - test result summary attached. *Two distribution water samples were reported positive for Total Coliform. The re-sample tests results were negative, meaning no bacteria were detected. Corrective Action Reports (CAR) were received, thus the water system was deemed to be in compliance with the terms and conditions of the Operating Licence.		

### *Disinfection*

Chlorine residual	A free chlorine residual of at least 0.5 mg/L in water entering the distribution system following a minimum contact time of 20 minutes	99.5%	100%
	A free chlorine residual of at least 0.1 mg/L at all times at any point in the water distribution system	100%	n/a
<b>Comments:</b>	The disinfection water quality standard was met - CAR was received for the one day		

### *Physical*

Turbidity	Less than or equal to 0.3 NTU in 95% of the measurements in a month of the effluent from each operating particulate filter (*see below)	n/a	n/a
	(Using a daily measurement that is not part of the licence standards, the <b>combined effluent</b> from the four filters entering the reservoir showed: 98 % of daily readings were ≤ 0.3 NTU)	98%	n/a*
	Not exceed 0.3 NTU for more than 12 consecutive hours of operation	<100%	yes
	Not exceed 1.0 NTU for any continuous daily measurement	<100%	yes



Office of Drinking Water

**Public Water System  
Annual Audit Report**

Reporting  
Period:

2013

Date:

Jan. 31, 2014

Water System:

PORTAGE LA PRAIRIE - PWS

Code:

171.00

Owner:

City of Portage la Prairie

Operating Licence Number:

PWS-08-147-01

<b>Comments:</b>	<p>*Unable to properly assess this (<math>\leq 0.3</math> NTU in 95% of measurements) because the filter backwash (FBW) spikes cause temporary high readings. Plap WTP has activated software for daily and monthly summary and average of all five minute interval turbidity readings to minimize or eliminate the effect of FBW spikes and give a true report on compliance with the standard. CAR forms were not required for FBW spikes. Plap WTP is working toward enabling the printing of a month-end report summarizing all turbidity data. Turbidity exceedances mainly occurred during the spring run-off adjustment period.</p>
------------------	--

**Chemical**

Total trihalomethanes (bromodichloromethane, bromoform, chloroform, dibromochloromethane)	Less than or equal to 0.10 mg/L as annual average of quarterly samples (0.10 mg/L = 100 µg/L, so 0.101 mg/L = 101 µg/L)	see attached results - overall average: <b>0.101 mg/L</b>
Bromate	Less than or equal to 0.01 mg/L (10 µg/L)	June 26: <0.0003 mg/L November 25: <0.005 mg/L

<b>Comments:</b>	The trihalomethane (THM) water quality standard was only very slightly exceeded. The bromate water quality standard was met at both samplings.
------------------	--

General chemistry	<p>June 26 and November 25, 2013 sample suites:</p> <p>All parameters measured in the treated water met the applicable health-based maximum acceptable concentrations (MAC) set by the <i>Guidelines for Canadian Drinking Water Quality</i> (GCDWQ).</p> <p>The link to Health Canada's <i>Guidelines for Canadian Drinking Water Quality</i> website is: <a href="http://www.hc-sc.gc.ca/ewh-semt/water-eau/drink-potab/guide/index_e.html">http://www.hc-sc.gc.ca/ewh-semt/water-eau/drink-potab/guide/index_e.html</a></p>
-------------------	--

<b>Monitoring Requirements</b>	<b>Percent Compliance</b>
--------------------------------	---------------------------

<b>Bacterial</b>		
Total coliform and <i>E. coli</i>	Weekly sampling program with each set of samples consisting of one raw, one treated, and a minimum of two distribution samples	>100%
	Consecutive sample sets must be separated by at least 5 days	100%
<b>Comments:</b>	regulatory requirement met and bettered extra voluntary distribution samples are sent each week	



Office of Drinking Water

Public Water System  
Annual Audit Report

Reporting  
Period:

2013

Date:

Jan. 31, 2014

Water System:

PORTAGE LA PRAIRIE - PWS

Code:

171.00

Owner:

City of Portage la Prairie

Operating Licence Number:

PWS-08-147-01

### Disinfection

Free chlorine (treated water)	Continuous sampling of water entering the distribution system following at least twenty minutes of contact time	100%
	A confirmatory sample to be taken daily at a location established by the Drinking Water Officer	100%
Free chlorine (distribution system)	At the same times and location(s) as bacteriological distribution system sampling	100%
Total chlorine (treated water)	One sample per day of water entering the distribution system following at least twenty minutes of contact time	100%
Total chlorine (distribution system)	At the same times and location(s) as bacteriological distribution system sampling	100%
<b>Comments:</b>	The disinfection monitoring requirement was met	

### Physical

Turbidity	One raw water sample per day.	100%
	Continuous sampling of the effluent from each operating particulate filter *	100%
	A confirmatory sample to be taken daily at locations established by the Drinking Water Officer	100%
<b>Comments:</b>	*Plap WTP has activated software for daily and monthly summary and average of all five minute interval turbidity readings to minimize or eliminate the effect of FBW spikes and give a true report on compliance with the standard. Plap WTP is working toward enabling the printing of a month-end report summarizing all turbidity data.	

### Chemistry

General chemistry	One raw and one treated water sample once every six months*	100%
Trihalomethanes (THMs)	Four preserved distribution system samples taken on a quarterly basis during February, May, August, and November, each year	100%
Total Haloacetic Acids (HAAs)	Four preserved distribution system samples taken on a quarterly basis during February, May, August, and November, each year at locations established by the Drinking Water Officer	starting in 2014
Bromate	One treated water sample once every six months*	100%
Lead	The City has a service connection monitoring program	n/a
<b>Comments:</b>	<p>* sample dates: June 26 and November 25, 2013 The general chemistry and Bromate sampling requirements were met Please see the explanation in the cover letter concerning chemistry sampling</p> <p>The THM sampling requirement was met</p>	



Office of Drinking Water

**Public Water System  
Annual Audit Report**Reporting  
Period:

2013

Date:

Jan. 31, 2014

Water System:

PORTAGE LA PRAIRIE - PWS

Code:

171.00

Owner:

City of Portage la Prairie

Operating Licence Number:

PWS-08-147-01

**Reporting Requirements**

Disinfection	Submit original monthly disinfection report forms within seven days after the end of each calendar month	<b>100%</b>
Physical	Submit original monthly turbidity report forms within seven days after the end of each calendar month	<b>100%</b>
Corrective Actions	Submit original corrective action report for minor exceedances as described in the most recent version of the Office of Drinking Water “Operational Guidelines for Public and Semi-public Water Systems”, along with the monthly disinfection, or turbidity report form	<b>100%</b>
Emergency	Immediately notify the Office of Drinking Water of any condition that may affect the ability of the water system to produce or deliver safe drinking water including treatment upsets or bypass conditions, contamination of the source water or treated water, a filtration or disinfection system failure, or a distribution system failure	<b>100%</b>
<b>Comments:</b>	The regulatory reporting requirements were met	

**Other Regulatory Requirements*****Engineering Assessment***

Due Date	December 1, 2009
Date Received	October 9, 2010
<b>Comments:</b>	regulatory requirement met - review pending - reply comment letter to follow

***Compliance Plan***

Due Date	December 1, 2008
Date Received	October 8, 2009 - acknowledgement of receipt letter sent February 24, 2012
<b>Comments:</b>	regulatory requirement met - review pending - reply comment letter to follow

***Operating Licence Expiry Date***

Expiry Date	November 30, 2018
<b>Comments:</b>	Please be advised that you are required to apply for renewal of your operating licence 60 days prior to its expiry

***2012 Water System Annual Report***

Due Date	March 31, 2013 (for the 2012 report)
Date Received	posted on website
<b>Comments:</b>	2012 annual report regulatory requirement met in 2013 next: 2013 report is due March 31, 2014



Office of Drinking Water

**Public Water System  
Annual Audit Report**

Reporting  
Period:

2013

Date:

Jan. 31, 2014

Water System:

PORTAGE LA PRAIRIE - PWS

Code:

171.00

Owner:

City of Portage la Prairie

Operating Licence Number:

PWS-08-147-01

**Inspection**

System Inspected	July and December, 2013
Inspection Letter Sent	no concerns
<b>Comments:</b>	

**Enforcement**

Type of Enforcement	
Issue Date	
Act/Regulation/Section	
Offence Description	
Compliance Date	
<b>Comments:</b>	not required