

February 1, 2012

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

**City of Portage la Prairie - PWS
2011 Annual Audit Report**

Dear Mayor Porter & Council:

Please find enclosed the 2011 Audit Report for the City of Portage la Prairie Public Water System (PWS). The Audit shows compliance with the terms and conditions of Operating Licence PWS-08-147, except that the trihalomethane standard was not met.

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. Doug Campbell, WTP Manager

e-copy: Mr. Dale Lyle, CAO
Mr. Kelly Braden, Director of Operations



**Water Stewardship
Office of Drinking Water**

**Public Water System
Annual Audit Report**

Reporting
Period:

2011

Date:

February 1,
2012

Water System:

PORTAGE LA PRAIRIE - PWS

Code:

171.00

Owner:

City of Portage la Prairie

Operator in Charge:

Doug Campbell

Address:

97 Saskatchewan Avenue East
Portage la Prairie MB R1N 0L8

Phone:

204-239-8373

Owner Representative:

Dale Lyle

Operating Licence Number:

PWS-08-147

Water Quality Standards

Percent
Compliance

Corrective
Action Forms

Bacterial

E. coli	Less than one E. coli 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
E. coli	Less than one E. coli bacteria detectable per 100 mL in all distributed water	100%	n/a
Total coliform	Less than one total coliform bacteria detectable per 100mL in all distributed water	100%	100%

Comments:

The bacterial water quality standard was met. Please see attached test result summary. Three water samples were reported positive for Total Coliform. The re-sample tests results were negative (no bacteria found) and Corrective Action reports 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	100%	n/a
	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

Comments:

The disinfection water quality standard was met

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) (Using a daily measurement that is not part of the licence standards, the combined effluent from the filters entering the reservoir showed: 94 % of daily readings were \leq 0.3 NTU)	n/a	n/a*
	Not exceed 0.3 NTU for more than 12 consecutive hours of operation	<100%	n/a**
	Not exceed 1.0 NTU for any continuous daily measurement	<100%	n/a**

Comments:

See page two



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*Unable to properly assess this (≤ 0.3 NTU in 95% of measurements) because the filter backwash (FBW) spikes cause temporary high readings for short periods of time
CAR forms were not required
Plap WTP has requested software activation for daily and monthly summary and average of all five minute interval turbidity readings, which will be able to separate and disregard FBW spikes
**The extended period of spring run-off and flood conditions caused difficult raw water quality conditions, so CAR forms were not required

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 0.147 mg/L = 147 µg/L)	see attached results overall average: 0.147 mg/L
Bromate	Less than or equal to 0.01 mg/L	100%
Comments:	The trihalomethane (THM) water quality standard was not met	

Monitoring Requirements

Percent
Compliance

Bacterial

Total coliform and E. coli	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%
Comments:	regulatory requirement met - extra voluntary distribution samples are sent each week	

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 (this is not in the current licence, but is done daily)	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%
Comments:	The disinfection monitoring requirement was met	



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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 weekly at location(s) established by the Drinking Water Officer (this is not in the current licence, but is done daily)	100%
	Comments: *Plap WTP has requested software activation for daily and monthly summary and average of all five minute interval turbidity readings	

Chemistry

General chemistry (to include arsenic, fluoride, nitrate, and uranium)	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, every year	100%
Lead	The City has had its distribution system monitoring program in place for several years	n/a
Comments:	*The water chemistry monitoring requirement was met - The Office of Drinking Water continued to undertake general chemistry sampling for 2010 on behalf of water utilities, as explained in the 2009 audit	

Reporting Requirements

Disinfection	Submit original monthly disinfection report forms within seven days after the end of each calendar month	100%
Physical	Submit original monthly turbidity report forms within seven days after the end of each calendar month	100%
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	100%
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	100%
Comments:	The regulatory reporting requirements were met	



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Other Regulatory Requirements

Engineering Assessment

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

Compliance Plan

Due Date	December 1, 2008
Date Received	October 8, 2009
Comments:	regulatory requirement met - review pending - reply comment letter to follow

Operating Licence Expiry Date

Expiry Date	May 31, 2013
Comments:	Please be advised that you are required to apply for renewal of your operating licence 60 days prior to its expiry

2010 Water System Annual Report

Due Date	March 31, 2011
Date Received	April 14, 2011
Comments:	2010 regulatory requirement met - next: 2011 report is due March 31, 2012

Inspection

System Inspected	July and December , 2011
Inspection Letter Sent	Water chemistry comment letter sent
Comments:	

Enforcement

Type of Enforcement	
Issue Date	
Act/Regulation/Section	
Offence Description	
Compliance Date	
Comments:	Not required