

January 14, 2016

Report To: Mayor & Council

From: Doug Brown, Manager of Operations & Facilities

SUBJECT: December 2015 Drinking Water Systems Monthly Summary Report

Please find attached the December 2015 Summary Report on the drinking water systems, prepared by Randy White, Senior WTP Operator.

Your Administration recommends that Operations & Facilities Executive Committee accept the December 2015 report as presented.

Respectfully submitted,
Operations & Facilities Division



Doug Brown, P. Eng.
Manager of Operations & Facilities

<p>Council approval of this report will accept the December 2015 Drinking Water Systems Monthly Summary Report and approve the report prior to it being made available to the general public.</p>
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c.c. – Doug Herr, Environmental & Facilities Supt.
Randy White, Senior WTP Operator

03CouncilwaterreportMarch 2015

December, 2015

**Monthly Summary Report
Water Systems**

**Prepared by: Randy White, ORO
Senior Water Treatment Plant Operator**

Dated: January 12, 2016

1) **Introduction**

This report contains the major maintenance activities and operational events that occurred during the month of December 2015 at the Water Treatment Plant - Water Works # 220000978 and the Airport Groundwater Well Water Works # 26002736. This information report has been prepared for Council to better understand how the water systems they own and operate are maintained on a monthly basis. Also, this report will assist Council as Directors of the Corporation in exercising its obligation to meet a reasonable Standard of Care as outlined in Section 19 of the Safe Drinking Water Act.

2) **Flow Data**

Water Treatment Plant: See attached spreadsheet. No flow data for Airport groundwater well.

3) **Microbiological (Health Related) Water Analysis– Main Water System # 220000978**

Water Treatment Plant (treated): 4 samples taken no adverse results

Water Treatment Plant (raw): 4 samples taken no adverse results

Water Distribution System: 16 samples taken where 25% of samples were tested for heterotrophic plate count HPC no adverse results

We take microbiological samples on a weekly basis, which includes 1 raw sample, 1 treated sample and 4 distribution samples. The 4 distribution samples are taken at different locations throughout the distribution system.

4) **Microbiological (Health Related) Water Analysis – Airport Groundwater Well # 26002736**

No samples taken.

The Airport has signs posted in the men's and women's washroom stating that the water has not been tested or treated for drinking purpose in accordance with the Health Protection and Promotion Act – Section 7 of the Small Drinking Water Systems Regulation, O. Reg. 318/08 (*Amended to Safe Drinking Water Act, 2002 - Section 6 of Ontario Regulation 252/05*). The operators do a visual inspection of the warning notices at a minimum of once per week to ensure that they are legible and comply with Ontario Regulation 318/08, Section 7(5).

**5) Free Available Chlorine Residual (FAC) – Main Water System –
220000978**

FAC residuals are taken at a minimum daily at both the Water Treatment Plant and within the Water Distribution System.

**6) Free Available Chlorine residual (FAC) – Airport Groundwater Well
System # 26002736**

Signs posted, exempt from testing.

7) Maintenance Activities at the WTP

- Dec. 02nd - worked on clarifier blow down lines.
- Dec. 03rd - cleaned the top and bottom tank on the poly unit.
- cleaned the four (4) check valves on the poly unit.
- Dec. 05th - calibrated distribution chlorine analyzer.
- Dec. 06th - calibrated distribution chlorine analyzer.
- Dec. 07th - worked on poly booster pump.
- Dec. 10th - worked on Ph meters.
- calibrated distribution chlorine analyzer.
- Dec. 17th - painted pipes at water plant.
- took grab samples off filters.
- Dec. 20th - calibrated distribution chlorine analyzer.
- Dec. 23rd - cleaned the top and bottom tank on the poly unit.
- cleaned the four (4) check valves on the poly unit.
- Dec. 25th - calibrated distribution chlorine analyzer.

8) **Water Complaints**

- Poor Pressure – 0 complaint.
- Water quality – 0 complaint.

9) **Other Miscellaneous Information**

- Dec. 01st - Day 2 of M.O.E. inspection.
- Dec. 02nd - worked on M.O.E. inspection requests.
- New fire line samples - 237 Eighth St. W. - 1st set.
- Dec. 03rd - New fire line samples - 237 Eighth St. W. - 2nd set.
- Dec. 04th - worked with M.O.E. & lakeside on M.O.E. inspection.
- Dec. 07th - routine micro sample collection
- Dec. 09th - took quarterly samples at the plant and water tower.
- took T.S.S. samples off filter # 1 during backwash sample.
- Dec. 14th - routine micro sample collection.
- New hydrant samples - 237 Eighth St. W. - 1st set.
- Dec. 15th - New hydrant samples - 237 Eighth St. W. - 2nd set.
- Dec. 21st - routine micro sample collection.
- Dec. 29th - routine micro sample collection.

10) In order to acknowledge that all levels of responsibility within the Corporation of the Town of Fort Frances have received and reviewed this monthly report, it is necessary to sign-off in the appropriate location below:

- Randy White, ORO, Senior WTP Operator: _____
- Doug Herr, Environmental & Facilities Supt.: _____
- Doug Brown, Manager of Operations & Facilities: _____
- Mark McCaig, CAO: _____
- Paul Ryan, Chair O& F Exec Committee: _____
- Roy Avis, Mayor: _____
- June Caul, Councillor: _____
- John Albanese, Councillor: _____
- Wendy Brunetta, Councillor: _____
- Doug Kitowski, Councillor: _____
- Ken Perry, Councillor: _____

Note: Once all signatures have been obtained, the report will be distributed and made available to the public. If you have any questions, please feel free to contact myself or Randy White, Senior WTP Operator at 274-2325.

Monthly Report December 2015

Town of Fort Frances - Water treatment Plant - Water Works # 220000978
Monitoring Record
December 2015

Flow Data	DECEMBER	Units	2013		2014		2015	
			Day of the Month		Day of the Month		Day of the Month	
Total Raw Water	m ³		133610		133860		159580	
Raw Maximum Day	m ³	Wednesday 25th	4500	Wednesday 24th	4860	Saturday 12th	5380	
Raw Minimum Day	m ³	Monday 09th	4010	Sunday 07th	4040	Monday 14th	4890	
Raw Average Daily Consumption	m ³		4310		4250		5150	
Total Treated Water	m ³		113220		110550		107110	
Treated Water Maximim Day Consumption	m ³	Tuesday 31st	4270	Tuesday 23rd	4140	Sunday 20th	3760	
Treated Water Minimim Day Consumption	m ³	Sunday 01st	3260	Saturday 06th	3230	Saturday 12th	3150	
Treated Water Average Day Consumption	m ³		3650		3570		3460	
Daily Average Per Household Consumption Rate	m ³		0.96		0.94		0.91	
* Daily Average Per Person Consumption Rate	m ³		0.46		0.45		0.43	
Monthly Averages - Operating Parameters WTP:								
FAC Residual - Treated Water	mg/L		1.77		1.91		2.09	
Total Chlorine Residual - Treated Water	mg/L		2.11		2.17		2.29	
Aluminum Sulphate - Raw Water	mg/L		34.0		37.2		35.0	
Aluminum Sulphate - Treated Water Residual	mg/L		0.05		0.05		0.04	
Fluoride - Treated Water	mg/L		0.65		0.66		0.58	
Soda Ash - Raw Water	mg/L		34.0		35.7		35.0	
PH - Adjusted	mg/L		7.14		7.22		7.27	
Temperature	C		2.0		2.0		3.3	
Quantity of Chemical Used:		kg						
Aluminum Sulphate	kg		4542.7		4973.5		5585.3	
Polyelectrolyte	kg		62.5		75.0		75.00	
Chlorine Gas	kg		467		513		616	
Soda Ash - Used for PH Adjustment	kg		4542.7		4780.5		5585.3	
Fluoride	kg		444		355		474	

- * The Canadian Average is 450 Litres (0.45 m³) per day.
- * Population is 7986
- * Number of Households is 3783