

## 2016 Drinking Water Quality Data

Water quality data presented below has been compiled from the results of laboratory testing. Water samples were taken from the Buffalo Pound Water Treatment Plant and comprehensive water quality analyses for all parameters were conducted in the plant laboratory.

Water quality test results for bacteriological, chlorine residual and turbidity were given in the 2016 Drinking Water Quality and Compliance Report.

Parameter	Testing Result Annual Average (mg/L)	Saskatchewan Environment Water Quality Objective (mg/L)
<b>Sodium (Na)</b>	96	<200 (AO)
<b>Sulphate (SO<sub>4</sub>)</b>	288	<500 (AO)
<b>Total Dissolved Solids (TDS)</b>	703	1500
<b>Manganese (Mn)</b>	<DL	0.05 (AO)
<b>Nitrate (NO<sub>3</sub>)</b>	<DL	45
<b>Potassium (K)</b>	9.0	No Standard
<b>Hardness</b>	272	800
<b>Iron (Fe)</b>	<DL	0.3 (IMAC)
<b>Magnesium (Mg)</b>	34.0	200
<b>Calcium (Ca)</b>	52.0	No Standard
<b>Chloride (Cl)</b>	43.5	<250 (AO)
<b>Fluoride (F)</b>	<DL	1.5
<b>Alkalinity (CaCO<sub>3</sub>)</b>	140	500

Notes:

1. Values are given in milligrams per litre (mg/l) which is equivalent to parts per million (ppm)
2. No fluoride was added to Regina water. Fluoride measured is naturally occurring.
3. "<" means "less than"
4. "DL" means "Detection Limit"
5. "AO" means "Aesthetic Objective"
6. "IMAC" means "Interim Maximum Allowable Concentration"

**For more information, please contact the City of Regina at 777-7000 or visit: [www.regina.ca](http://www.regina.ca)**

## 2016 Drinking Water Quality and Compliance Report Annual Notice to Customers

### Introduction

Saskatchewan Water Security Agency requires that at least once each year, waterworks owners provide notification to consumers of the quality of water produced and supplied as well as information on the performance of the water works in submitting samples as required by the Minister's Order or Permit to Operate a Waterworks

The following is a summary of the City of Regina water quality and sample submission compliance records for the period January 1, 2016 - December 31, 2016. This report was completed on January 24, 2017.

Readers should refer to Saskatchewan Watershed Authority document: [Saskatchewan Drinking Water Standards and Objectives](#) for more information on minimum sample submission requirements and the meaning of each type of sample.

<http://www.saskh2o.ca/pdf/epb507.pdf>

Permit requirements for a specific waterworks may require more sampling than outlined in the Authority's monitoring guidelines. If consumers need more information on the nature and significance of specific water tests, for example, "what is the significance of sulphate?"

[http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index\\_e.html](http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index_e.html)

### Water Quality Standards

#### I. Bacteriological Quality

Parameter	Limit	Regular Samples Required	Total Samples Tested	No. of Samples Positive of Bacteria
Total Coliform and Background Bacteria	Zero Organisms/100ml Less than 200/100ml	832	832	0

#### II. Water Disinfection - Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples

Parameter	Minimum Limit (mg/l)	Test Level Range (mg/l)	No. of Tests Required	No. of Tests Performed
Chlorine Residual	0.1 mg/L Free	0.04 - 0.88	832	832
	0.5 mg/l Total	0.43 - 1.30		

### III. Turbidity

Parameter	Limit (NTU)	Test Level Range	No. of Tests Not Meeting Requirements	No. of Tests Required	No. of Tests Performed
Turbidity	1.0	0.11 – 0.62	0	832	832

*(NTU) Nephelometric Turbidity Unit - a unit of measurement used to indicate the clarity of drinking water*

### IV. Chemical - Trihalomethanes

Parameter	Limit (mg/l)	Sample Result (Average)	No. of Samples Required	No. of Samples Taken
Trihalomethanes	0.1	0.097 mg/l	8	8

### Contact Information

More information on water quality and sample submission performance may be obtained from:

Water Works  
City of Regina  
Tel: 306-777-7000  
Web: regina.ca

## 2016 Additional Drinking Water Data

Water quality parameters are tested at both the City of Regina and the Buffalo Pound Water Treatment Plant. The tested parameters include all those required by the Water Security Agency. There are additional parameters within Health Canada guidelines which are not typically tested in this region. The City of Regina has tested these additional parameters with the results given below.

Parameter	Testing Results (mg/L)	Health Canada Guideline Water Quality Objective (mg/L)
Antimony	<0.0006	0.006
Asbestos	<0.18	NR
Azinphoz-methyl	<0.002	0.02
Carbaryl	<0.005	<0.005
Chloramines	0.34	3
Chlorite	<0.1	1
Diazinon	<0.001	0.02
Diquat	<0.007	0.07
Diuron	<0.01	0.15
Formaldehyde	<10	NR
Metolachlor	<0.0005	0.05
Metribuzin	<0.005	0.08
Nitrotriacetic acid (NTA)	<0.05	0.4
Nitrite	<0.01	3
N-Nitroso dimethylamine	<0.000002	0.00004
Paraquat	<0.001	0.01
Phorate	<0.0005	0.002
Simazine	<0.001	0.01
Terbufos	<0.0005	0.001
Radium-226 (Bq/L)	<0.01	0.5
Radon-222 (Bq/L)	16	NR

Notes:

1. Values are given in milligrams per liter (mg/l) which is equivalent to parts per million (ppm), unless otherwise noted.
2. NR means "None required"