

Annual Drinking Water Quality and Compliance Report 2006

Saskatchewan Property Management Valley View Centre Moose Jaw, Saskatchewan

Introduction

Saskatchewan Environment (SE) 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 waterworks in submitting samples as required by a *Minister's Order or Permit to Operate* a waterworks. Saskatchewan Property Management owns and operates the waterworks at *Valley View Centre* in Moose Jaw. The following is a summary of the *Valley View Centre* water quality and sample submission compliance record for the *January 1, 2006 to December 31, 2006* time period.

This report was completed on *April 1, 2007*.

For more information on minimum sample submission requirements and the meaning of type of sample, please refer to SE's "**Municipal Drinking Water Quality Monitoring Guidelines, November 2002, EPB 202**". Permit requirements for a specific waterworks may require more sampling than outlined in the department's monitoring guidelines. If consumers need more information on the nature and significance of specific water tests, for example, "*what is the significance of Selenium in a water supply*", more detailed information is available from:

<http://www.hc-sc.gc.ca/hecs-sesc/water/dwgsup.htm>.

Water Quality Standards

Bacteriological Quality:

| Parameter/Location | Limit | Regular Samples Required | Regular Samples Submitted | # of Positive Regular Submitted (%) |
|---------------------|----------------------|-----------------------------|------------------------------|--|
| Total Coliform | 0 Organisms/100 mL | 52 | 50 (96%) | 0 (0%) |
| Background Bacteria | Less than 200/100 mL | | | |

Water Disinfection –

Chlorine Residual in Distribution System for Test Results Submitted with Bacteriological Samples

| Parameter | Minimum Limit | Free Chlorine Residual Range | Total Chlorine Residual Range | Average Free Chlorine (mg/L) | Average Total Chlorine (mg/L) |
|-----------|------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|
| Chlorine | 0.1 mg/L free | | | | |
| Residual | 0.5 mg/L total | 0.10 – 1.63mg/l | .21 > 1.89mg/l | .53 | 0.80 |

Water Disinfection - Free Chlorine Residual for Water Entering Distribution System from Waterworks Records-From Water Treatment Plant Records

| Parameter | Limit (mg/L) | Test Level Range | # Tests Performed | # Tests Not Meeting Requirements |
|------------------------|---------------|------------------|-------------------|----------------------------------|
| Free Chlorine Residual | at least 0.10 | .06 > 2.20 | 365 | 2 |

A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual is required for water entering the distribution system. Tests are normally performed on a daily basis by the waterworks operator and are to be recorded in operation records. This data includes the number of free chlorine residual tests performed, the overall range of free chlorine residual (highest and lowest recorded values) and the number of tests and percentage of results not meeting the minimum requirement of 0.1 mg/L free chlorine residual.

Chemical -Trihalomethanes

| Parameter | Limit IMAC (ug/L) | Sample Result (average) | # Samples Required | # Sample Submitted |
|------------------------|-------------------|-------------------------|--------------------|--------------------|
| Trihalomethanes (THMs) | 100 | 70.5 | 4 | 4 |

THMs are generated during the water disinfection process as a by-product of reactions between chlorine and organic material. THMs are generally found only in drinking water obtained from surface water supplies. THMs are to be monitored on a quarterly basis and the IMAC result is expressed as an average of 4 quarterly samples. Only water supplies derived from surface water or groundwater under the influence of surface water are required to monitor for THMs.

Chemical – Health Category

All waterworks serving less than 5000 persons are required to submit water samples for SE's Chemical Health category **once every two (2) years**. The Chemical Health category includes analysis for arsenic, barium, boron, cadmium, chromium, fluoride, lead, nitrate, selenium and uranium.

All water for the **Valley View Centre Waterworks** is supplied by the City of Moose Jaw and the Buffalo Pound Treatment Plant. For Chemical Health analysis, please refer to the Buffalo Pound Water Administration Board 2005 Annual Report. It can be found at the City of Moose Jaw website at: <http://www.citymoosejaw.com/departments/engineers/municipal/waterquality.shtml>

Sample results indicate that the provincial drinking water quality standards were within requirements.

General Chemical

All waterworks serving less than 5000 persons are required to submit water samples for SE's General Chemical category **once every two (2) years** if a ground water source. The General Chemical category includes analysis for alkalinity, bicarbonate, calcium, carbonate, chloride, conductivity, hardness (as CaCO₃), magnesium, sodium, sulphate and total dissolved solids.

All water for the **Valley View Centre Waterworks** is supplied by the City of Moose Jaw and the Buffalo Pound Treatment Plant. For General Health analysis, please refer to the Buffalo Pound Water Administration Board 2005 Annual Report. It can be found at the City of Moose Jaw website at: <http://www.citymoosejaw.com/departments/engineers/municipal/waterquality.shtml>

Sample results indicated that the provincial drinking water quality standards were within requirements.

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

**Saskatchewan Property Management
Accommodation Services Division
Infrastructure Support Services
Regina, Saskatchewan
(306) 787-6332**

Copies of this report are available at:

<https://watermon.spm.gov.sk.ca/>