

Annual Notification to Consumers: Guidelines for Compliance



The public is able to view information about their local drinking water supply through the SaskH2O website.

Go to www.saskh20.ca

My Drinking Water Page

Section 44 of *The Water Regulations, 2002* require that the owner (permittee) of a waterworks provide annual notification to consumers served by the system of:

- (a) the quality of water produced or supplied by the waterworks in comparison with the levels set out in these regulations; and
- (b) the permittee's compliance with sample submission requirements described in the permittee's permit.

These requirements apply to waterworks providing water for human consumptive use and hygienic use. In the case of hygienic use water systems, not all parameters will be monitored and only parameters that are monitored can be reported to consumers.

Templates are attached which outline the minimum content of notices to consumers. Both a "long form" and a "short form" are provided. At a minimum, permittees should include information found on the "short form" to meet the requirements for notification to consumers. The "long form" is provided for permittees to provide additional information in the event that consumers seek to gain more knowledge regarding water quality and sample submission compliance for the waterworks.

These templates have been designed to allow use of annual compliance reports provided to the permittee by Saskatchewan Ministry of Environment as a source for most needed information. Even though Environment provides annual compliance information, the permittee is responsible for publication of notices and any associated costs. 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/ewh-semt/pubs/water-eau/selenium/index_e.html.

Permittees are to provide annual notification to consumers **by June 30th of the next year**. Convenient means to provide notification to consumers may include any one of the following:

- inclusion in water bills or tax notices;
- publication of the notice in a local newspaper;
- publication (newspaper, radio, television) of information availability and citing the location at which a full notice may be obtained (ie. town office); or
- publishing information on an internet web-site if such a resource is available.

The *Water Regulations, 2002* also require that as soon as possible after provision of notification to consumers, the permittee shall provide the minister with written notice of their compliance with this requirement.

To meet this requirement Permittees should inform the local Environment Region office in writing, at the address on the next page, and include a copy of the notification provided to consumers.

EPB 236 May/08



Saskatchewan
Ministry of
Environment

www.environment.sk.ca

SaskH₂O

<p>Estevan EPB Office PO Box 5000, 1302 3rd St. ESTEVAN SK S4A 0S1 Phone: (306) 637-4604 Fax: (306) 637-4603</p>	<p>North Battleford EPB Office 108-1146 102nd St. NORTH BATTLEFORD SK S9A 1E9 Fax: (306) 446-7464 Phone: (306) 446-7683 or (306) 446-7987</p>
<p>La Ronge EPB Office PO Box 5000 LA RONGE SK S0J 1L0 Phone: (306) 425-4581 Fax: (306) 425-4673</p>	<p>Prince Albert EPB Office 6TH Floor, PO Box 3003 PRINCE ALBERT SK S6V 6G1 Phone: (306) 953-3369 Fax: (306) 953-2502</p>
<p>Meadow Lake EPB Office Unit 1 – 101 Railway Place MEADOW LAKE SK S9X 1E6 Fax: (306) 236-7677 Phone: (306) 236-7645</p>	<p>Regina EPB Office 3211 Albert Street REGINA SK S4S 5W6 Fax: (306) 787-0197 Phone: (306) 787-6199</p>
<p>Melfort – EPB Office PO Box 6500, 107 Crawford Avenue E. MELFORT SK S0E 1A0 Phone: (306) 752-6129 Fax: (306) 752-6168</p>	<p>Saskatoon EPB Office 102-112 Research Drive SASKATOON SK S7K 2H6 Phone: (306) 933-8367 Fax: (306) 933-8442</p>
<p>Melville EPB Office 256 2nd Ave. W., Box 2170 MELVILLE SK S0A 2P0 Phone: (306) 728-7492 Fax: (306) 728-7447</p>	<p>Swift Current EPB Office 350 Cheadle Street West SWIFT CURRENT SK S9H 4G3 Fax: (306) 778-8212 Phone: (306) 778-8642, 778-8429 or 778-8685</p>
<p>Moose Jaw EPB Office 206-110 Ominica St. W. MOOSE JAW SK S6H 6V2 Phone: (306) 694-3586 or (306) 694-3364 Fax: (306) 694-3743</p>	<p>Watrous EPB Office PO Box 1128, 403 Main Street WATROUS SK S0K 4T0 Phone: (306) 946-3233 Fax: (306) 946-3221</p>
<p>Moose Mountain EPB Office 3211 Albert Street REGINA SK S4S 5W6 Phone: (306) 787-8253 Fax: (306) 787-0197</p>	<p>Yorkton EPB Office 120 Smith Street YORKTON SK S3N 3V3 Fax: (306) 786-5716 Phone: (306) 786-1425 or (306) 786-1424</p>
<p>Strasbourg EPB Office 3211 Albert Street REGINA SK S4S 5W6 Phone: (306) 787-1016 Fax: (306) 787-0197</p>	



Drinking Water Quality and Compliance Cities Long Form – A Template for Annual Notice to Consumers

Saskatchewan Ministry of Environment 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. The following is a summary of the (*community name*) water quality and sample submission compliance record for the (*inset applicable time period here*) time period. This report was completed on (*insert date here*) (*must be completed before June 30 each year on a calendar year based reporting frequency*). Readers should refer to Saskatchewan Ministry of Environment's Municipal Drinking Water Quality Monitoring Guidelines, November, 2002, EPB 202 for more information on minimum sample submission requirements. 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/ewh-semt/pubs/water-eau/index_e.html.

Water Quality Standards

Bacteriological Quality

Parameter/Location	Limit	Regular Sample Required	Regular Samples Submitted	# of Positive Regular Submitted (Percentage)
Total Coliform and Background Bacteria	0 organisms/100 mL Less than 200 organisms/100 mL	_____	_____	_____

The owner/operator is responsible to ensure that one hundred percent of all bacteriological samples are submitted as required. Generally analysis is performed on a single sample for all parameters mentioned above. All waterworks are required to submit samples for bacteriological water quality, the frequency of monitoring depends on the population served by the waterworks.

Water Disinfection – Chlorine Residual for Test Results Submitted with Bacteriological Samples

Parameter	Minimum Limit (mg/L)	Free Chlorine Residual Range	Total Chlorine Residual Range	# Tests Required	# Tests Submitted	# Adequate Chlorine (%)
Chlorine Residual in Distribution System	0.1 mg/L free OR 0.5 mg/L total	_____	_____	_____	_____	_____ (____%)

*A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual **OR** 0.5 mg/L total chlorine residual is required at all times throughout the distribution system unless otherwise approved. A proper chlorine submission is defined as a bacteriological sample submission form with both the free and total chlorine residual fields filled out. An adequate chlorine is a result that indicates that the chlorine level is above the regulated minimums. An adequate chlorine may be counted even if the chlorine results were submitted incorrectly. A waterworks is required to submit chlorine residual test results on every bacteriological sample they submit.*

Water Disinfection – Free Chlorine Residual for Water Entering Distribution System – From Water Treatment Plant Records

Parameter	Limit (mg/L)	Test Level Range	# Tests Performed	# Tests Not Meeting Requirements
Free Chlorine Residual	at 0.1	_____	_____	_____

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 operators 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.

Turbidity

Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Required
Turbidity	1.0	_____	_____	_____	_____	_____

Turbidity is a measure of water treatment efficiency. Turbidity measures the “clarity” of the drinking water and is generally reported in Nephelometric Turbidity Units (NTU). All waterworks are required to monitor turbidity at the water treatment plant. The frequency of measurement varies from daily for small systems to continuous for larger waterworks.

Chemical – Health Category

Parameter	Limit MAC(mg/L)	Limit IMAC (mg/L)	Sample Results	Samples Exceeding MAC/IMAC	# Samples Required	# Samples Required
Arsenic	0.025		_____	_____	_____	_____
Barium	1.0		_____	_____	_____	_____
Boron		5.0	_____	_____	_____	_____
Cadmium	0.005		_____	_____	_____	_____
Chromium	0.05		_____	_____	_____	_____
Fluoride (avg.*)	1.5		_____	_____	_____	_____
Lead	0.01		_____	_____	_____	_____
Nitrate (avg.*)	45.0		_____	_____	_____	_____
Selenium	0.01		_____	_____	_____	_____
Uranium	0.02		_____	_____	_____	_____

Substances within the chemical health category may be naturally occurring in drinking water sources or may be the result of human activities. These substances may represent a long-term health risk if the Maximum Acceptable Concentration (MAC) or Interim Maximum Acceptable Concentration (IMAC) is exceeded. All drinking water supplies are required to monitor for substances in the “Chemical-Health” category, the frequency of monitoring depends on the population served by the waterworks. Some waterworks add fluoride to drinking water as a means to aid in the prevention of dental decay.

* Results expressed as average values for communities or waterworks which fluoridate drinking water supplies or those with elevated concentrations of fluoride or nitrates.

Chemical – Pesticides

Parameter	Limit MAC(mg/L)	Limit IMAC (mg/L)	Sample Results	Samples Exceeding MAC/IMAC	# Samples Required	# Samples Required
Atrazine		0.005	_____	_____	_____	_____
Bromoxynil		0.005	_____	_____	_____	_____
Carbofuran	0.09		_____	_____	_____	_____
Chlorpyrifos	0.09		_____	_____	_____	_____
Dicamba	0.12		_____	_____	_____	_____
2,4-D*		0.1	_____	_____	_____	_____
Diclofop-methyl	0.009		_____	_____	_____	_____
Dimethoate		0.2	_____	_____	_____	_____
Malathion	0.19		_____	_____	_____	_____
Pentachlorophenol	0.06		_____	_____	_____	_____
Picloram		0.19	_____	_____	_____	_____
Trifluralin		0.045	_____	_____	_____	_____

Pesticides in drinking water may occur as a result of the use of these substances by humans. These substances may represent a long-term health risk if the Maximum Acceptable Concentration (MAC) or Interim Maximum Acceptable Concentration (IMAC) is exceeded. Mandatory sampling requirements depends on the population served by the waterworks.

Chemical – Trihalomethanes

Parameter	Trihalomethanes Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Trihalomethanes	0.1	_____	4 (one every 3 months)	_____

Trihalomethanes are generated during the water disinfection process by a by-product of reactions between chlorine and organic material. Trihalomethanes are generally found only in drinking water obtained from surface water supplies. Trihalomethanes are to be monitored on a quarterly basis and the Interim Maximum Acceptable Concentration 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 trihalomethanes.

Chemical – Cyanide and Mercury

Parameter	Limit MAC (mg/L)	Sample Results	# Samples Exceeding MAC	# Samples Required	# Samples Submitted	Date of last sample: _____
Cyanide	0.2	_____	_____	_____	_____	
Mercury	0.001	_____	_____	_____	_____	

Mercury enters water supplies naturally and as a result of human activities. Cyanide can enter source waters as a result of industrial effluent or spill events. These substances may represent a long-term health risk if the Maximum Acceptable Concentration (MAC) is exceeded. Mandatory sampling requirements depends on the population served by the waterworks.

Chemical – Synthetic Organic Chemicals

Parameter	Limit MAC (mg/L)	Limit IMAC (mg/L)	Sample Result(s)	# Samples Exceeding Limit	# Samples Required	# Samples Submitted
Benzene	0.005		_____	_____	_____	_____
Benzo(a)pyrene	0.00001		_____	_____	_____	_____
Carbon tetrachloride	0.005		_____	_____	_____	_____
Dichlorobenzene, 1,2	0.02		_____	_____	_____	_____
Dichlorobenzene, 1,4	0.005		_____	_____	_____	_____
Dichloroethane, 1,2		0.005	_____	_____	_____	_____
Dichloroethylene, 1,1	0.014		_____	_____	_____	_____
Dichloromethane	0.05		_____	_____	_____	_____
Dichlorophenol, 2,4	0.9		_____	_____	_____	_____
Monochlorobenzene	0.08		_____	_____	_____	_____
Tetrachlorophenol, 2,3,4,6	0.1		_____	_____	_____	_____
Tichloroethylene	0.05		_____	_____	_____	_____
Trichlorophenol, 2,4,6	0.005		_____	_____	_____	_____
Vinyl Chloride	0.002		_____	_____	_____	_____

Contamination of drinking water by synthetic organic chemicals only results from pollution events. Contamination of drinking water in excess of Maximum Acceptable Concentration (MAC) or Interim Maximum Acceptable Concentration (IMAC) may represent a health risk. Mandatory sampling requirements depends on the population served by the waterworks.

Radiological

Parameter	Becquerels/L	Sample Results	# Samples Exceeding Limit	# Samples Required	# Samples Submitted
Gross Alpha	0.1	_____	_____	_____	_____
Gross Beta	1.0	_____	_____	_____	_____

Radiological constituents in drinking water may be the result of natural conditions or as a result of human activities. Gross alpha and Gross Beta are initial water quality screening tests used to determine the overall quality of drinking water for a larger set of specific radiological parameters. Further sampling may be required if Gross Alpha or Beta exceedences are found. Sampling requirements depend on permit specific requirements.

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

- City/Owner/Manager Name and Title
- Postal Address
- Telephone number / Facsimile number (if available) / E-mail address (if available)

(Note: This form may be used for communities or waterworks serving a population of 5000 persons or more).



Drinking Water Quality and Compliance

Cities Short Form – A Template for Annual Notice to Consumers

Introduction

Saskatchewan Ministry of Environment 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. The following is a summary of the (*community name*) water quality and sample submission compliance records for the (*inset applicable time period here*) time period. This report was completed on (*insert date here*) (*must be completed before June 30 each year on a calendar year based reporting frequency*). Readers should refer to Saskatchewan Ministry of Environment's Municipal Drinking Water Quality Monitoring Guidelines, November 2002, EPB 202 for more information on minimum sample submission requirements and the meaning of type of sample. 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/ewh-semt/pubs/water-eau/index_e.html

Water Quality Standards

Bacteriological Quality

Regular Parameter/Location (%)	Limit	Regular Samples	Regular Samples	# of Positive
		Required	Submitted	Submitted
Total Coliform and Background Bacteria	Organisms/100 mL Less than 200/100 mL	_____	_____	_____

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

Parameter	Limit (mg/L)	Test Level Range	# Tests Performed	# Tests Not Meeting Requirements
Chlorine	0.1 mg/L free OR			
Residual	0.5 mg/L total	_____	_____	_____

Water Disinfection – Free Chlorine Residual for Water Entering Distribution System – From Water Treatment Plant Records

Parameter	Limit (mg/L)	Test Level Range	# Tests Performed	# Tests Not Meeting Requirements
Free Chlorine Residual	at least 0.1	_____	_____	_____

Turbidity

Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Turbidity (NTU)	# Tests Required	# Tests Performed
Turbidity	_____	_____	_____	_____	_____	_____

Chemical – Health Category

All waterworks serving 5000 persons or more are required to submit water samples for Saskatchewan Environment's "Chemical Health" based on population size. The "Chemical Health" category includes analysis for arsenic, barium, boron, cadmium, chromium, fluoride, lead, nitrate, selenium and uranium.

Samples for "Chemical Health" analysis were submitted on (*insert date*). Sample results indicated that the provincial drinking water quality standards were not exceeded. (*Use this one if review indicates that there were no exceedances*). **(OR)** Samples exceeded provincial water quality standards only for the following parameters: (*Use only the applicable portions of table below for which values have been exceeded*).

Parameter	Limit MAC (mg/L)	Limit IMAC (mg/L)	Sample Results	# Samples Exceeding Limit	# Samples Required	# Samples Submitted
Arsenic	0.025		_____	_____	_____	_____
Barium	1.0		_____	_____	_____	_____
Boron		5.0	_____	_____	_____	_____
Cadmium	0.005		_____	_____	_____	_____
Chromium	0.05		_____	_____	_____	_____
Fluoride (avg.*)	1.5		_____	_____	_____	_____
Lead	0.01		_____	_____	_____	_____
Nitrate (avg.*)	45.0		_____	_____	_____	_____
Selenium	0.01		_____	_____	_____	_____
Uranium	0.02		_____	_____	_____	_____

* Results expressed as average values for communities or waterworks which fluoridate drinking water supplies or those with elevated concentrations of fluoride or nitrates.

Chemical – Trihalomethanes

Parameter	Trihalomethanes Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Trihalomethanes	0.1	_____	4 (1 every 3 months)	_____

(Note: Only water supplies derived from surface water or groundwater under the influence of surface water are required to monitor for trihalomethanes. Waterworks using groundwater sources beyond the influence of surface water do not need to report trihalomethanes, since sampling and analysis will not likely have been performed).

Chemical – Pesticides

All waterworks serving 5000 persons or more are required to submit water samples for Saskatchewan Environment's "Pesticides" category. The frequency of sample submission depends on the number of persons supplied by the waterworks. The "Pesticides" category includes analysis for atrazine, bromoxynil, carbofuran, chlorpyrifos, dicamba, 2,4-D, diclofop-methyl, dimethoate, malathion, pentachlorophenol, picloram and trifluralin.

Samples for pesticide analysis were submitted on (*insert date*). Sample results indicated that the provincial drinking water quality standards were not exceeded. (*Use this one if review indicates that there were no exceedences*). **(OR)** Samples exceeded provincial water quality standards only for the following parameters: (*Use only the applicable portions of table below for which values have been exceeded*).

Parameter	Limit MAC (mg/L)	Limit IMAC (mg/L)	Sample Result	# Samples Exceeding MAC/IMAC	#Samples Required	# Samples Submitted
Atrazine		0.005	_____	_____	_____	_____
Bromoxynil		0.005	_____	_____	_____	_____
Carbofuran	0.09		_____	_____	_____	_____
Chlorpyrifos	0.09		_____	_____	_____	_____
Dicamba	0.12		_____	_____	_____	_____
2,4-D*		0.1	_____	_____	_____	_____
Diclofop-methyl	0.009		_____	_____	_____	_____
Dimethoate		0.2	_____	_____	_____	_____
Malathion	.19		_____	_____	_____	_____
Pentachlorophenol	0.06		_____	_____	_____	_____
Picloram		0.19	_____	_____	_____	_____
Trifluralin		0.045	_____	_____	_____	_____

Chemical – Cyanide and Mercury

Parameter	Limit MAC (mg/L)	Sample Results	# Samples Exceeding MAC	# Samples Required	# Samples Submitted
Cyanide	0.2	_____	_____	_____	_____
Mercury	0.001	_____	_____	_____	_____

Chemical – Synthetic Organic Chemicals

All waterworks serving 5000 persons or more are required to submit water samples for Saskatchewan Environment's "Synthetic Organic Chemicals" category. The frequency of sample submission depends on the number of persons supplied by the waterworks. The "Synthetic Organic Chemicals" category includes analysis for Benzene, Benzo(a)pyrene, Carbon tetrachloride, 1,2-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, Dichloromethane, 2,4-Dichlorophenol, Monochlorobenzene, 2,3,4,6-Tetrachlorophenol, Trichloroethylene, 2,4,6-Trichlorophenol and Vinyl Chloride.

Samples for synthetic organic chemicals were submitted on *(insert dates)*. Sample results indicated that the provincial drinking water quality standards were not exceeded. *(Use this one if review indicates that there were no exceedences)*. **(OR)** Samples exceeded provincial water quality standards only for the following parameters: *(Use only the applicable portion of table below for which values have been exceeded)*.

Parameter/Location	Limit MAC	Limit IMAC	Sample Result(s)	# Samples Exceeding Limit	# Samples Required	# Samples Submitted
Benzene	0.005	_____	_____	_____	_____	_____
Benzo(a)pyrene	0.00001	_____	_____	_____	_____	_____
Carbon Tetrachloride	0.005	_____	_____	_____	_____	_____
Dichlorobenzene, 1,2	0.02	_____	_____	_____	_____	_____
Dichlorobenzene, 1,4	0.005	_____	_____	_____	_____	_____
Dichloroethylene, 1,1	0.014	_____	_____	_____	_____	_____
Dichloromethane	0.05	_____	_____	_____	_____	_____
Dichlorophenol, 2,4	0.9	_____	_____	_____	_____	_____
Monochlorobenzene	0.08	_____	_____	_____	_____	_____
Tetrachlorophenol, 2,3,4,6	0.1	_____	_____	_____	_____	_____
Trichloroethylene	0.05	_____	_____	_____	_____	_____
Trichlorophenol, 2,4,6	0.005	_____	_____	_____	_____	_____
Vinyl Chloride	0.002	_____	_____	_____	_____	_____

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

City/Owner/Manager Name and Title
 Postal Address
 Telephone Number
 Facsimile Number (if available)
 E-mail address (if available)

(Note: This short form may be used for communities or waterworks serving a population of 5000 or more persons).

March 2008
 EPB 236B



Drinking Water Quality and Compliance Town Long Form – A Template for Annual Notice to Consumers

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. The following is a summary of the (community name's) water quality and sample submission compliance record for the (inset applicable time period here) time period. This report was completed on (insert date here) (*must be completed before June 30 each year on a calendar year based reporting frequency*). Readers should refer to SE's "Municipal Drinking Water Quality Monitoring Guidelines, November 2002, EPB 202" for more information on minimum sample submission requirements. 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/ewh-semt/pubs/water-eau/index_e.html.

Water Quality Standards

Bacteriological Quality

Parameter/Location	Limit	Regular Samples Required	Regular Samples Submitted	# of Positive Regular Submitted (Percentage)
Total Coliform and Background Bacteria	0 Organisms/100 mg/L Less than 200 Organisms/100 mL	_____	_____	_____

The owner/operator is responsible to ensure that 100 per cent of all bacteriological samples are submitted as required. All waterworks are required to submit samples for bacteriological water quality, the frequency of monitoring depends on the population served by the waterworks.

Water Disinfection

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

Parameter	Minimum Limit (mg/L)	Free Chlorine Residual Range	Total Chlorine Residual Range	# Tests Required	# Tests Submitted	# Adequate Chlorine (Percentage)
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	_____	_____	_____	_____	_____ (____%)

A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual OR 0.5 mg/L total chlorine residual is required at all times throughout the distribution system unless otherwise approved. A proper chlorine submission is defined as a bacteriological sample submission form with both the free and total chlorine residual fields filled out. An adequate chlorine is a result that indicates that the chlorine level is above the regulated minimums. An adequate chlorine may be counted even if the chlorine results were submitted incorrectly. A waterworks is required to submit chlorine residual test results on every bacteriological sample they submit.

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 0.1	_____	_____	_____

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.

Turbidity – From Water Treatment Plant Records

Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Performed
Turbidity	_____	_____	_____	_____	_____	_____

Turbidity is a measure of water treatment efficiency. Turbidity measures the “clarity” of the drinking water and is generally reported in Nephelometric Turbidity Units (NTU). All waterworks are required to monitor turbidity at the water treatment plant. The frequency of measurement varies from daily for small systems to continuous for larger waterworks.

Chemical – Health Category

Parameter	Limit MAC (mg/L)	Limit IMAC (mg/L)	Sample Results	# Samples Exceeding MAC/IMAC	# Samples Required	# Samples Submitted
Arsenic	0.025		_____	_____	_____	_____
Barium	1.0		_____	_____	_____	_____
Boron		5.0	_____	_____	_____	_____
Cadmium	0.005		_____	_____	_____	_____
Chromium	0.05		_____	_____	_____	_____
Fluoride (avg.*)	1.5		_____	_____	_____	_____
Lead	0.01		_____	_____	_____	_____
Nitrate (avg.*)	45.0		_____	_____	_____	_____
Selenium	0.01		_____	_____	_____	_____
Uranium	0.02		_____	_____	_____	_____

Substances within the chemical health category may be naturally occurring in drinking water sources or may be the result of human activities. These substances may represent a long-term health risk if the Maximum Acceptable Concentration (MAC) or Interim Maximum Acceptable Concentration (IMAC) is exceeded. All drinking water supplies are required to monitor for substances in the Chemical-Health category, the frequency of monitoring depends on the population served by the waterworks. Some waterworks will add fluoride to drinking water as a means to aid in the prevention of dental decay.

Chemical – Trihalomethanes

Parameter	Limit IMAC (mg/L)	Sample Result (average)	# Samples Required	# Samples Required
Trihalomethanes (THMs)	0.1	_____	_____	_____

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.

General Chemical

Parameter	Aesthetic Objectives* (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Alkalinity	500	_____	_____	_____
Bicarbonate	No Objective	_____	_____	_____
Calcium	No Objective	_____	_____	_____
Carbonate	No Objective	_____	_____	_____
Chloride	250	_____	_____	_____
Conductivity	No Objective	_____	_____	_____
Hardness	800	_____	_____	_____
Magnesium	200	_____	_____	_____
PH	No Objective	_____	_____	_____
Sodium	300	_____	_____	_____
Sulphate	500	_____	_____	_____
Total dissolved solids	1500	_____	_____	_____

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

The last sample for General Chemical analysis was required on *(insert year required)* and submitted on *(insert date)* *(use this statement if a groundwater supply)*. The last sets of quarterly samples for General Chemical analysis were required on *(insert year or sample submission period required)* and were submitted on *(insert dates)* *(use this statement if a surface source or blended source)*. Sample results indicated that there were no exceedences of the provincial aesthetic objectives for the General Chemical category *(use this statement if there were no exceedences)*. OR Samples exceeded provincial aesthetic objectives for the General Chemical category for the following parameters: *(use only the applicable portions of the table below for which values have been exceeded)*.

*Objectives apply to certain characteristics of or substances found in water for human consumptive or hygienic use. The presence of these substances will affect the acceptance of water by consumers and/or interfere with the practice of supplying good quality water. Compliance with drinking water aesthetic objectives is not mandatory as these objectives are in the range where they do not constitute a health hazards. The aesthetic objectives for several parameters (including hardness as CaCO₃, magnesium, sodium and total dissolved solids) consider regional differences in drinking water sources and quality.

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

Town/Village/Hamlet/Rural Municipality/Owner Name and Title
Postal Address
Telephone number/Facsimile number (if available)/E-mail address (if available)

(Note: This form may be used for communities or waterworks serving a population of less than 5000 persons.)
March2008 EPB 236C



Drinking Water Quality and Compliance Town Short Form – A Template for Annual Notice to Consumers

(Note: This short form may be used for communities or waterworks serving a population of less than 5000).

Introduction

Saskatchewan Ministry of Environment 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. The following is a summary of the (*community name*) water quality and sample submission compliance record for the (*inset applicable time period here*) time period. This report was completed on (*inset date here*) (*must be completed before June 30 each year on a calendar year based reporting frequency*). Readers should refer to Environment's Municipal Drinking Water Quality Monitoring Guidelines, November 2002, EPB 202 for more information on minimum sample submission requirements and the meaning of type of sample. 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/ewh-semt/pubs/water-eau/index_e.html.

Water Quality Standards

Bacteriological Quality

Parameter/Location	Limit	Regular Samples Required	Regular Samples Submitted	# of Positive Regular Submitted (%)
Total Coliform and Background Bacteria	0 Organisms/100 mL Less than 200/100 mL	_____	_____	_____

Water Disinfection –

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

Parameter	Minimum Limit	Total Chlorine Residual Range	Free Chlorine Residual Range	# Tests Required	# Tests Submitted	# Adequate Chlorine (%)
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	_____	_____	_____	_____	_____

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 0.1	_____	_____	_____

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.

Turbidity – From Water Treatment Plant Records

Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Performed
Turbidity	_____	_____	_____	_____	_____	_____

Chemical – Health Category

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

The last sample for Chemical Health analysis was submitted on (*inset date*). Sample results indicated that the provincial drinking water quality standards were not exceeded. (*Use this one if review indicates that there were no exceedences*). **(OR)** Samples exceeded provincial water quality standards for the following parameters: (*Use only the applicable portions of table below for which values have been exceeded*).

Parameter	Limit MAC(mg/L)	Limit IMAC (mg/L)	Sample Result(s)	# Samples Exceeding Limit	
Arsenic	0.025		_____	_____	* Results expressed as average values for communities or waterworks that fluoridate drinking water supplies or those with elevated concentrations of fluoride or nitrates.
Barium	1.0		_____	_____	
Boron		5.0	_____	_____	
Cadmium	0.005		_____	_____	
Chromium	0.05		_____	_____	
Fluoride (avg*)	1.5		_____	_____	
Lead	0.01		_____	_____	
Nitrate (avg.*)	45.0		_____	_____	
Selenium	0.01		_____	_____	
Uranium	0.02		_____	_____	

Chemical – Trihalomethanes (THMs)

Parameter	THMs Limit (mg/L)	Sample Result (average)	# Samples Required	# Samples Submitted
Trihalomethanes	0.1	_____	4 (1 every 3 months)	_____

Note: Only water supplies derived from surface water or groundwater under the influence of surface water are required to monitor for THMs. Waterworks using groundwater sources beyond the influence of surface water do not need to report THMs since sampling/analysis will not likely have been performed.

General Chemical

Parameter	Aesthetic Objectives * (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Alkalinity	500	_____	_____	_____
Bicarbonate	No Objective	_____	_____	_____
Calcium	No Objective	_____	_____	_____
Carbonate	No Objective	_____	_____	_____
Chloride	250	_____	_____	_____
Conductivity	No Objective	_____	_____	_____
Hardness	800	_____	_____	_____
Magnesium	200	_____	_____	_____
PH	No Objective	_____	_____	_____
Sodium	300	_____	_____	_____
Sulphate	500	_____	_____	_____
Total dissolved Solids	1500	_____	_____	_____

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

The last sample for General Chemical analysis was required on (insert year required) and submitted on (insert date) (use this statement if a groundwater supply). The last sets of quarterly samples for General Chemical analysis were required on (insert year or sample submission period required) and were submitted on (insert dates) (use this statement if a surface source or blended source). Sample results indicated that there were no exceedences of the provincial aesthetic objectives for the General Chemical category (use this statement if there were no exceedences). (OR) Samples exceeded provincial aesthetic objectives for the General Chemical category for the following parameters: (use only the applicable portions of the table below for which values have been exceeded).

*Objectives apply to certain characteristics of or substances found in water for human consumptive or hygienic use. The presence of these substances will affect the acceptance of water by consumers and/or interfere with the practice of supplying good quality water. Compliance with drinking water aesthetic objectives is not mandatory as these objectives are in the range where they do not constitute a health hazards. The aesthetic objectives for several parameters (including hardness as CaCO₃, magnesium, sodium and total dissolved solids) consider regional differences in drinking water sources and quality.

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

- Town/Village/Hamlet/Rural Municipality/Owner Name and Title
- Postal Address
- Telephone Number / Facsimile Number (if available)
- E-mail address (if available)