Resort Village of Kannata Valley

2025 Drinking Water Quality and Compliance
Annual Notice to Consumers

1. INTRODUCTION

The Water Security Agency and the Ministry of Environment require 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 RESORT VILLAGE OF KANNATA VALLEY's water quality and sample submission compliance record for the 2025 time period. This report was completed on May 28, 2026.

Readers should refer to Water Security Agency's *Municipal Drinking Water Quality Monitoring Guidelines*, October 2020, EPB 202 for more information on minimum sample submission requirements and the meaning of type of sample. Permit requirements for specific waterworks may require more sampling than outlined in the department's monitoring guidelines. Further information on the nature and significance of specific water tests is available at: http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index-eng.php

2. WATER QUALITY STANDARDS - BACTERIOLOGICAL QUALITY

Bacteriological determination has been a standard monitoring tool for many years, particularly using total coliform bacteria as an indicator of the potential presence of pathogens. Bacteriological water quality monitoring is required for systems supplying water for human consumptive use or hygienic use. Sampling locations are intended to be at representative locations in the distribution system. Samples include reservoir samples and those obtained during routine distribution sampling.

Parameter	Limit	Regular Samples Required	Regular Samples Submitted	# of Positive Regular Submitted (%)
Total Coliform	Zero organisms/100 mL	26	22	0
E. Coli	Zero organisms/100 mL	26	22	0
Background Bacteria	<200 organisms/100mL	26	22	0

3. WATER DISINFECTION – CHLORINE RESIDUAL IN DISTRIBUTION SYSTEM FOR TEST RESULTS SUBMITTED WITH BACTERIOLOGICAL SAMPLES

Unless otherwise approved, a minimum of 0.1 mg/L free chlorine residual OR 0.5 mg/L total chlorine residual is always required throughout the distribution system. The Village employs chlorination; therefore, total chlorine residual samples are collected from the distribution system at the same time and frequency as the bacteriological water quality samples.

Parameter	Minimum Limit	Total Chlorine Residual Range	Free Chlorine Residual Range	# of Tests Required	# of Tests Submitted	% Adequate Chlorine
Chlorine Residual	0.1 mg/L free OR 0.5 mg/L total	0.15 – 1.79	0.06 – 1.20	365	363	100

4. WATER DISINFECTION - FREE CHLORINE RESIDUAL FOR WATER ENTERING DISTRIBUTION SYSTEM FROM WATERWORKS RECORDS-FROM WATER TREATMENT PLANT RECORDS

As indicated in the Village's PTO, a minimum of 0.1 milligrams per litre (mg/L) free chlorine residual is required for water entering the distribution system. Tests are performed on a daily basis by the waterworks operators and are 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.

Parameter	Limit (mg/L)	Test Level Range	# of Tests Performed	# Of Tests Not Meeting Requirements
Free Chlorine	Minimum 0.1 mg/L	0.63-2.20	363	0

5. **TURBIDITY**

Because of the effects on bacteriological quality and treatment performance, turbidity is an important water quality parameter. Depending on the composition of the turbidity, interference with chlorination can range from negligible to severe. Waterworks operators for the Village continuously monitor the turbidity of all filters and outgoing water into the distribution system. Monitoring is also conducted on discrete samples that are taken daily by the WTP Water Lab.

Parameter	Limit NTU	Test Level Range	# of Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# of Tests Required	# of Tests Performed
Turbidity	1.00	0.08-0.38	0	0.38	365	363

6. 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* if a groundwater source. Sample results indicated that there were no exceedances of the provincial aesthetic objectives for the General Chemical category.

Parameter	Limit MAC	Units	Limit IMAC	Units	Sample Result (s)	Units	# of Samples Exceeding Limit	*Results expressed as average values for communities or waterworks that fluoridate drinking water supplies or those with elevated concentrations of fluoride or nitrates.
Arsenic	10.0	µg/L			7.7	ug/L	0	
Barium	1.0	mg/L	<1000	Ug/L	6.0	ug/L	0	
Boron			5.0	mg/L	1.0	mg/L	0	
Bromate	10.0	µg/L	-	-	-	-	0	
Cadmium	5.0	µg/L			<0.15	ug/L	0	
Chlorate	1.0	mg/L	-	-	-	-	0	
Chlorite	1.0	mg/L	-	-	-	-	0	
Chromium	50.0	µg/L			<0.19	ug/L	0	
Flouride (avg. *)	1.5	mg/L	-	-	-	-	0	
Lead	10.0	µg/L			0.50	ug/L	0	
Nitrate (avg. *)	45.0	mg/L	-	-	-	-	0	
Selenium	10.0	µg/L			<1.13	ug/L	0	
Uranium	20.0	µg/L			0.40	ug/L	0	

MAC – Maximum Acceptable Concentration, IMAC – Interim Maximum Acceptable Concentration
Note: "<" values are considered to be below detection limits

7. CHEMICAL – TRIHALOMETHANES (THMS)AND HALOACETIC ACIDS (HAAS)

Parameter	Limit (mg/L)	Sample Result (average)	Units (mg/L or µg/L)	# of Samples Required	# of Samples Submitted
Trihalomethanes	0.1	4.0	Ug/l	4 (1 every 3 months)	4
Haloacetic Acid	0.08	12.5	Ug/L	4 (1 every 3 months)	4

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

8. GENERAL CHEMICAL

All waterworks serving less than 5000 persons are required to submit water samples for SE's Chemical Health category *once every 2 years* if a groundwater source. Sample results indicated that there were no exceedances of the provincial aesthetic objectives for the General Chemical category.

Parameter	Aesthetic Objective (mg/L)	Sample Results (average)	Units (mg/L or µg/L)	# of Samples Required	# of Samples Submitted
Alkalinity	500	506	mg/L	1	1
Bicarbonate	No Objective	617	mg/L	1	1
Calcium	No Objective	89	mg/L	1	1
Carbonate	No Objective	0	mg/L	1	1
Chloride	250	180.6	mg/L	1	1
Conductivity	No Objective	2942	uS/cm	1	1
Hardness	800	412	mg/L	1	1
Magnesium	200	46	mg/L	1	1
pH	No Objective	7.9	mg/L	1	1
Sodium	300	610	mg/L	1	1
Sulphate	500	829.8	mg/L	1	1
Total Dissolved Solids	1500	2383	mg/L	1	1

Note: "<" values are considered to be below detection limits

Objectives apply to certain characteristics of 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 hazard. The aesthetic objectives for several parameters (including hardness as $CaCO_3$, 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:

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