

Date Woytrak .
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Drinking Water Quality and Compliance Annual Notice to Customers

Introduction

The Water Security Agency requires that at least once a year waterworks owners provide notification to consumers of the quality of water produced and supplied as well as information of the performance of the waterworks in submitting samples as required by a minister's order or Permit to Operate waterworks. The following is a summary of the Resort Village of Aquadeo water quality and sample submission compliance report for the period January 1, 2018 – December 31, 2018 and was completed on June 7-2019.

Permit requirements for a specific waterworks may require more sampling than outlined in the department's monitoring guidelines.

Water Quality Standards

Bacteriological Quality

	Regular Samples Required	Regular Samples Submitted	Regular Samples Submitted (%)
Total Coli form and 0 Organisms/100ml	17	17	100%
Background bacteria less than 200/100mL			
Special samples submitted re: drinking water advisory		4 Arsenic samples	

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	0.1mg/L free OR 0.5mg/L total	0.76 -4.7	0.49-4.10	17	17	100%

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		0.43-5.7	365	0

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 water works operator and are to be recorded in operation records.

This data includes the number of free chlorine residual 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	1.0	0.08-0.25	0	0.25	365	365

Chemical – Health Category

All waterworks serving less than 500 persons are required to submit water samples for SE's Chemical Health category once every two 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 was submitted December 17,2018. Sample results indicated that the provincial drinking water quality standards were exceeded.

<u>Parameter</u>	<u>Limits (mg/L)</u>	<u>Sample Results</u>	<u>Limits Exceeded</u>
Arsenic	10ug/l	3.2 ug/l	0
Barium	1.0	11.5	0
Boron	5.0	0.30	0
Cadmium	0.005	0.15	0
Chromium	0.05	0.19	0
Fluoride (avg*)	1.5	0.17	0
Lead	0.01	0.70	0
Nitrate (avg*)	45.0	9.3	0
Selenium	0.01	1.13	0
Uranium	0.02	0.90	0

Objectives apply to certain characteristics of or substances found in water for human consumption or hygienic use. The presence for these substances will affect the acceptance of water by consumers and/or interfere with the practice of supplying the water quality. 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 CaCO³, magnesium, sodium, and total dissolved solids) consider regional difference in drinking water sources and quality.

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

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