2018 Consumer Confidence Report

South Kingstown
South Shore Water System

To Our Customers:

Annual Drinking Water Quality Report

We're pleased to present to you this year's Consumer Confidence Report. This report is designed to inform you about your water quality and the services we deliver to you every day. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards set by the regulatory agencies. Our goal is to provide you with a safe and dependable supply of drinking water.

We purchase 100% of our water from SUEZ Rhode Island Operations (SUEZ) through a Consecutive Connection (CC). The water we receive from SUEZ comes from seven gravel packed wells located in the central area of South Kingstown. SUEZ has initiated a Wellhead Protection Program which has identified a well protection area around their well fields. SUEZ has also conducted an inventory regarding land use within this wellhead area.

The RI Department of Health, in cooperation with other State and Federal agencies, has assessed the threats to SUEZ's water supply sources. The assessment considered the intensity of development, the presence of businesses and facilities that use, store or generate potential contaminants, how easily contaminants may move through the soils in the Source Water Protection Area (SWPA), and the sampling history of the water.

Our monitoring program continues to assure that the water delivered to your home is safe and wholesome. The assessment found that the water source is at LOW RISK of contamination. This does NOT mean that the water cannot become contaminated. Protection efforts are necessary to assure continued water quality. For a copy of the complete Source Water Assessment Report, please contact our office or the Rhode Island Department of Health at (401) 222-6867.

The Town does not conduct regularly scheduled water supply meetings, but if you have any questions about this report or want to learn more about your water utility, please contact me at (401) 789-9331 Extension 2250 or stop in. The Water Division office is located in the Public Services Building, 509 Commodore Perry Highway (U.S. Route 1), Wakefield, RI 02879.

Sincerely,

Jon R. Schock
Public Services Director

Consumer Confidence Report

Understanding this Report

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. The U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system is required to test a minimum of 6 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from human or animal activity. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Additional Important Information

For most people, the health benefits of drinking plenty of water outweigh any possible health risk from these contaminants. However, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA and Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Term Definitions

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - Laboratory analysis indicated the contaminant was not present
Parts per million (ppm) or **Milligrams per liter (mg/l) -** one part per million corresponds to one minute in two years or a single penny in $10,000.
Parts per billion (ppb) or **Micrograms per liter (ug/L) -** one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. A violation will occur only if the supplier fails to take corrective action.
Maximum Contaminant Level (MCL) - the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Secondary Maximum Contaminant Level (SMCL): Recommended level for a contaminant that is not regulated and has no MCL.
Maximum Contaminant Level Goal (MCLG) - the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Residual Disinfection Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants
Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Running Annual Average (RAA) - an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.
Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.
Millirems per Year (mrem/yr) - measure of radiation absorbed by the body.
Monitoring Period Average (MPA) - An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.
Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.
Locational Running Annual Average (LRAA) - Average of sample analytical results for samples taken at a particular monitoring location during the pervious four calendar quarter.
NA - Not applicable

Water Quality Test Results:

The table below lists all of the drinking water contaminants that were detected through our water quality monitoring and testing. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from the January-December 2018 monitoring period. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, through representative of the water quality, is more than one year old.

Maximum Contaminant Levels (MCL's) are set at very stringent levels. The Maximum Contaminant Level Goal (MCLG) is set at a level where no health effects would be expected, and the MCL is set as close to that as possible, considering available technology and cost of treatment. A person would have to drink 2 liters of water every day, as recommended by health professionals, at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

All our drinking water is supplied from Suez Water Rhode Island. The table below lists all of the drinking water contaminants, which were detected during the 2018 calendar year from which we purchase drinking water from.

2018 TEST RESULTS FROM SUEZ RHODE ISLAND

Unless otherwise noted, test results are from 2017 and the ranges listed are results from SUEZ'S wells

Microbiological Contaminants	Violation Y/N	Levels Detected	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
E.Coli	**Y**	0-2	# positive	0	TT	Human or animal waste.
Total Coliform Bacteria	**N**	0-3	# positive	0	TT	Naturally present in the environment
Regulated Contaminants	**Collection Date**	**Levels Detected Range (low/high)**	**Unit of Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Barium	8/7/2017	0.013 Range: 0.003-0.013	ppm	2	2	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
Chromium	8/7/2017	2 Range: 1-2	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Gross Alpha, Inc. Radon & U	2017-2018	Range 3.06-4.07	PC/L			
Nitrate-Nitrite	9/26/2018	2.45 Range 0.14-2.45	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Unregulated Contaminants	**Violation Y/N**	**Levels Detected Range (low/high)**	**Unit of Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Metolachlor (2017 data)	N	0.2 Range ND-0.2	ppb	0	NA	Runoff from herbicides
Dacthal (2017 data)	N	0.42 Range ND-0.42	ppb	0	NA	Runoff from herbicides
Lead and Copper	**Violation Y/N**	**90th Percentile**	**Unit of Measurement**	**MCLG**	**AL**	**Likely Source of Contamination**
Copper*	N	0.219	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives household plumbing
Lead*	N	3.8	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits;
Disinfection Residual	**Violation Y/N**	**Levels Detected Range (low/high)**	**Unit of Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
[1]Distribution Disinfectant Residual (Chlorine) (2017)	N	RAA** 0.3 Range 0-1.15	ppm	MRDLG = 4	MRDL = 4	Water additive used to control microbes
Disinfection By-Products	**Violation Y/N**	**Levels Detected Range (low/high)**	**Unit of Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Halocacetic Acids (HAAs)	N	RAA** 21.75	ug/l	NA	60	By-product of water chlorination
[1]Total Trihalomethanes (TTHM)	N	RAA** 66.4	ppb	0	80	By-product of water chlorination

* These results are from SUEZ's distribution system. All sampling results represented at the 90th Percentile.
** RRA: Running Annual Average is the average of all monthly or quarterly samples for the last year at all sample locations.
[1]These results are from SUEZ's distribution system. The averages presented are the Running Annual Average (RAA) and the ranges are the lowest and highest individual detection levels.

2018 TEST RESULTS FROM SUEZ RHODE ISLAND

Secondary Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	SMCL
Alkalinity, Total	10/10/2018	Suez Water	62	20-62	MG/L	1000
DCPA	12/4/2017	Suez Water	2	0.42-2	UG/L	
Nickel	8/7/2017	Suez Water	0.005	0.005	MG/L	0.1
Phosphorus, Total	2/14/2018	Suez Water	0.45	0.26—0.45	MG/L	
Sodium	3/1/2018	Suez Water	18.2	7.01—18.2	MG/L	1000

Unregulated Contaminants

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminants monitoring is to assist the EPA and RIDOH in determining the occurrence of unregulated contaminants in drinking water and whether regulations is warranted.

Substance (2015)	MCLG	MCL	Average Result	Range of Results	Violation	Likely Source of Contamination
Molybdenum ppb	NA	NA	0.38	<0.33—0.38	N	Naturally occurring element
Strontium ppb	NA	NA	63.5	0.34—63.5	N	Naturally occurring element
Vanadium ppb	NA	NA	1.20	0.34—1.20	N	Metal occurs in many different minerals and fossil fuel deposits
Chromium, Hexavalent ppb	NA	NA	0.080	0.52—0.08	N	Industries that process or use chromium compounds or chromium processes
Chlorate ppb	20		*60	0.50—0.68	N	By-products of drinking water chlorination

*Highest results are based upon the highest single sample.
It is important to note that our water system has sampled for a series of unregulated contaminants. Unregulated contaminants (UCMRs) are those that don't yet have a drinking water standard set by the EPA. The purpose of monitoring these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers you have the right to know that these data are available.

Water System	Type	Category	Analyte	Compliance Period
Suez Water	Exceeded MCL for E. coli	MCL	E.coli	8/1/2018-8/31/2018

TOWN OF SOUTH KINGSTOWN
South Shore Water System
509 Commodore Perry Highway
Wakefield RI 02879

2018 DISTRIBUTION SYSTEM TEST RESULTS FROM SOUTH KINGSTOWN-SOUTH SHORE WATER SYSTEM							
Microbial Contaminants	**Result**			**MCL**	**MCLG**		**Likely Source of Contamination**
Total Coliform Bacteria (TCR)	In the month of July, 3 sample(s) returned as positive			Treatment Technique Trigger	0		Naturally present in the environment
Lead and Copper	**Monitoring Period**	**90th Percentile**	**Range (low/high)**	**Unit**	**AL**	**Sites Over AL**	**Likely Source of Contamination**
Copper	2015-2017	0.302	0.25—0.42	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2015-2017	5	1—71	ppb	15	2	Corrosion of household plumbing systems, erosion of natural deposits
Maximum Disinfection Level	**MPA**		**MPA Units**	**RAA**	**RAA Units**		**Likely Source of Contamination**
Chlorine (2018)	0.3400		mg/L	0.2	mg/L		Water additive used to control microbes
Disinfection By-Products	**Monitoring Period**	**Highest RRA**	**Range (low/high)**	**Unit**	**MCL**	**MCLG**	**Likely Source of Contamination**
Total Trihalomethanes (TTHM)	2018	50	49.6	ppb	80	0	By-product of water chlorination
Please Note: Because of sampling schedules, results may be older than 1 year.							

Important Information on Lead

If present, elevated levels of lead can cause serious health problems. Pregnant women, infants and young children are typically more vulnerable to lead in drinking water than the general population. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The South Kingstown-South Shore Water System is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at http://www.epa.gov/safewater/lead.

Secondary Contaminants-Non Health Based Contaminants—No Federal Maximum Contaminant (MCL) Established	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
Nickel	8/7/2017	0.007	0.006—0.007	mg/L	0.1
Sodium	3/15/2018	22.3	21—22.3	mg/L	1000

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year one Level 2 assessments were required to be completed for our water system. One Level 2 assessments were completed. In addition, we were required to take eight corrective actions and we completed all eight of these actions. There are no additional required health effects violation notices.

During the 2018 calendar year, we had the below noted violation(s) of drinking water regulations.

Federal Compliance Period	Analyte	Comments
7/1/2018—7/6/2018	Consumer Confidence Rule	Failed to deliver Consumer Confidence Report to the state or consumers on time.
7/1/2018—7/31/2018	Coliform (TCR)	Level 2 Violation
4/1/2018—4/30/2018	Chlorine	Late Chlorine Reporting to RIDOH

Consumer Confidence Rule Violation

The Consumer Confidence Report was mailed to all South Kingstown Water Customers on June 25, 2018. The Consumer Confidence Report with all supporting documentation was mailed in good faith on June 29, 2018 to the RIDOH, but they did not receive it on or before July 1, 2018.

Total Coliform Bacterial TCR Violation

In July 2018, our water testing results were positive in three (3) water sample collected on 7/24/2018 and 7/27/2018 was positive of coliform bacteria. A consulting engineer with expertise in potable water treatment to try to determine the cause of the bacteriological exceedance. In addition, a contractor with expertise in potable water disinfection treated incoming potable water from the Town's interconnection with Suez Water Rhode Island to boost residual chlorine levels in the distribution system. Public notification was posted or distributed to all users. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Subsequent tests have been negative. The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply.

Drinking Water Monitoring Schedule State Chlorine Standards for a Community Public Water System

In April, 2018, Monthly Chlorine Report was not sent to the State by the 10th of the month after the end of a compliance period. Results were emailed to the State when notified of the error. Violation is for late reporting only.

We, at the South Kingstown-South Shore Water System, work to provide top quality water to every tap. We encourage all of our customers to conserve and use water efficiently and remind you to help us protect our water sources. Don't hesitate to call our office at (401) 789-9331 Extension 2257 if you have any questions.

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