

**2017 CONSUMER CONFIDENCE REPORT**  
**South Kingstown – South Shore Water System**  
**509 Commodore Perry Highway**  
**Wakefield, RI 02879**  
**PWS ID#1615623**

We are very pleased to provide you with this year's Consumer Confidence Report. This report provides you with information on the water and services that we delivered to you in 2017. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies.

We want our valued customers to be informed about their water utility. There are no regularly scheduled meetings, therefore; if after reviewing this report you have any questions, or would like to know more about the South Kingstown – South Shore Water System, please call Jon Schock, Public Services Director, at (401) 789-9331, ext. 2250 or stop by the office at 509 Commodore Perry Highway (U.S. Route 1), Wakefield, RI 02879.

**The Quality of Your Drinking Water**

Our goal is to provide you with a safe and dependable supply of drinking water. We're proud to inform you that your drinking water meets all Federal and State requirements. We are committed to ensuring the quality of your water.

**The Source of Your Drinking Water**

During 2017, our water source was three gravel packed wells. We also purchased some of our water from SUEZ/United Water Rhode Island (UWRI). The water we receive from SUEZ/UWRI comes from seven gravel packed wells located in the central area of South Kingstown. SUEZ/UWRI has initiated a Wellhead Protection Program which has identified a well protection area around their well fields. SUEZ/UWRI 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 United Water RI'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 to drink. However, 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. The complete Source Water Assessment Report is available from the South Kingstown – South Shore Water System or the Department of Health at (401) 222-6867.

**Why Are There Contaminants in My Drinking Water?**

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 (800-426-4791).

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

The sources of drinking water (both tap water 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 the presence of animals or from human activity:

- **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 chemical 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 the result of oil and gas production and mining activities.

**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 2017 monitoring period. For those contaminants that are monitored less frequently the most recent test results are listed.

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.

2017 Test Results from SUEZ Rhode Island Operations						
Unless otherwise noted, test results are from 2017						
Contaminants	Violation Y/N	Level Detected (Range)	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
<sup>1</sup> Total Coliform Bacteria (2017)	N	Absent	% of positive monthly samples	0	5% of monthly samples	Naturally present in the environment
<b>Inorganic Contaminants</b>						
Barium (2017)	N	0.013 (ND-0.013)	ppm	2	2	Erosion of natural deposits; discharge of drilling wastes;
Copper * (2017)	N	0.15	ppm	1.3	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits
Chromium (2017)	N	2.0 (ND-2)	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Lead * (2017)	N	3	ppm	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (2017)	N	2.14 (0.89-2.14)	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Volatile Organic Contaminants</b>						
<sup>1</sup> Chlorine (2017)	N	RAA**: 0.25 (0.0-0.95)	ppm	MRDLG =4	MRDL =4	Water additive used to control microbes
<sup>1</sup> Haloacetic Acids (HAA5) (2017)	N	RAA**: ND Range: ND	ppb	0	60	By-product of water chlorination
<sup>1</sup> Total Trihalomethanes (TTHM) (2017)	N	RAA**: 66.4 (39.5-66.4)	ppb	0	80	By-product of water chlorination

\*All sampling results represented at the 90th Percentile.

\*\*RAA: Running Annual Average, is the average of all monthly or quarterly samples for the last year at all sample locations.

<sup>1</sup>These tests are from SUEZ's distribution system. The averages presented are Running Annual Averages (RAA). The ranges are the lowest and highest individual detection levels.

2016 TEST RESULTS FROM SOUTH KINGSTOWN-SOUTH SHORE WATER SYSTEM						
Contaminants	Violation Y/N	Level Detected (Range)	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Total Coliform Bacteria (August 2017)	N	Present (2 Positive)	Highest # of monthly positive samples	Absent	1 positive	Naturally present in the environment
Total Coliform Bacteria (November 2017)	N	Present (1 Positive)	Highest # of monthly positive samples	Absent	1 positive	Naturally present in the environment
<b>Inorganic Contaminants</b>						
Barium (2017)	N	0.007 (0.004-0.007)	ppm	2	2	Erosion of natural deposits

Chromium (2017)	N	6.0 (1.0-6.0)	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper* (2017)	N	0.302	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead* (2017)	N	5.0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nickel (2017)	N	7.0 (0.0-7.0)	ppb	100	100	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate [as Nitrogen] (2017)	N	0.63 (0.34-0.63)	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

### Volatile Organic Contaminants

Chlorine (2017)	N	RAA*: 0.171 (0.09-0.326)	ppm	MDRLG = 4	MRDL = 4	Water additive used to control microbes
Total Trihalomethanes (TTHM) (2017)	N	RAA*: 30.3 Single sample	ppb	0	80	By-product of water chlorination

\*All sampling results represented at the 90<sup>th</sup> Percentile. Of the 20 samples collected for both Lead and Copper, Lead had one sample that exceeded the action level of 15 ppb, while all the Copper samples fell below its action level of 130ppm.

ND = Not Detected

**Nitrate:** Because we detected Nitrate at a level over 5 ppm, we are required to include the following language: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

**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.

**Maximum Contaminant Level (MCL)** -The 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.

**Maximum Contaminant Level Goal (MCLG)** - The MCLG 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.

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

The State of Rhode Island requires testing for other contaminants not regulated by the US EPA. The following contaminant was detected in our well water:

**SUEZ Water:** In 2016, Sodium was detected at 15.3 mg/L.

**SUEZ Water:** In 2014, Metolachlor was detected at 0.20 ppb.

**SUEZ Water:** In 2014, Dacthal was detected at 4.4ppb and DCPA was detected at 7.8ppb.

**SUEZ Water:** In 2015, Strontium was detected at 0.34-63.5 ppb, Vanadium was detected at 0.34-1.20 ppb, and Hexavalent Chromium was detected at 0.52-0.08 ppb.

**South Kingstown:** In 2016, Sodium was detected in Well #1 at 21.9 ppm, Well #2 at 17.7, and Well #3 at 19.8 ppm. All samples were single samples.

**Alkalinity, Total:** In 2017, Total Alkalinity was detected at 36 mg/L.

**Calcium:** In 2017, Calcium was detected at 19 mg/L.

**Sodium:** In 2017, Sodium was detected at 21.9 mg/L

### Total Coliform Bacteria MCL Violation

In August 2017, our water testing results were positive and at least 1 recheck sample was positive for the presence of coliform bacteria. To resolve this problem, we chlorinated our wells and the distribution system. Public notification was posted or distributed to all concerned residents. 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. **Total Coliform:** 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.

### Total Trihalomethanes (TTHM) and Total Haloacetic Acids (HAA5) Monitoring/Reporting Violation

In 2017, our water system failed to test and report TTHM and HAA5 results to the Rhode Island Department of Health's Center for Drinking Water Quality by the required deadline according to our sampling schedule. Samples for TTHM and HAA5 were collected on October 24, 2017 and results were submitted to the DWQ for compliance purpose, and may be

found in the table above. TTHM and HAA5 Health Effects: Some people who drink water containing TTHM in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. Some people who drink water containing HAA5 in excess of the MCL over many years could experience nervous system or liver damage. We have been found to be in compliance and the matter closed.

#### **Lead & Copper Rule Consumer Notification Violation**

In 2017, our system failed to notify consumers of lead results within 30 days of collecting and submitting samples as required by State and Federal regulations. This does not pose a threat to the quality of our water. Since this violation, we have distributed all Public Notifications and are in compliance with this order.

#### UCMR Language

SUEZ/UWRI's water system sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact Jon Schock at 401-789-9331 x2250 or at mailing address 509 Commodore Perry Highway, Wakefield, RI 02879.

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. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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 or at <http://www.epa.gov/safewater/lead>.

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, which are the heart of our community, our way of life and our children's future. Please do not hesitate to call our office with any questions.