2021 Consumer Confidence Report

South Kingstown
Middlebridge 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 VEOLIA Rhode Island Operations (VEOLIA) through a Consecutive Connection (CC). The water we receive from VEOLIA comes from seven gravel packed wells located in the central area of South Kingstown. VEOLIA has initiated a Wellhead Protection Program which has identified a well protection area around their well fields. VEOLIA 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 VEOLIA 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 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. 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 US 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 1 sample 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.
Radioactive contaminants, which can be naturally occurring or the result of mining activities.
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.

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 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 or yearly.

Nephelometric Turbidity Unit (NTU) - 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 previous 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 1-December 31, 2021 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. **Our water system makes every effort to provider you with safe drinking water.**

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.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria 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.

2021 TEST RESULTS FROM VEOLIA WATER RHODE ISLAND
Unless otherwise noted, test results are from 2021 and the ranges listed are results from VEOLIA'S wells

Microbiological Contaminants	Violation	Unit of Measurement	MCLG	Highest Month % Positive	MCL	Likely Source of Contamination
Total Coliform Bacteria	No	# positive	NA	10%	TT = < 5% of monthly samples	Naturally present in the environment

Regulated Contaminants/Collection Date	Violation	Levels Detected Range (low/high)	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
Barium (2020 data)	No	0.014 Range: 0.003-0.014	ppm	2	2	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
Chromium (2020 data)	No	2 Range: ND—2	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Nitrate (as Nitrogen)	No	2.4 Range 0.68—2.4	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radionuclides	**Violation**	**Levels Detected Range (low/high)**	**Unit of Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Gross Alpha (including radon and uranium) (2018 data)	No	4.07 Range ND—4.07	pCi/L	0	15	Erosion of natural deposits.
Unregulated Contaminants	**Violation**	**Levels Detected Range (low/high)**	**Unit of Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Dacthal (DCPA) (2020 data)	No	0.78 Range ND-0.78	ppb	0	NA	Runoff from herbicides
Lead and Copper	**Violation**	**90th Percentile Range (low/high)**	**Unit of Measurement**	**MCLG**	**AL**	**Likely Source of Contamination**
Copper (2019—2021)	No	0.18 0.009—0.47	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives household plumbing
Lead (2019—2021)	No	1 .5 O —25.6	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives household plumbing
Disinfection Residual	**Violation**	**Levels Detected Range (low/high)**	**Unit of Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
[1]Distribution Disinfectant Residual (RAA)	No	RAA** 0.54 Range*0.26—0.54	ppm	MRDLG = 4	MRDL = 4	Water additive used to control microbes
Disinfection By-Products	**Violation**	**Levels Detected Range (low/high)**	**Unit of Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Halocacetic Acids (HAAs)	No	RAA** 21.4 Range 11.8—21.4	ppb	0	60	By-product of water chlorination
[1]Total Trihalomethanes (TTHM)	Yes	RAA** 81.8 Range 52.9—81.8	ppb	0	80	By-product of water chlorination

* These results are from VEOLIA'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 VEOLIA's distribution system. The averages presented are the Running Annual Average (RAA) and the ranges are the lowest and highest individual detection levels.

Some people who drink water containing Trihalomethanes 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.

2021 TEST RESULTS FROM VEOLIA RHODE ISLAND

Secondary Contaminants	Water System	Highest Value	Range (low/high)	Unit	RUL
Alkalinity, Total	Veolia Water Rhode Island	22.8	4.58-22.8	ppm	NA
Iron (2020 data)	Veolia Water Rhode Island	383	ND— 0.383	ppb	300
Manganese	Veolia Water Rhode Island	12.0	ND—12.0	ppb	50
Nickel (2020 data)	Veolia Water Rhode Island	0.024	ND—0.024	ppm	NA
Phosphorus Total (2018 data)	Veolia Water Rhode Island	0.45	0.26—0.45	ppm	NA
Sodium	Veolia Water Rhode island	17.9	5.17—17.9	ppm	NA

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

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	MCLG	MCL	Average Result	Range of Results	Violation	Likely Source of Contamination
Bromide ppb	NA	NA	41.3	32.1—50.6	No	Naturally occurring element
Total Organic Carbon ppb	NA	NA	3.32	3.32	No	Naturally occurring element
HAA5 ppb	0	60	10	1.72—18.3*	No	By-product of drinking water chlorination
HAA6Br ppb	NA	NA	2	0—4.64	No	By-product of drinking water chlorination
HAA9 ppb	NA	NA	12.06	1.72—22.4	No	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.

2021 DISTRIBUTION SYSTEM TEST RESULTS FROM SOUTH KINGSTOWN-MIDDLEBRIDGE WATER SYSTEM

Disinfection By Products	Sample Point	Monitoring Period	2021 LRAA	Range (low/high)	Unit	MCL	Violation	MCLG	Typical Source
Total Haloacetic Acids (HAA5)	Middlebridge Road	2021	24.0	14.2—36.1	ppb	60	No	0	By product of drinking water disinfection.
Total Haloacetic Acids (HAA5)	Middlebridge Road	2021	23.8	13—33.6	ppb	60	No	0	By product of drinking water disinfection.
Total Haloacetic Acids (HAA5)	Hydrant @ Middlebridge/ Radial Drive	2021	16.1	5.41—26.9	ppb	60	No	0	By product of drinking water disinfection.
TTHM	Middlebridge Road	2021	39.0	25.6—66.8	ppb	80	No	0	By product of drinking water disinfection.
TTHM	Middlebridge Road	2021	40.4	24.8—74.3	ppb	80	No	0	By product of drinking water disinfection.
TTHM	Hydrant @ Middlebridge/ Radial Drive	2021	54.1	40.2—79.0	ppb	80	No	0	By product of drinking water disinfection.

Lead and Copper	Monitoring Period	90th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Likely Source of Contamination
Copper	2019-2021	0.099	0.034—0.188	ppm	1.3	AL=0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2019-2021	1	0—10	ppb	15	AL=0	Corrosion of household plumbing systems, erosion of natural deposits

Important Information on Lead

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-Middlebridge 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ASBESTOS	8/31/2020	0.093	0.093	MFL	7	7	Decay of asbestos cement water mains; Erosion of natural deposits

Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units	Violation
Chlorine (2021)	0.382	MG/L	Less than 4.0	MG/L	No

Microbiological Contaminants	Collection Date	Collection Date	Range (low/high)	Unit of Measurement	MCL	MCLG	Typical Source
No Detected Results were found in the Calendar year of 2021							
Radiological Contaminants	**Collection Date**	**Collection Date**	**Range (low/high**	**Unit of Measurement**	**MCL**	**MCLG**	**Typical Source**
No Detected Results were found in the Calendar year of 2021							

During the 2021 calendar year, Veolia Water had the below noted violation(s) of drinking water regulations.

Federal Compliance Period	Analyte	Comments
1/1/2021—12/31/2021	TTHM	VEOLIA Water had a locational running annual average greater than the MCL of 80 ppb.

This notice **only** applies to URI Bay Campus customers. Although it is not an emergency, you have the right to know what happened and what Veolia is doing to correct this situation. Testing results from 1/1/21 to 3/31/2021 show that Veolia system exceeded the standards, or maximum contaminant levels (MCLs) for trihalomethanes (TTHM) at the URI's Bay Campus site. The MCL for TTHM is 80 ppb. It is determined by averaging all samples at each sample site for the past 12 months. The level of TTHM averaged at the URI Bay campus site for 1/1/2021 to 3/31/2021 was 82 ppb. The Action Plan submitted to the State on April 28, 2021 as required by RIDOH included: An analysis of our system water age. Additional Testing for compounds that could contribute to formation of trihalomethanes. Assisting URI Bay Campus with periodic flushing on their Campus to improve water circulation A recommendation that URI Bay Campus add mixing to their storage tank to assist in reduction of water age and disinfection by-product formation.

We, at the South Kingstown-Middlebridge 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