2019 Annual Drinking Water Quality Report

South Martin Regional Utility

Dear Valued Customer,

We are pleased to present to you this year's Annual Drinking Water Quality Report. Our constant goal is to provide you with a safe and dependable supply of drinking water and this report is designed to inform you about the quality product we deliver to you every day. We want you to understand the efforts we make to continually improve the water treatment processes and protect, not only your water supply, but also the water resources of everyone in our community. We are, and continue to be, committed to ensuring the highest quality product and we are proud to report that your drinking water meets or exceeds all Federal and State drinking water requirements.

Water Source and Treatment

Your drinking water is obtained from two different sources: the Surficial Aquifer (85 – 250 feet deep) and the deeper Floridan Aquifer (1,400 feet deep). This water is treated at two different facilities before being disinfected with chloramines, and pH balanced prior to entering the distribution system.

SMRU's North Water Treatment Facility (NWP) uses an independent wellfield supplied by the Surficial Aquifer. This water is conveyed to the NWP Nanofiltration facility. The Nanofiltration purified water is blended with water from the shallow wells to improve palatability before being disinfected with chloramines.

SMRU's South Water Treatment Facility (SWP) uses two independent wellfields – one supplied by the Surficial Aquifer and one supplied by the Floridan Aquifer. Water from the Floridan Aquifer is conveyed to the SWP Reverse Osmosis (RO) facility. The ultra-purified water from the RO process is blended with water from the shallow wells to improve palatability before being disinfected with chloramines.

Blending ratios, disinfection, and corrosion control measures help to ensure that the finished water from both treatment plants blends seamlessly in the distribution system providing a uniform quality for all of our customers.

Source Water Assessment

In 2018, the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are eleven potential sources of contamination identified for this system with a low to high susceptibility level. The assessment results are available on the FDEP SWAPP website at https://www.dep.state.fl.us/swapp or they can be obtained from South Martin Regional Utility, 9000 SE Athena Street Hobe Sound, Florida 33455.

Questions?

We encourage our customers to be informed about their drinking water. If you have any questions about this report or SMRU, please contact the SMRU Customer Service office at 772-546-2511. Our highly trained staff can address common questions and concerns and have the ability to contact field experts and department heads.

If you'd like to learn more, a schedule of upcoming SMRU board meetings can be found on the Town of Jupiter Island's website at http://townofjupiterisland.com/.

Additional drinking water information can be obtained through the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Looking Towards the Future

Wetland Rehabilitation

SMRU has been working with the Hobe Sound National Wildlife Refuge (HSNWR) in a wetland rehabilitation project. To date, the HSNWR Wetland has been fully restored. We will continue in our partnership with HSNWR to maintain the newly recovered wetland.

New Surficial Wells

In order to meet the growing needs of the community, SMRU has begun construction on a new surficial well in the NWP wellfield. It is expected to be completed in the fall of 2020. We are also preparing for another new well for the SWP with construction expected to begin in 2021.

NWP Treatment Improvements

In 2020, we are performing an in-depth analysis of the NWP with the goal of expanding our treatment capabilities and further improving our quality as a whole.

Hydrant Flushing

Hydrant flushing is a necessary part of distribution maintenance and helps protect the public health by clearing the water mains of sedimentation and bringing in fresh water. As many of you may have noticed, the SMRU hydrant flushing program is ongoing throughout the service area. Even if a hydrant is unattended, all SMRU flushing will occur with a meter attached to the hydrant and a yellow "Hydrant Flushing" sign in the immediate vicinity.

Upcoming Lead and Copper Testing

Lead and Copper testing will take place in 2020. If your address is on the sampling plan, you will be contacted by SMRU customer service. Selected residents will receive a sealed plastic bag with sample bottles and instructions. These bags will be prepared in a sanitary laboratory by trained professionals to ensure no risk of contamination. Please be on the lookout for notifications.

Monitoring and Water Quality

SMRU routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2019. Data obtained before January 1, 2019 and presented in this report is from the most recent testing done in accordance with the laws, rules, and regulations. Testing done directly at the treatment facilities are denoted with SWP or NWP. All other results are directly from the distribution system.

In the accompanying table, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

Action Level (AL): *The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.*
Maximum Contaminant Level or MCL: *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 or MCLG: *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 disinfectant level or 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.*
Maximum residual disinfectant level goal or 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.*
ND: *means not detected and indicates that the substance was not found by laboratory analysis.*
NWP: *North Water Plant*
Parts per billion (ppb) or Micrograms per liter (µg/l): *one part by weight of analyte to 1 billion parts by weight of the water sample.*
Parts per million (ppm) or Milligrams per liter (mg/l): *one part by weight of analyte to 1 million parts by weight of the water sample.*
SMRU: *South Martin Regional Utility*
SOC: *Synthetic Organic Contaminant*
SWP: *South Water Plant*
VOC: *Volatile Organic Contaminant*

Radioactive Contaminants

SMRU tests for Radioactive Contaminants every three years.

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radium 226 + 228 or combined radium (pCi/L) **SWP**	01/17	N	0.9	N/A	0	5	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L) **NWP**	01/17	N	1.2	N/A	0	5	Erosion of natural deposits

Inorganic Contaminants

SMRU tests for Nitrate and Nitrite twice annually and every three years for all other inorganics.

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm) **SWP**	01/19, 07/19	N	0.636	0.636 – 0.653	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm) **SWP**	01/17, 05/17	N	43.0	40.8 – 43.0	N/A	160	Salt water intrusion, leaching from soil
Sodium (ppm) **NWP**	01/17, 05/17	N	48.5	41.4 – 48.5	N/A	160	Salt water intrusion, leaching from soil

Disinfectants and Disinfection By-Products

SMRU tests for disinfectants monthly in the distribution system and Disinfectant By-Products annually.

Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine and Chloramines (ppm)	01/19 – 12/19	N	2.6	0.6 – 3.9	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	07/19	N	17	15 - 17	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	07/19	N	9.6	N/A	N/A	80	By-product of drinking water disinfection

Lead and Copper (Tap Water)

SMRU tests for Lead and Copper in customer taps every three years.

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	06/17	N	0.389	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	06/17	N	1.49	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Statements about Contaminants

Source Waters

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.

Contaminants that may be present in source water include:

(A) *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) *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.

(C) *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

(D) *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.

(E) *Radioactive contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities.

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

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

The Presence of 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. SMRU 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 https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

Vulnerable Populations

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/Center 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 (800-426-4791).